The Durham Region Healthy SexYouthality Project: *youths' perspectives of sexual health needs in Durham Region*

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Table of Contents

ABSTRACT……………………………………………………………………………...…iv
LIST OF ABBREVIATIONS, ACRONYMS AND INITIALISMS……………………………..v
GLOSSARY…………………………………………………………………………....…v
ACKNOWLEDGEMENTS……………………………………………………………...vii
CHAPTER ONE: INTRODUCTION……………..……………………………...…………1
Figure 1. Map of Durham Region with Identified Focus Groups……………………..…2
Background to the study……………………………………………………………..3
Rationale……………………………………………………………………………..4
CHAPTER TWO: LITERATURE REVIEW…...……………………………….…………6
Consequences of Poor Sexual Health……………………………….…………6
Sexually Transmitted Infections……………...….……………………7
HIV/AIDS……………………………………………………..……....8
Pregnancy…………………………………………………...………10
Risk Factors for Poor Sexual Health……………………………………….…11
Sexual behaviour of youth……………………………………………11
Substance Use…………………………………………………………14
Sexual Orientation……………………………………………………15
Sources of Sexual Health Information…………………………………….…..16
School………………………………………………………...…16
Parents…………………………………………………………………21
Peers………………………………………………...……………22
Media…………………………………………………….………………23
Internet……………………………………………………….……..24
Barriers to Sexual Health Resources…………………………….……....26
Youth Perception of Sexual Health Services……………………………………27
How Youth Want to Receive Sexual Education……………………………....29
CHAPTER THREE: CONCEPTUAL FRAMEWORK...…………….……………………31
Social Determinants of Health……………………………………………….……..31
Figure 2. Interrelationship of Determinants of Health and Sexual Health………………32
Rights of the Child – A Child Rights Approach……………………………….….…32
Community-Based Research……..………………………………………...….36
Table 1. Principles of CBR & the Durham Region Healthy SexYouthality Project….…39
Research Question & Objective………………………………….………......….41

CHAPTER FOUR: METHODS……………..…………………………………………………..42
Community-Advisory Committee……………………………………………….……42
Development of Focus Groups …………………………………………………….……43
Recruitment……………………………………………………….…………...43
Sample…………………………………….…………………………………...44
Table 2. Demographic Characteristics of Sample……………………………….45
Description of focus groups………………………………………….………..45
Data Collection ……………………………………….……..…………….……46
Focus Groups…………………………….…….…..…………….…………....47
Table 3. Focus Group Data……………………….……….……………….……...50
Data Analysis………………………………………………………..……………….…..51
CHAPTER FIVE: RESULTS & DISCUSSION……………………………………….……..52
Themes……………………………………………………………………………………...52
Table 4. Research Objectives & Highlights of Findings.…………………….......52
Objective 1………………………………………………………………………53
Objective 2…………………………..………………………….…………………..58
Objection 3……………………………………………………….…………………69
Objective 4 ………………………………..…………….…………………………87
CHAPTER SIX: CONCLUSIONS……………………….………………………....……....106
Conclusions…………………………………………..……………………..……..106
Figure 3. Sexual Health Objectives……………………………….………………111
Strengths and Limitations………………………………………….……..……………112
Implications & Knowledge Translation……………………………………….………..114
REFERENCES………...………………………………………………………………….118
APPENDICES………………………………………...…………………………..132
Appendix A: Research Protocol…………………………………………..……….132
Appendix B: Consent Form……………………………………………………………150
Appendix C: Focus Group Guides…………………………………………..……….152
Appendix D: Brock Community Health Centre Report……………………..……….161
Appendix E: Community Launch Report……………………..……….……………….167
Appendix F: OHTN Final Report……………………..……..………………………….169
Appendix G: Press Release……………………..…….…………………………..….174
Appendix H: Newspaper Article……………………..…….………………………....175
Appendix I: Research Timeline…………………..………….…………………….....…177

ABSTRACT

According to Durham Region Public Health Department, 40% of youth, aged 15-19 years, living in Durham Region said that they had engaged in sexual intercourse in the last year, with 570 youth becoming pregnant. In Durham Region 2.3/100,000 youth between the ages of 15 and 24 years are infected with HIV/AIDS annually. Chlamydia rates have also been steadily increasing with 1,250 cases reported in 2009 in Durham Region, with the rates of STIs in Canada being the highest in youth ages 15 to 24 years.

This study was undertaken as a capacity building venture to engage youth in Durham Region and allow them to identify their sexual needs and priorities for HIV prevention and healthy sexual development. The study also had four objectives: (1) To assess whether youth know about the sexual health services that are available to them; (2) To discover how youth perceive the sexual health services they are aware of; (3) To identify where youth currently receive sexual health resources; and (4) To understand where, how and from whom youth would like to receive sexual health resources.

The Durham Region Healthy SexYouthality Project was a community-based research study conducted by the Durham Region Healthy SexYouthality Coalition. The Project was a qualitative research study that employed focus group sessions to engage youth in discussions pertaining to their sexual health. The study sample included 32 participants ranging from 15 to 24 years of age, with the mean age of 18.96 years. Of the 32 participants, 19 were female, 12 were male and 1 identified as transgender. The coalition identified four populations within Durham Region; urban, rural, semi-rural and LGBTQ youth, which resulted in 10 focus groups. The size of each meeting ranged from four to nine participants and each was audiotaped. The data was transcribed and then analyzed using open coding with the NVivo 9 software.

Several themes about sexual health services emerged from the study. They include: lack of knowledge of services, the need for increased awareness; the perceptions youth have about health services including that they are inaccessible, not anonymous, not confidential, not knowledgeable, are judgemental but are youth-friendly; where youth currently receive information including the internet, media, friends/peers, school, parents and health professionals; and how youth would prefer to receive sexual health education such as through trustworthy internet sources, improved sexual education in schools and new community programs.

In conclusion, youth in Durham Region need more information about the sexual health services that are available to them and changes need to be made to make them more accessible, anonymous and confidential. Youth also prefer to access information about sexual health through convenient and reliable sources and it is up to organizations working with youth to ensure that these needs are best being met.

LIST OF ABBREVIATIONS, ACRONYMS AND INITIALISMS

CAC – Community Advisory Committee

CBR – Community-based research

CIHR – Canadian Institute of Health Research

CYSHHAS- Canadian Youth, Sexual Health and HIV/AIDS Study

LGBTQ – Lesbian, gay, bisexual, transgender and other sexual minorities.

OHTN- Ontario HIV Treatment Network

STI – Sexually transmitted infection

UOIT – University of Ontario Institute of Technology

WHO – World Health Organization

YAC – Youth Advisory Committee

GLOSSARY

Coalition – "A partnership or coalition allows some individuals relative freedom from the confines of their individual organizations and enables them to explore new situations. If confined to their own organizations, professionals often develop "tunnel vision." By partnering with others, engaging in a common enterprise beyond their own organizations, these professionals may experience greater freedom to explore new possibilities and to innovate" (Green, Daniel & Novick, 2001). In the context of this research study, "coalition" refers to the partnership of organizations in Durham Region that work with youth and are a part of the Durham Region Healthy SexYouthality Coalition.

Community-Based Research – "Research conducted at a community site that focuses not only on individuals but on the community itself. Community-based research may be initiated by the community independently or in collaboration with a researcher" (Government of Canada, 2011).

Pansexual – “A term referring to being attracted to persons without regard for sexual or gender identity. The term reflects notions of gender and sexual identities beyond binaries such as male or female, straight or gay and is used mainly by those who wish to express acceptance of all gender and sexual identity possibilities” (The Ohio State University, 2012).

Sexual Health – “a state of physical, mental and social well-being in relation to sexuality. It requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence” (WHO, 2012).

Sexual Health Resources – contraceptives, educational items and programs as well as services pertaining to sexual health

Sexuality – “sexuality is best understood as a complex, fluid and dynamic set of forces that are an integral aspect of an individual’s sense of identity, social well-being and personal health” (Public Health Agency of Canada, 2003)

Social Capital – “features of social organization, such as trust, norms and networks, that can improve the efficiency of society by facilitating co-ordinated actions” (Putnam, 1993, p.167)

Queer – “An umbrella term that can refer to anyone who transgresses society's views of gender or sexuality” (The Ohio State University, 2012).

Transgender – this adjective is used specifically to describe people whose gender identities do not match their sex designation at birth, such as people designated male at birth who identify as women (The Ohio State University, 2012). This is in contrast to those who identify with their given gender and are expressed as CisGendered (The University of Texas at San Antonio, n.d.).

Youth – Youth are people between the ages of 15 years to 24 years of age. Other jurisdictions may have different definitions for youth (Public Health Agency of Canada, 2003).

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CHAPTER ONE: INTRODUCTION

The Durham Region Healthy SexYouthality Project was a community-based research (CBR) study conducted by the Durham Region Healthy SexYouthality (Coalition). The Coalition is made up of health professionals who work with youth in Durham Region from organizations throughout Durham Region, such as The Youth Centre, Durham Region Health Department, The Oshawa Community Health Centre, The AIDS Committee of Durham Region, and many others.

This CBR study was conducted by the Durham Region SexYouthality Coalition, in partnership with researchers from the University of Ontario Institute of Technology (UOIT). This study was undertaken as a capacity building venture to engage youth in Durham Region and allow them to identify their sexual needs and priorities for HIV prevention and healthy sexual development. The community agencies that interact with youth on a daily basis were the ones that identified the overall objectives of the SexYouthality Project and what they wanted to know from youth related to their sexual health. This participation in the research process was critical for the project's success.

According to Durham Region Health Department, 40% of youth, aged 15-19 years, living in Durham Region said that they had engaged in sexual intercourse in the last year, with 570 youth becoming pregnant. In 2010 there were 2.3/100,000 youth between the ages of 15 and 24 years that were infected with HIV/AIDS (Durham Region Health Department, 2011b, unpublished data). Chlamydia rates have also been steadily increasing with 1,250 cases reported in Durham Region and 43,709 in Canada in 2009 (Public Health Agency of Canada, 2010). In Canada, rates of STIs are the highest in youth ages 15 to 24 years (Durham Region Health Department, 2010).

Durham is a unique region with both rural and urban areas and is located about 40 kilometres East of Toronto (Figure 1). It is considered a part of the Greater Toronto area and is comprised of the cities of Pickering, Oshawa, the town of Whitby and Ajax, the Municipality of Clarington and the Townships of Uxbridge, Scugog and Brock. According to Statistics Canada, Durham Region is made up of 88% white and 12% are a visibly minority (Statistics Canada, 2007b) with the population of Durham, 608,124 in 2011 (Durham Region, 2012) 78,655 of which are between the ages of 15 and 24 years of age (Statistics Canada, 2007b).

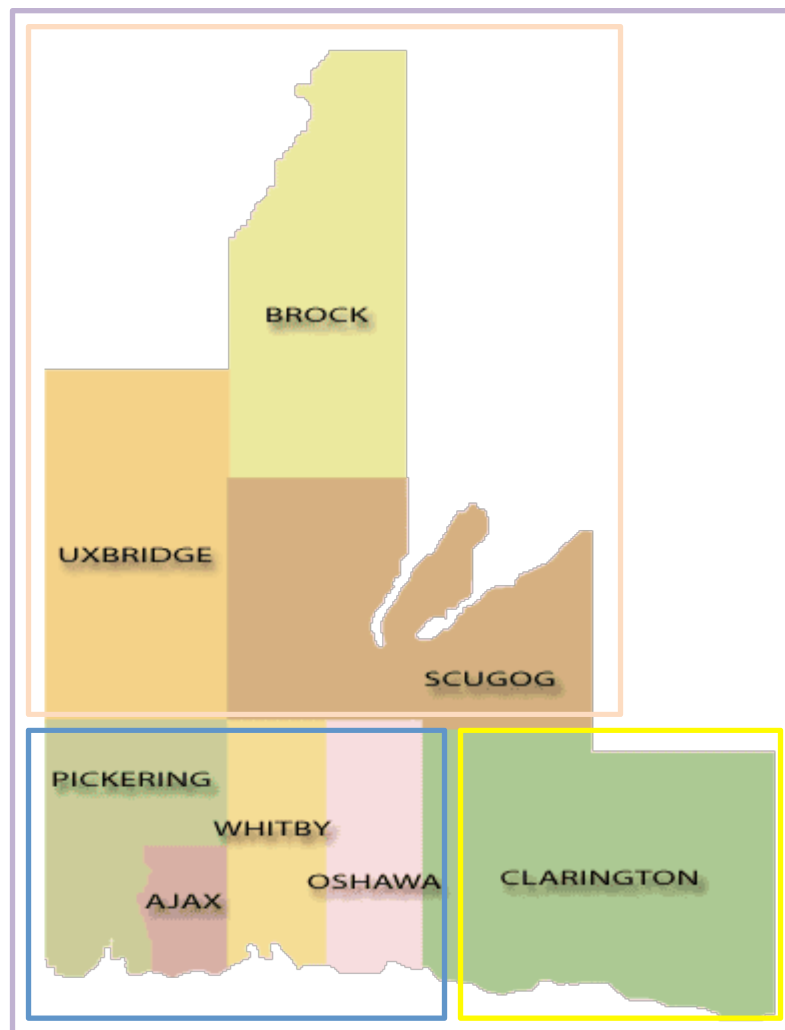

Figure 1. Map of Durham Region with identified focus groups

Background to the Study

In 2006, the Coalition approached researchers at The University of Ontario Institute of Technology (UOIT) to partner on a research project, as they were concerned about the sexual health needs of youth in Durham Region. The Coalition and researchers met on several occasions to develop a research protocol for the study. The purpose of the study was to provide preliminary information about youth and the challenges they face in Durham Region, which in turn would lead to a larger study to clarify the needs of youth. This study is the initial stage of this larger study.

A research protocol was developed by researchers at UOIT in partnership with the Coalition. Coalition members identified the research objectives and needs. As stated in the protocol, "the ultimate aim of the project is to develop a research protocol which will elucidate the sexual health needs of youth and identify ways in which youth leaders and youth agencies can unite to create such programs and services" (Durham Region Healthy SexYouthality Coalition).

A proposal for funding for this exploratory research was submitted and accepted by the Ontario HIV Treatment Network (OHTN). An ethics proposal was submitted to the UOIT Ethics Board in January of 2010 and was also reviewed by Durham Region Health Department in April of 2010. The study received ethics approval from UOIT on March 24, 2010 and the research was able to commence at this time. A research coordinator was hired in July of 2010.

I formally came on board in November 2010 as the Research Coordinator and as a graduate student. However, the study facilitators were previously hired and trained prior to November 2010.

Rationale

The Durham Region Healthy SexYouthality Project was done to assess the sexual health concerns of youth in Durham Region, in response to rising STI rates and poor sexual health outcomes among youth. The study is youth focused as it centers on the United Nations Convention on the Rights of the Child to which Canada is a signatory. Article 3 of the Convention states that the best interest of the child must be considered when making decisions that affect them, while article 12 states that children have the right to share their thoughts and opinions regarding decisions that affect them (UNICEF, 2011). This is why a CBR approach was used to engage youth in determining their sexual health needs.

Durham Region is quickly developing and issues that were formally “urban” in nature must now be addressed in this region. While HIV rates are relatively low compared to regions of Africa and Asia or even within Canada, they do present a burden to youth in Durham Region. Also, high Chlamydia rates demonstrate that Durham youth are sexually active but do not practice safe sex. Unsafe sexual activities and early pregnancy can have important negative effects on youths’ future health and well being.

The aim of this research was to explore the sexual health needs of youth in Durham Region. By focusing on this area and actively working with service organizations it is expected that these organizations will gain the knowledge and information they need to better serve youth and meet the sexual health needs that youth identify.

The study has four objectives:

(1) To assess whether youth know about the sexual health services that are available to them;

(2) To discover how youth perceive the sexual health services they are aware of;

(3) To identify where youth currently receive sexual health resources;

(4) To understand where, how and from whom youth would like to receive sexual health resources.

By examining the sexual health concerns of youth and discovering where they get information on the topic of sex, we will be able to better meet their needs through the creation of appropriate resources.

CHAPTER TWO: LITERATURE REVIEW

There are a number of different topics and factors related to the sexual health concerns of youth. This chapter will discuss a number of topics that relate to this research study. These topics include the consequences of poor sexual health; sexually transmitted infections, HIV/AIDS, and pregnancy; risk factors associated with poor sexual health; sexual debut and practice, sexual behaviour, substance use and sexual orientation; sources of sexual health information; barriers to sexual health resources; youth perception of sexual health resources and; how youth want to receive sexual health resources.

There are increasing STI rates in Durham Region and it is likely that most new infections are among youth (Durham Region Health Department, 2010). However, studies of risk behaviours in one region are not easily adopted in another since the characteristics that influence risk behaviours may be very different in the two regions. Like many regions, the sexual health of youth living in Durham Region is impacted by a number of different factors including HIV/AIDS, sexually transmitted infections (STIs), poverty, geography, and other social determinants of health. Further, Durham Region is of disparate geography covering large remote rural areas but also has urban areas, such as Pickering and Whitby, which are highly influenced and overshadowed by Toronto.

Consequences of Poor Sexual Health

There are a number of consequences of poor sexual health. These include sexually transmitted infections, HIV/AIDS and pregnancy, each of which will be discussed further in the following paragraphs.

Sexually Transmitted Infections

According to the World Health Organization (WHO), not including HIV and other incurable STIs, 448 million new sexually transmitted infections (STI), such as Syphilis, Gonorrhoea, Chlamydia and Trichomoniasis, occur every year in adults aged 15-49 years (World Health Organization [WHO], 2011). When untreated, STIs have serious implications such as affecting the reproductive health system, including maternal and newborn health. Some STIs, if left untreated also increase the risk for contracting HIV by a factor of up to 10 (WHO, 2011). Considering this, the treatment and prevention of STIs is important for reducing or preventing HIV infection, especially in high-risk populations (WHO, 2011).

In Canada there is an increasing number of youth that are infected with HIV and STIs, with a close link existing between the two (Public Health Agency of Canada, 2008). The rates of STIs in Canada are the highest in youth ages 15 to 24 years (Public Health Agency of Canada) with the most common bacterial STIs being Chlamydia, Syphilis and Gonorrhoea. Chlamydia rates will be discussed further as this was most relevant to Durham Region.

Chlamydia

In 2009, there were a combined total of 33,000 cases of Chlamydia, Gonorrhoea and Infectious Syphilis cases reported in Ontario. In Ontario, Chlamydia has an incidence rate of 219.8 per 100,000 (Ministry of Health and Long-Term Care, 2009). The rates of STIs, such as Chlamydia and Gonorrhoea, are also found to be the highest in youth and females respectively between the ages of 15 and 24 (Lee & Whelan, 2011).

In Toronto, Chlamydia rates have also been increasing since 1997. There were 157.7 per 100,000 cases of Chlamydia in 1997, which rose to 258.7 per 100,000 in 2006. This age group also has the highest rate of Gonorrhoea with cases in Toronto in 1996 being 62.3 cases per 100,000 and the highest incidence of 70.6 cases per 100,000 occurring in 2003. There was a 10% increase between 2005 and 2006 as well that was attributed to an increased rate of Gonorrhoea among males that reported multiple sexual partners and men who have sex with other men (MSM).

Consistent with Ontario trends Durham Region has the highest Chlamydia rates for adolescent youth compared to other demographics. Chlamydia is also the most common sexually transmitted infection in Durham Region, with rates that were significantly higher than the rest of Ontario. From this it can be seen that Chlamydia rates among Durham Region youth may be higher than in other populations of youth living in Ontario (Durham Region Health Department, 2012), with Chlamydia rates steadily increasing with 1,250 cases reported in 2009 (Durham Region Health Department, 2011). Chlamydia infections also indicate risky sexual behaviours, which increase the risk of being infected with HIV/AIDS.

HIV/AIDS

HIV is a significant disease that is spread through sexual contact, intravenous drug use and from mother to child (vertical transmission). HIV stands for Human Immunodeficiency Virus and it attacks the immune system, causing a chronic, progressive illness that increases the vulnerability of an individual to infections. As HIV weakens the body’s immune system, opportunistic infections, including bacterial and viral infections, parasites, fungi and cancers,

cause the onset of AIDS (Health Canada, 2010). It should be noted however that the definition of AIDS varies by jurisdictions.

HIV is a prevalent disease throughout the world, with an estimated 40 million people living with HIV worldwide. Over four million people become infected each year, with 640,000 of them being children (Public Health Agency of Canada, 2008). In Canada there were an estimated 65,000 people living with HIV in 2008, compared to 57,000 people at the end of 2005 (Public Health Agency of Canada, 2010). At the end of 2006, there were a total of 58,981 positive HIV cases, with 868 youth aged 15 to 19 years and 14,911 aged 20 to 29 years. It was estimated that at the end of 2006, 729 youth were diagnosed with AIDS, which accounted for 3.5 percent of the cumulative cases in Canada (Public Health Agency of Canada, 2007b). While the reported cases of HIV in the youth population represents a small proportion of the total number of HIVcases in Canada, this population is at risk due to high-risk behaviours that are common with this population – eg. unprotected sex, drug use, homelessness, mental illness and sexual abuse. LGBTQ youth (youth that are lesbian, gay, bisexual, transgender or queer) are also at greater risk than heterosexual youth as they are less likely to seek medical treatment and may engage in risky sexual behaviours (Public Health Agency of Canada, 2007a).

Between 1999 and 2008 there was a significant increase in the number of people living with HIV in Ontario with 15,904 people with HIV in 1999 to 26,627 in 2008. There were also 1,618 new infections of HIV in 2008 in Ontario (Ministry of Health and Long-Term Care, 2010). The HIV rate in Toronto was reported to be 24.8 per 100,000 in 2006, with more than half of the new HIV infected individuals being MSM (Toronto Public Health, 2007).

In 2006, of the 12,160,282 people that lived in Ontario, 561,258 lived in Durham Region (Statistics Canada, 2007a). According to the Durham Region Health Department there were 227 cases of HIV reported between 1991 and 2003 (Durham Region Health Department, 2004). Furthermore 2.3/100,000 youth between the ages of 15 and 24 are infected with HIV in 2010 (Durham Region Health Department, 2011b, unpublished data). This illustrates an important need for prevention programs to reduce the number of youth infected with HIV each year.

Pregnancy

Babies born to teenage mothers are more likely to experience adverse birth outcomes and die before they are one year old compared to those born to older women (Rotermann, 2007). In Canada, as well as the United States, France, Sweden and the United Kingdom, there is a strong negative relationship between education level and having a child before the age of 20 (McKay, 2006). Education and employment opportunities of teenage mothers are also believed to be extremely limited and therefore are often economically unstable. Young mothers who have multiple children face even larger challenges as many live in low-income neighbourhoods (Rotermann, 2007).

In 2005, 30,948 females under the age of 20 years old became pregnant, with 14,013 resulting in live births. The number of births to mothers between the ages of about 15 years to 19 years increased in 2009 to 15,638 (Statistics Canada, 2012). Despite this, teen pregnancy rates overall are decreasing in Canada with an estimated 46,753 pregnancies in 1994 and 42,162 in 1997 (Dryburgh, 2012). The national average of pregnancies in girls between 15 and 19 years of age was 32.1 per 1000 in 2003 which was lower than the 1994 rate of 49.2 per 1000. In Ontario

however, the average rate is below the national average, with 27.4 per 1000 female youth that became pregnant (McKay, 2006).

Between 2001 and 2007 there were an average of 570 teens living in Durham Region between the ages of 15 and 19 that became pregnant every year (Durham Region Health Department, 2010). However pregnancy rates were not evenly distributed in Durham Region with some locations having higher rates of pregnancy. The areas are often associated with high unemployment rates – eg. Oshawa had a significantly higher rate of pregnancy among youth between 2001 and 2007 than other municipalities in Durham Region and in Ontario (Durham Region Health Department, 2010).

Risk Factors for Poor Sexual Health

There are a number of risk factors that affect the health of young people. These risk factors include sexual behaviour of youth, substance use and sexual orientation.

Sexual behaviour of youth

There are number of risky behaviours associated with sexual intercourse of youth. These include early sexual debut, unprotected sex and multiple partners, each of which will be discussed further.

Youth in Canada are highly sexually active and many become sexually active at a young age. Early sexual debut is a significant predictor of HIV infection (Pettifor, Van der Straten, Dunbar, Shiboski & Padian, 2004). Young people are more vulnerable, impulsive and less self-disciplined than adults as their brains are not fully developed. This has lead researchers to believe that youth who have sex at an early age are more likely to suffer partner violence, STIs,

psychological harm and depression. They are also more likely to become pregnant and have low academic achievement (The Institute for Youth Development, 2008).

There are a number of factors that impact early sexual debut, defined as engaging in sex before the age of 13, including; family relationships; psychological factors, including self-esteem and school achievement; peers and risk-taking; and partner-related factors, e.g. Relationship dynamics, greater abstinence self-efficacy, which refers to one's belief in their own abilities, and the age difference between partners (Boyce, Gallupe & Fergus, 2008). Being connected with parents/family and being part of an expressive family are related to later sexual debut, suggesting that strong family ties reduce the likelihood of early first sexual intercourse. Early age of first sexual intercourse is associated with dysfunctional family history, family upset and not living with both parents (Boyce, Gallupe & Fergus, 2008).

Higher academic achievement, participation and connectedness at school have also been associated with a decreased likelihood of early age first sexual intercourse (Boyce, Gallupe & Fergus, 2008; Kirby, Laris & Rolleri, 2007). Peer-pressure has been found to be associated with earlier age of first sexual incounter, as has substance use. Youth are more likely to engage in sexual intercourse early in life if they think their friends are doing it or if they think it is associated with higher social status. Having an intimate partner who is more than two or more years older is also related to an earlier age of first sexual intercourse (Boyce, Gallupe & Fergus, 2008).

Epidemiological data suggests that 25.1% of youth at age 15 years have had sexual intercourse, with this number increasing to 37.5% at 16 years old and 46.9% by 17 years of age (Bleakley, Hennessy & Fishbein, 2006). Therefore, there is a need for timely and useful sexual

health education in school to promote informed sexual decision making that might help prevent STIs and unintended pregnancies (Bleakley, Hennessy & Fishbein, 2006).

A national study done in 2002-2003 with 1150 Canadian youth found that 23% of males and 19% of females in grade 9 have had sex, while 40% of males and 46% of females in grade 11 were sexually active. Of these students, 8-10% of grade 9 and 5-6% of grade 11 youth said they did not use any type of protection or contraception (Boyce, Doherty-Poirier, MacKinnon, Fortin, Saab, King & Gallupe, 2006). In a 2005 Canadian national online survey of 14 to 17 year olds, 27% reported that they were sexually active (Canadian Association for Adolescent Health, 2006). About half of these sexually active teens had three sexual partners and 24% had not used any protection against STIs at their last sexual encounter. Youth engaging in anal sex without using protection are also at a greater risk of contracting HIV or other STIs (Remafedi, 1994).

Further, 38% were engaged in casual sex and 16% had partners who had multiple partners. In a 2003 Canadian study among school aged youth, called *Canadian Youth, Sexual Health and HIV/AIDS Study* (CYSHHAS), 23% of boys and 19% of girls in Grade 9 reported they had sexual intercourse, while 40% of boys and 46% of girls in Grade 11 reported having had sexual intercourse. At least 2% of Grade 7 students reported having had sexual intercourse. While only students up to Grade 11 were surveyed in the CYSHHAS, the average age of first sexual intercourse was 14.1 years among boys and 14.5 years among girls. In that study, 50% of the students who had initiated sex had only one sexual partner but many students reported having 4 or more partners (Council of Ministers of Education Canada, 2003).

Substance Use

Research has shown that substance use increases the chance of risky behaviour. From a Canadian Alcohol and Drug Use Monitoring Survey in 2010, 10.7% of youth surveyed that were 15 years or older used marijauna in 2010, which had decreased from 14.1% in 2004 (Health Canada, 2012). For Canadians, 15 years or older, the prevalence of cocaine or crack use in the past year was 1.2% in 2010, while 0.9% used hallucinagens, 0.7% used ecstasy and 0.5% had used speed. The drug use rates remain much higher for the 15 to 24 year age group and are three times more likely to use marijauna. Seventy-seven percent of Canadians also reported that they had consumed alcohol in the past year, with 71.5% of youth reporting that they had consumed alcohol. The prevalence of binge drinking was 3 times higher than the rate for adults 25 years or older (9.4% versus 3.3%) (Health Canada, 2012).

According to an Ontario Student Drug Survey completed between 1997 and 2007, the most commonly used substance among youth is alcohol, with two-thirds of youth reporting that they had consumed alcohol in the past year (Leslie, 2008). The study also showed that the second most common drug that youth use is marijauna. Less common drugs included ecstacy, LSD, cocaine and crystal methamphetamine, with 1 in 20 youth reporting using these drugs in that time period. The survey indicated that one-third of teens reported that they had not used any drugs, including tobacco and alcohol (Leslie, 2008).

In Durham Region, 68% of secondary school students ages 14 to 18, had not used marijauna in the last 12 months. Over 15% of youth in Durham Region said that they have used marijauna one to nine times in the past year (Durham Region Health Department, 2009). Ten percent of secondary school students reported that they had tried using hallucinogens other than

LSD or PCP, such as mushrooms (Durham Region Health Department, 2010b). Additionally, 4% reported that they had used Cocaine in their lifetime and 2% had tried LSD. These statistics were also similar to the rates in Ontario (Durham Region Health Department, 2010b).

Drugs and alcohol can play a large role in influencing risky decisions related to sexual behaviour (Smylie, Maticka-Tyndale, Boyd Adolescent Sexual Health Planning Committee, 2008). According to Leigh and Stall (1993), studies have shown that youth are more likely to engage in high-risk behaviours, such as unprotected sex, when they are under the influence of alcohol or drugs. Drugs such as marijauna may affect youths' level of consciousness and feelings of sexual arousal (Pope, Gruber & Yurgelun-Todd, 2001). Youth that use marijauna have been found to be at higher risk for HIV and other STIs (Poikolainen, Tuulio-Henriksson, Aalto-Setala, Anttila & Lonnqvist, 2001).

Sexual Orientation

Lesbian, gay, bisexual and transgender (LGBT) may be at higher risk, as they often do not use health care services that offer preventible methods because of perceived discrimination or fear of stigmatization (Shapiro & Ray, 2007). In Ontario, many HIV cases among males may be due to unprotected same sex activites, but due to the stigma attached to homosexuality, they may not report that activity (Shapiro & Ray, 2007). In the Toronto Teen Survey, sexual minority youth identify homophobia as an important concern (Flicker, Flynn, Larkin, Travers, Guta, Pole et al., 2009). Youth that identify themselves as LGBT are more likely to experience depressive symptoms, suicidal thoughts and to attempt suicide (Almeida, Johnson, Corliss, Molnar & Azrael, 2009). Therefore, particular attention must be paid to this population when developing sexual health programs.

Sources of Sexual Health Information

There is a need for accurate sources of sexual health information for youth, at an appropriate age (Bleakley, Hennessy & Fishbein, 2006). According to a review by Kirby, Laris and Rolleri (2007), twenty-eight different studies have examined whether sexual health programs that deliver sexual health information reduced sexual risk-taking. Half of these studies show there was a significant decrease in taking sexual risks and none showing an increase in sexual risk-taking (Kirby, Laris & Rolleri, 2007). Considering this, youth need to have access to counteract effective sexual health resources.

There are numerous resources that youth can use to access sexual health information. For the purposes of this study we need to evaluate the formal sources of education that are available to youth, e.g. School (Spanier, 1976) and informal resources of sexual health information. There are a variety of "informal sources" of information, including friends, television and printed materials (Spanier, 1976) and the Internet. A study done in Ontario with 406 students in grades 7-12 youth during 1996, participants stated where they wanted to receive their information on sexual health. Fifty-five percent said school was either their first or second choice, followed by family with 44%. Friends (32%), television (21%), magazines and pamphlets (19%) and doctor/nurse (13%) were also identified as sources of information (McKay & Holowaty, 1997).

School

School is an important aspect of young people's socialization as all youth are required by Canadian law to attend school until they are 15-16 years, depending on the province (Citizenship and Immigration Canada, n.d.). Teaching sexual health in schools is an efficient method of delivery as about 95% of youth (in the United States) attend public schools regularly (Guzman,

Casad, Schlehofer-Sutton, Villanueva & Feria, 2003). This is similar to Canadian youth as 98% of children between the ages of 5-14 years between 1997-1998 were enrolled in formal education and 82% of youth 15-19 attended school either part-time or full-time in 1996 (Statistics Canada, 2001). Therefore the use of sexual health education in schools has the potential to impact youth before they become sexually active (Guzman et al., 2003). Approximately 20 years ago there was no consistent curriculum for sexual health education in Ontario. There are now provincial guidelines that inform how sexual health information is delivered and what topics are covered (Maticka-Tyndale, 2008). The guidelines highlight the importance of teaching about the positive aspects of sexuality in sex education, such as non-exploitive sexual behaviour, healthy relationships and communication with sexual partners, instead of focussing on the potential negative outcomes of sexual activity, such as STIs and unintended pregnancies (Smylie, Maticka-Tyndale, Boyd, Adolescent Sexual Health Planning Committee, 2008). These guidelines are to assist those delivering sexual health information to youth and to ensure that everyone is receiving adequate sexual health education (Public Health Agency of Canada, 2008).

Despite having guidelines in the Ontario curriculum to students about sexual health, there are still topics that are highly contested and not included (Maticka-Tyndale, Shirpak & Chinichian, 2007; Marsman & Herold, 1986). The Toronto Teen Survey, which was done conducted between 2006 and 2007, found that the curriculum does not address the sexual health issues that youth are most interested in, such as healthy relationships, sexual experience, sexual orientation and sexual pleasure (Flicker, Flynn, Larkin, Travers, Guta, Pole, et al., 2009). The findings were similar to that of a study conducted in New Brunswick, which asked parents when they thought certain subjects in sexual health should be introduced. The study found that for several topics more than 10% of parents did not want certain topics taught in the curriculum,

including wet dreams, sexuality in the media, masturbation, sex as a part of a loving relationship, homosexuality, sexual behaviour, teenage prostitution, sexual problems and concerns, pornography, and sexual pleasure or orgasm (Weaver, Byers, Sears, Cohen & Randall, 2002).

Even with sexual health education in schools, many students receive less than 20 hours of sexuality education in all of their elementary school and high school years (Eisenberg, Bernat, Bearinger & Resnick, 2008). With this limited amount of time dedicated to teaching youth about sexual health issues, topics can only be covered broadly and not in great detail. Further, teachers do not have high levels of expertise in many of the topic areas. Many teachers do not receive specialized training to effectively teach youth about sexual health issues (Ninomiya, 2010; McNamara, Greary & Jourdan, 2010).

Teachers also have discretion over what they choose to include in their sexual health classes. A study conducted in Newfoundland in 2007 investigated the experiences, coverage of topics and comfort levels of teachers in junior high schools (Ninomiya, 2010). Topics that were often covered were romantic relationships, emotions and hormones, decision-making on sexual practices, contraception choice awareness, mechanics of the reproductive system, safer sex practices, menstruation, reproduction, pregnancy and birth, and sexual abuse/assault. Topics that teachers often opted out included unplanned pregnancy options, sperm production, wet dreams/unwanted erections, parenting and adoption, sexual feelings and expression, vaginal/penile sex, masturbation and sexual pleasure, gender/power dynamics and oral sex (Ninomiya, 2010). The main reason for not covering these topics was low comfort levels with the topics. This is a major concern as it means that many youth are not receiving the information that has been recognized as important by both Health Canada.

A study conducted in Calgary between 2006 and 2007, noted the importance of providing teachers with training that will help them to implement the sexuality curriculum. This training gives teachers a broad understanding of sexuality in a variety of sexual health topics thereby developing feelings of comfort and capability of teaching the curriculum, giving teachers up to date resources to refer to, and giving them information pertaining to diversity and a wide range of teaching methods (Lokanc-Diluzio, Cobb, Harrison & Nelson, 2007). When asked, 65% of teachers had received no special training, such as the Sexual Attitude Reassessment workshop, prior to teaching sexual education. Teachers also reported that they only felt somewhat comfortable teaching the sexual health curriculum that include topics of communication about sex, birth control methods, safer sex practices and sexual coersion (Cohen, Byers, Sears & Weaver, 2004). By providing them with the necessary training, many teachers will be able to feel more comfortable and knowlegable about the topics they are teaching (Lokanc-Diluzio, Cobb, Harrison & Nelson, 2007).

Some studies have suggested that the use of ‘visitors’, such as public health nurses or health promoters, to deliver sexual health education in schools may be a more effective way of increasing the knowledge of youth in different areas of sexual health (De Vries et al., 2009). Alternate ways of teaching sex education have shown to have a positive impact on sexual knowledge. These include computer-based and theatre-based interventions, as well as mixed-method outside-facilitation approaches delivered by medical professionals and/or peer educators (De Vries et al., 2009). Sexual education in schools may be more effective if a more modern and/or creative approach is taken by a facilitator that is also not a student’s teacher or parent.

A nationwide study conducted by the National Center for Health Sciences, in the United States, was conducted between 2002 and 2003 to evaluate the role of sex education in the initiation of sexual activity and the risk of teen pregnancy and STIs. The study looked at youth, aged 15-19 years and found that those who received abstinence-only education or no education at all were significantly more likely to report a teen pregnancy, compared to those who recieved comprehensive sex education ($p = 0.001$). Abstinence-only programs also did not have a significant effect in delaying sexual activity or in reducing the risk for teen pregnancy or STIs. Instead, comprehensive programs had a great affect on the reduction of teen pregnancy and was somewhat related to delaying the initiation of sexual activity (Kohler, Manhart & Lafferty, 2007).

Some schools boards employ an abstinence-only sexual health education program that emphasizes waiting until marriage as a lifestyle choice. This type of education prevents teachers from talking about contraception or other forms of protection or birth control, such as condoms, unless it is to mention their limitations (Bleakley, Hennessy & Fishbein, 2006). In a study where parents were asked about their beliefs on abstinence-only education as an effective way to prevent unplanned pregnancy and sexually treansmitted infections (STIs), 54.5% said that they strongly disagreed or somewhat disagreed with this method of teaching. Parents (80.5%) were in favour of teaching about abstinence in addition to other methods of preventing pregnancy as an effective way to prevent unplanned pregnancy and STIs, but many still contest many subjects from being taught in the classroom (Bleakley, Hennessy & Fishbein, 2006). The authors concluded that based on public opinion and scientific evidence of the effectiveness of abstinence-only education, this type of education should be replaced in favour of more comprehensive sexual health education programs (Bleakley, Hennessy & Fishbein, 2006).

Parents

Children spend the majority of their time with their parents and as such, they develop trust and bonds. Therefore, parents are important in educating on sexual health education (if they are themselves prepared). Studies have shown that parents are willing to play a part in providing sexual health education to their children (Weaver, Byers, Sears, Cohen & Randall, 2002). In a survey of 4200 parents with children in New Brunswick schools, 95% believed that sexual health education should be a shared responsibility between school and home (Weaver, Byers, Sears, Cohen & Randall, 2002). A study in Ontario on 216 parents found that 98% of Ontario parents believed that AIDS education should be provided, with 88% stating that condom use should be taught as well (Verby & Herold, 1992). A study in the United States found that family communication about sex was significantly associated with using a birth control method during their last sexual encounter (Mueller et al., 2010). This suggests that family communication plays an important role in decreasing risky sexual behaviour in youth.

Parent-youth communication plays an important role in educating youth about sexual health, as shown in several studies addressing the topic (Mueller et al., 2010; Weaver, Byers, Sears, Cohen & Randall, 2002; Verby & Herold, 1992) Mothers are often more likely to talk to their child about sexual health if they are knowledgeable in the area and can answer questions easily, or if they feel like they won’t embarass their child by talking to them about sex. They are also more likely to talk to their youth if they felt more relaxed or comfortable about talking about sex and felt that talking to their kids made them a more responsible parent (Guilamo-Ramos, Jaccard, Dittus & Collins, 2008). If parents do not talk to their children about sex however, children may use other formal/informal sources to gain knowledge on certain subjects that are not included in programs at school or conversations with parents at home. Despite parents’

willingness to be involved in sexual education, there needs to be a shared responsibility between schools, parents and other possible sources (Weaver, Byers, Sears, Cohen & Randall, 2002), such as peers.

Peers

In addition to parents, many studies identify peers as an informal source of sexual information (Dale, Watson, Adair, Moy & Humphris, 2010; Kirby, Laris & Rolleri, 2007; L'Engle, Brown & Kenneavy, 2004; Smylie et al, 2008; Hughes & McCauley, 1998; McKay & Holowaty, 1997; Spanier, 1976). Friends are considered to be easy for youth to discuss personal and sexual matters (Currie, Levin & Todd, 2008). Peers are also a main source of sexuality information, making peer-education programs discussing a variety of topics– e.g. willingness to use condoms, confidence using them, and negotiating skills, an effective delivery method. Peer education programs were shown to be significantly successful for girls between 14 and 25 years (Hughes & McCauley, 1998). Peer education has shown to be effective in school-based programs as youth who took part in this type of sexual education often had higher sexual health knowledge compared to classes taught by teachers or community members (Smylie, Maticka-Tyndale, Boyd & the Adolescent Sexual Health Planning Committee, 2008). Youth report feeling higher levels of comfort when receiving information from people that recently experienced the issues that matter to them and believe that they are more credible than adults (Smylie et al, 2008). While peer educators have been shown to encourage youth to consider the consequences of sex and to give youth the skills they need to make responsible decisions and to improve attitudes toward condom use and abstinence, they may not be the best at giving accurate information if they are not properly trained (Mellanby, Rees & Tripp, 2000).

Peers also play a role in a youth's decision to engage in sexual intercourse (DiIorio, Kelley, Hockenberry-Eaton, 1999) and perceived sexual experience of peers is believed to predict sexual activity. A survey of children ages 9 years to 15 years in the United States found that frequency of hearing that their peers are having sex, the greater the chance that they will engage in sexual intercourse (Romer et al, 1994). Peer connectedness, or relationships with others close in age, has also been seen to have a direct correlation to youth sexual and reproductive health, in both a risk and protective relationship (Markham et al, 2010).

Media

Sources have cited that along with peers, parents and school, media has been identified as a source of sexual information (Kaiser Family Foundation, 1998; Sutton, Brown, Wilson & Klein, 2002). The mass media, including television, music, magazines, movies and the Internet (which will be discussed separately from other media) are important sources of sexual health education and will be discussed further (Brown & Keller, 200). Studies have shown that the media also plays a role in educating and influencing youth in regards to sexuality and sexual health (Brown, 2000; Chapin, 2000). Mass media played a significant role in the lives of young people, especially in relation to sexual risk behaviour (Brown, 2000; Chapin, 2000; Kaiser Family Foundation, 1998). Roberts et al. (2004) also found that youth spend about six to seven hours a day using media. According to several studies the media that youth are exposed to often have sexual images but often do not include healthy sexual messages and the consequences of sexual risk-taking (Pardun, L'Engle & Brown, 2005; Huston, Wartella & Donnerstein, 1998). A report by the Kaiser Family Foundation found that 83% of the top rated television shows for teens included some kind of sexual content, while only 12% of the sexual content addressed sexual risks and responsibilities (Kunkel, Biely, Eyal, et al, 2003). L'Engle, Brown and

Kenneavy (2004) found that there is a relationship between youth who are exposed to more sexual content are more likely to report sexual activity or intentions to engage in sexual intercourse. The study suggests that this may be because the media plays a large role in sexual socialization of youth (Kaiser Family Foundation, 1998; Sutton, Brown, Wilson & Klein, 2002). While mass media is considered an informal source of sexual health information, it can play an important role in addressing the sexual health issues and questions that formal sources do not address (Spanier, 1976).

Internet

As of 2009, 93% of youth in the United States were using the Internet and were spending about 44 hours a week on the computer (Kaiser Family Foundation, 2010). Youth are believed to be the most "connected" demographic group today (Ralph, Berglas, Schwartz & Brindis, 2011). Thirty-one percent of teens have searched online for health information that they find difficult to talk about (Levine, 2011). Youth may not want to talk to parents about sexual health matters due to embarrassment and not wanting them to think they are sexually active. For this reason, youth will often use the Internet for sexual health information (Harvey, Brown, Crawford, Macfarlane & McPherson, 2007). According to Borzekowski and Rickert (2001) young people who are familiar and comfortable using the Internet use it to access information that may improve their physical and psychological health. In 2000, more than 33.5 million people were believed to have sought out health information online (Borzekowski & Rickert, 2001). This number has grown considerably in recent years, as more households have Internet access. The Internet is also recognized as a popular place for youth to access sensitive information as it is accessible, anonymous and nonjudgmental (Borzekowski, 2006).

A survey completed on 189 participants between the ages of 18 and 80 years of age in Australia found the Internet to be the preferred source of health information. It is most popular

among university students, ages 18 and 25 years of age (Dart, 2008). For those who use the Internet often, it was ranked in the top five sources for health information and was more important for the 18 years to 25 years age group which accounted for 133 of the 189 total participants (Dart, 2008). While this was the case, the trustworthiness of the Internet was called into question and many participants said that it depended on the website (Dart, 2008).

The Internet also offers a new way of delivering sexual health information to youth and can be a successful channel for sex education (Brown, Keller & Stern, 2009). The Internet is used for finding and maintaining social, sexual and romantic relationships because it is perceived to be safe, anonymous, outside of adult of control, available at all times and allows them to communicate with peers through mediums such as Skype, MSN and other channels that allow youth to chat online (Brown, Keller & Stern, 2009). Many teens agree that the Internet provides them with a platform to search for the answers they are looking for to embarrassing sex-related questions (Borzekowski & Rickert, 2001). They also used the Internet to learn more about topics they found uncomfortable, familiarize themselves with the human body and learn about sexual practices (Borzekowski & Rickert, 2001).

Research also suggests that youth, especially boys, use the Internet to watch pornography. In the United States, 30% of females and 50 to 70% of males have viewed sexually explicit content online (Brown, Keller & Stern, 2009). It is believed that the Internet provides a safe place for youth to explore their sexuality (Brown, Keller & Stern, 2009). This was found to be the case for LGBTQ youth, as the internet allows them a space for experimentation and self-definition. LGBTQ youth are able to discuss sexual identities and queer politics online and are also able to seek partners and discuss safer sex practices, as well as figure out the coming out process (Bond, Hefner & Drogos, 2008).

Youth face a number of barriers when trying to access sexual health information, such as confidentiality, cost and accessibility to services (Brindis, 2006). Considering this, it is important to find new ways of delivering information to youth to prevent unintended pregnancies and sexually transmitted infections (Ralph, Berglas, Schwartz & Brindis, 2011). A key characteristic of a successful sexual health outreach program connects the target population, such as adolescent youth, to information in their own environments to ensure that they know about the services that are available to them in their communities (Ralph, Berglas, Schwartz & Brindis, 2011).

Barriers to Sexual Health Resources

It has been reported that youth awareness of sexual health resources is often low and those who are most in need of this information do not receive it (Ralph, Berglas, Schwartz & Brindis, 2011). In a survey among 1171 Canadians between the ages of 14 and 17 years, youth reported experiencing barriers when trying to access sexual health information pertaining to sexually transmitted infections (Frappier, Kaufman, Baltzer, Elliott, Lane, Pinzon et al., 2008). When asked, 62% of youth reported they experienced obstacles in finding information about sex and 69% could not find the information they were looking for at all (Frappier, et al., 2008).

One study noted that a lack of knowledge about sexual health services is a major barrier for youth. Often youth only contact a sexual and reproductive health program when they are already pregnant or have an STI (Hughes & McCauley, 1998). This finding is supported by another study that found students have little awareness of the services that are available to them (DiCenso et al., 2001). The delivery of creative and effective programs, that can reach a large number of youth, is often prevented due to the attitudes of adults towards such programs. As a result, programs remain small and deliver inadequate information to youth (Hughes & McCauley, 1998).

In a study conducted in Niagara Region, of those who knew about the health services that were available to them, a majority of the participants indicate that accessing the services is difficult (DiCenso et al., 2001). Barriers that were idenitifed by the participants were the location, hours of operation and insufficient time for appointments. Location and transportation was also cited as a major issue, especially for those living in rural areas. Confidentiality and fear of judgment were also a major concern for many youth, as they were afraid that they would be seen by someone they knew, when trying to access sexual health resources (DiCenso et al., 2001), thereby impacting the accessibility of the service.

Barriers to the delivery of sexual health services and information as stated above, is a major concern for youth as they need to have access to sexual health resources for their overall health and well-being (Public Health Agency of Canada, 2008). By eliminating the barriers they experience when trying to access services, youth will be better prepared and equipped to make informed, positive choices. This is an important part of both cognitive and social development for youth (Maticka-Tyndale, 2001).Youth must be able to get the information they need and/or want, without experiencing obstacles as they gather information about sexual health and discover more about their individual sexuality.

Youth Perception of Sexual Health Resources

Youth often report that communication with parents about sexuality is infrequent, limited in scope and unimportant (Byers et al., 2003). Byers et al (2003) discuss the youth perspective on sexual health education at school and at home. They emphasize that it is important to determine whether youth think their parents are meeting their sexual health education needs and if schools are able to fill in the gaps that may exist. There have been several studies done in the area of

sexual health education in schools from both a public and parental point of view (Eisenberg, Bernat, Bearinger, & Resnick, 2008; Maticka-Tyndale, Shirpak & Chinichian, 2007; Bleakley, Hennesy & Fishbein, 2006; McKay & Holowaty, 1997; Marsman & Herold, 1986), but very few about what youth think about sexual health information delivery and where they would prefer to receive such information. Also, there have been several studies that explore the youth perspective on sexual health education (Meaney, Rye, Wood & Solovieva, 2009; Byers, Sears, Voyer, Thurlow, Cohen & Weaver, 2003; DiCenso et al., 2001; McKay & Holowaty, 1997); however several of these studies were done more than five years ago and were conducted outside of Durham Region.

In an exploratory study that looked at the perceptions and satisfaction with school-based sexual education among 184 university students who were recent graduates of high school in Ontario (Meaney, Rye, Wood & Solovieva, 2009, found that students were slightly satisfied with the sexual health education they received in high school. Another study completed in New Brunswick also assessed the satisfaction of 1663 youth enrolled in grade 9-12. They discovered that 55% of the students rate their sexual health education as either fair or poor while 45% said they thought it was good or very good (Byers, Sears, Voyer, Thurlow, Cohen & Weaver, 2003).

A study done in Niagara Region among 83 youth in grades nine and eleven also found that students believed that sex education was too focused on “plumbing” and was often taught by teachers who seemed uncomfortable with the material (DiCenso et al., 2001). In a 1996 study, students were given a questionnaire on their opinions related to sexual health education. Results showed 61.2% of this youth population thought their schools were doing a good job at delivering sexual health information (McKay & Holowaty, 1997). While studies have shown that there can be great variation between regions (Millson et al., 2003), these studies indicate that there are

mixed reactions towards sexual health education. Durham Region has a specific need for further sexual health education due to the high prevalence of sexually transmitted infections in youth (Durham Region Health Department, 2010).

When students in New Brunswick were asked about the quality of education they received, 37% rated it as excellent or very good, while 30% rated it as fair or poor. When youth were asked if their sexual health education included topics they were most interested in, 44% of youth agreed or strongly agreed, while 25% disagreed (Byers, Sears, Voyer, Thurlow, Cohen & Weaver, 2003). Many Canadian students/youth in other studies have noted that the quality of sexuality education is low as they lack information on topics that interest them, such as how to get tested for STIs, methods of birth control, how to talk to boyfriends/girlfriends about sex and how to prevent STIs (Lokanc-Diluzio, Cobb, Harrison & Nelson, 2007).

How Youth Want to Receive Sexual Education

Youth have strong opinions about how they want to receive information about sexual health. Youth want to learn about the issues that are relevant to them, which may not be happening at home or in school (Byers et al, 2003). A New Brunswick study asked youth whether sexual health education should be taught in school. Most of the students (93%) said that school-based programs should be provided. When asked more in-depth questions about the topics that should be included in school-based programs, youth said, sexually transmitted diseases, birth control methods and safe sex practices, personal safety, puberty, reproductions, sexual coercion and sexual assault, sexual decision-making in dating relationships, sexual pleasure and enjoyments, correct names for genitals and abstinence, were all important (Byers, Sears, Voyer, Thurlow, Cohen & Weaver, 2003).

In a 2003 study, youth were given an opportunity to evaluate sexual health education delivery (Byers et al., 2003). Students identified methods such as videos, class discussions, lectures, a question box, readings, role-play and games, guest speakers and individual projects as being important for the provision of sexual health information. Students said that they thought videos and question boxes were the most helpful teaching methods for sex education (Byers, Sears, Voyer, Thurlow, Cohen & Weaver, 2003). This study also evaluated what youth thought about sexual health education at home. Only 42% reported that their parents had done excellently or very well on providing the information they needed. There were indications that middle school students have a negative attitude about sexual communication with their parents, as only 21% of students wanted their parents to talk to them more about sexuality (Byers, Sears, Voyer, Thurlow, Cohen & Weaver, 2003). This was also the case when youth were given the opportunity to select where they prefer to get information about AIDS and STIs, as they did not include parents as one of the sources (McKay & Holowaty, 1997). This may be an indication that youth would prefer sexual health education outside of the home even though parents would like to be part of their youth's sexual health education.

Youth feel there is something missing in the sexual health education that they receive both in school and at home. It is important to find out more about what youth want and need from sexual health education programs, which will be achieved in this study, so improvements can be made to health services in Durham Region.

CHAPTER THREE: CONCEPTUAL FRAMEWORK

This chapter describes how the social determinants of health impact the sexual well-being of youth and why the Rights of the Child plays an integral role in sexual education. The chapter will also discuss the community-based research (CBR) approach and how it was utilized for this research study as a means to build capacity with youth to support them with healthy sexual decisions. The Social Determinants of Health, The Rights of the Child and CBR will also be discussed as a conceptual framework for this research study as they all influenced the research process.

Social Determinants of Health

The purpose of this research was to explore the sexual health needs of youth in Durham Region. There are a number of social determinants of health, including economics, housing, relationships and education, among others. These social determinants can impact an individual's sexual health and their ability to make informed and positive decisions regarding sex. One social determinant that is often forgotten is age as it can have a large impact on ones health. This is why our study chose to target youth as they are an at risk population in regards to sexual health. Social determinants shape a youths' social-cultural environment, which includes economic status, access to information and transportation, their culture, pressures to person at school, among many others. This environment has a direct impact on a youth's sexual health. Similarly, a youth's sexual health can also have an impact on the social-cultural environment as teens with children for example have been shown to have lower levels of education and higher levels of poverty. This interrelationship makes the social determinants an important concept to understand when assessing the sexual health needs of youth.

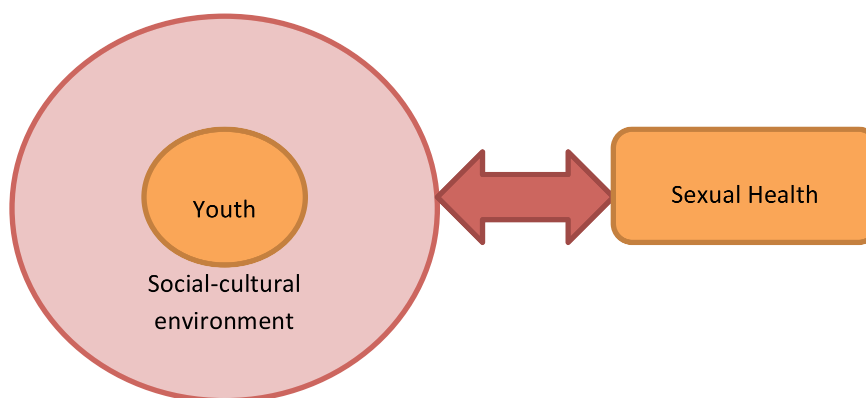

Figure 2. Role of youths' social-cultural environment on their sexual health

In school aged children a common theme in health behaviour that can be seen is that they have the ability to make decisions, however their choices are influenced by the circumstances in which they live. This applies directly to sexual health as there are socio-cultural influences that affect a youth's choice to engage in sexual intercourse (Marmot, 2009). For example, minority youth living in poverty are at greater risk for STIs and teen pregnancy (Romer et al., 1994). This makes it crucial that youth are involved in and empowered to improve their health by addressing the social determinants. Youth have a fundamental right to the information they need to protect their sexual health and their sexual identity. This concept will be further explored.

Rights of the Child – A Child Rights Approach

Youth have the right to health, information and life. The U.N. Committee on the Rights of the Child states that teens should have complete access to accurate information about contraception and have a legal right to health care that includes access to sexual health services (Santelli, Ott, Lyon, Rogers, Summers & Scleifer, 2006). Access to accurate and comprehensive HIV/AIDS and sexual health information has been recognized as a basic human right. The U.N.

Committee on the Rights of the Child provides guidelines and has emphasized that children – defining children as a person under the age of 18 years – have the right to access HIV/AIDS and sexual health information as it pertains to their right to health and information (Santelli et al., 2006).

The Convention on the Rights of the Child clearly states that every child must be protected from sexual abuse and from pornography and prostitution (article 34) (UNICEF, 2011). There are also three principles of the Convention that are relevant to this study; the principle of non-discrimination, the principle of the best interests of the child and the principle of participation.

The principle of non-discrimination states that all children must be protected and treated fairly, no matter their race, religion, culture, abilities, where they live, their gender, whether they have a disability, their economic status or what language they speak (UNICEF, 2011). Some children are at higher risk of being victims of sexual abuse and commercial sexual exploitation, such as children with disabilities, children in institutions and children who live and/or work on the street (Gilbert et al, 2009). This article also requires that every child must be provided with the same sexual health information to ensure that they have the knowledge they need to protect themselves. There is currently a wide variation in the amount, quality, type and timings of sexual education provided in Canadian schools that needs to be addressed.

The principle of best interests of the child relates to the need to ensure that children are the primary concern when making decisions that may affect them (UNICEF, 2011). This relates to the delivery of information as children need to have a stronger influence over the education they receive pertaining to sexual health, as parents have been seen to exert power over what is

taught in the classroom. This was the case in April, 2010 when Premier Dalton McGuinty withdrew a proposal for a new Health and Physical Education program that included new sexual health education topics to be taught in schools (Rayside, 2010). This was the result of religious and other groups protesting against the changes and led to the reversal of the decision to change school sexual education programs. This decision was made without regard for the best interest of children, impacting the quality of sexual health education that children receive.

The principle of participation, or respect for the views of the child (article 12) states that children also have the right to share their thoughts and opinions when decisions are being made that affect them and that children have rights related to information (article 13 and 17). These articles are important guides for sexual health information. These principles state that children have the right to receive and share information that is clear and appropriate (UNICEF, 2011). This directly relates to sexual health education delivery and suggests that children should be able to influence the topics that are taught in school about sex and receive within their communities from formal and informal sources.

In 1990, the Charter of the United Nations was signed by many countries, including Canada, which recognizes "the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world" (UN General Assembly, 1989, p. 7). In this Charter, the United Nations specifically stated that children are entitled to special care and assistance to ensure proper development. Article 24 of this Charter also states that, "the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health" and that "Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services" (UN General Assembly, 1989, p. 7). This concept can be applied to sexual

health education as youth need timely, accurate and detailed information so they can make informed sexual health decisions. Children should have access to health care services so that they can achieve optimal sexual health.

Traditional sexual health education has been shown to infringe upon children's rights to information (Kennedy & Covell, 2009). A survey done with 120 grade ten students was done to measure the sex education they had received on topics including birth control, sexually transmitted disease, sexual health knowledge, attitudes towards gays lesbians and teaching about homosexuality and school-based experiences with homophobia (Kennedy & Covell, 2009). The study found that many students were sexually active, however their knowledge of sexual health issues, and particularly homosexuality, was poor. Current education programs are inadequate and are violating the rights of all children, but especially those who identify as a sexual minority. To better meet the needs and rights of children, sexual health education practices need to change by improving the attitudes and behaviours of teachers and other educators (Kennedy & Covell, 2009).

A Child Rights Approach was used to guide this research study. It is crucial for youth to be given age-appropriate and comprehensive sexual health education that will allow them to protect themselves. Evidence has shown that youth who receive comprehensive sexual health information reduces the risk of teen pregnancy and STIs (Kohler, Manhart & Lafferty, 2007), making it important to ensure that youth are given education on sex. Children have the right to sexual health information and more needs to be done to include youth in voicing their thoughts and opinions on matters that could potentially affect their health and well-being.

Community-Based Research

CBR is recognized as an effective approach for addressing issues related to disempowered populations, which affects health status. This approach to research involves working with those who are affected by a specific problem and working with them in an equal partnership to find a solution (Flicker & Guta, 2008; Jones, Koegel & Wells, 2008). CBR principles stress research with, rather than on communities (Leung, Yen & Minkler, 2004). Principles also “recognize and address the pathways through which social inequities and social hierarchies contribute to disparities” and aim to address these differences and inequities (Schulz, Kreiger & Galea, 2002). CBR partnerships allow for the opportunity to bring diverse individuals and organizations from different fields together enhancing a community’s capacity to improve health (Schulz, Kreiger & Galea, 2002). The participation and influence of the community and non-academic researchers, is important in CBR (Israel, Schulz, Parker & Becker, 1998). Community-based partnerships also give a voice to disempowered youth to address the social conditions that cause disparities and can lead to effective health research and action (Schulz, Kreiger & Galea, 2002).

There are three main components of CBR: participation, education and social action (Leung, Yen & Minkler, 2004). Participation involves the community in each stage of the research process to ensure that the issues that are addressed are locally relevant. Through this process, the community gains new skills for conducting research and enhances their problem solving ability. Through education, participants will develop awareness of the health of their community and the larger social structure. Other issues may be discovered through CBR and by making education a main priority; CBR can address health disparities (Leung, Yen & Minkler, 2004). The final element of CBR is action, which is an area that distinguishes this approach from

other research approaches. Social action involves translating the findings into recommendations and possible change to improve the community (Leung, Yen & Minkler, 2004).

This research strategy is also recognized as an extremely effective method when working with youth. CBR can increase the capacity of youth by including them in the research as not only participants but also advisors and stakeholders in the research. Through this process, youth can become empowered to encourage change. By giving those who are affected by health disparities the opportunity to guide research, barriers regarding participation are addressed and research acceptance from the community is increased (Flicker & Guta, 2008). This process can lead to social justice and the outcomes of CBR should achieve their objectives related to health outcomes by addressing the underlying social determinants of health (Schulz, Israel & Lantz, 2003).

In addition to being an effective approach, CBR can also guide the theoretical framework. A CBR framework promotes positive sexual health research as it requires informed and ecological interpretation of the health issues that take place in the community (Reece & Dodge, 2004). The concept of CBR frameworks is not new, Reece and Dodge (2004) discuss early work of Lewin (1946) regarding action research, which led to participatory approaches in a number of different academic disciplines (Reece & Dodge, 2004).

According to Israel, Sculz, Parker and Becker (1998), there are eight guiding principles that represent the theory of CBR in the field of public health. The key principles of CBR include: (1) recognize community as a unit of identity; (2) build on strengths and resources within the community; (3) facilitate collaborative partnerships in all phases of the research; (4) promote a co-learning and empowering process that attends to social inequities; (5) integrate knowledge

and action for mutual benefit of all partners; (6) involve systems development through a cyclical and iterative process; (7) emphasize local relevance of public health problems and ecological perspectives that attend to multiple determinants of health; and (8) disseminate findings and knowledge gained to all partners and involves them in the dissemination process (Israel, Schulz, Parker & Becker, 1998). A ninth principle was also identified by Reece and Dodger (2004), which is also applicable to this research study: (9) involves a long-term process and commitment. The principles of community-based research were a part of the Durham Region Healthy SexYouthality Project and play an important role in the study design, implementation, analysis and dissemination of the study findings. The principles of CBR are believed to be "fairly ambiguous" and can be applied to a variety of studies as a result (Reece & Dodge, 2004).

Table 1. Describes the principles of CBR and how they were applied to the Durham Region Healthy SexYouthality Project. The first and second principles of CBR recognizes the community as a unified unit and builds on the strengths and resources of the community. CBR also builds a collaborative partnership throughout the research process and promotes education and empowerment of the community to address social inequalities. The fifth principle of CBR is that knowledge and action benefits all of the partners involved in the research process. It also involves a cyclical and iterative process and CBR continues to develop as the study progresses. The local relevance of the research is also emphasized and findings and knowledge can be used to improve the social determinants of health. Finally, CBR involves a long-term commitment to research and builds lasting relationships between the community and research institutions. These principles have assisted other researchers design and conduct research, as well as analyze and disseminate the findings of this study. It is also suggested that these principles offer a theoretical

framework that sexual health researchers can use to explore the lived experience of sexual behaviours and values of the individuals and communities being studied (Reece & Dodge, 2004).

Table 1. Principles of CBR and the Durham Region Healthy SexYouthality Project

CBR Principles	**CBR Process**
1. Recognize community as a unit of identity	- Both the Coalition members and the youth are considered a single community (Israel et al., 1998, p. 178) - The research was done in partnership with this community and used their shared experiences, norms, interests of youth and expertise to guide each step of the study to ensure it addressed the common goal
2. Build on strengths and resources within the community	- Coalition members and researchers at the UOIT work together in developing the research study - The coalition members and the researchers work together over a number of months, allowing for trust and mutual commitment to both the community and the research
3. Facilitate collaborative partnerships in all phases of the research	- The Coalition and Community Advisory Committee (CAC) group worked together in each step of the research - Both the Coalition and CAC recruited for focus groups, trained youth to implement the project and supported dissemination
4. Promote a co-learning and empowering process that attends to social inequities	- The skills of the coalition members are extremely beneficial and the knowledge of the researchers is used to build the capacity of the coalition members and youth in conducting this research - Power dynamics also play a role; however it is important that power is shared between all stakeholders, including the participants to them with opportunities to share their experiences, opinions and expertise
5. Integrate knowledge and action for mutual benefit of all partners	- Findings from the research are presented to the community on several occasions, thereby expanding their knowledge - Knowledge translation is high as Coalition members were able to use the information to make the necessary changes to programs and sexual health services benefiting all parties involved, including the researchers, participants, coalition members, and the rest of the community
6. Involve systems development through a cyclical and iterative process	- This cyclical process may also be present within this research study as future plans may arise from the results of this study that will involve further research in this community related to sexual health, however this has not yet been established
7. Emphasize local relevance of public health problems and	- The local relevance of this research study pertains to the Coalition's goal and purpose of the research - The determinants of health affecting this specific population are

ecological perspectives that attend to multiple determinants of health	addressed by including different demographics throughout Durham Region, such as rural and LGBTQ youth and access to health services is explored
8. Disseminate findings and knowledge gained to all partners and involves them in the dissemination process	- Research findings from this study are disseminated in collaboration with coalition members and participants through the use of two community launches and presentations - A youth-friendly report is also developed to be distributed to health service providers, participants and a number of other community members - Knowledge translation was done to ensure that the results of this result could result in social action and change in program delivery in Durham Region
9. Involves a long-term process and commitment.	- Our community-based research study is established over a number of years, developing partnerships, planning and conducting the research, as well as disseminating the results - A strong partnership is formed and future plans for research may extend beyond this study and therefore require a great deal of commitment by both community coalition members and researchers

Eight of the nine identified principles of CBR were utilized during the Durham Region Healthy SexYouthality Project (principle six has not yet been confirmed as part of this research). CBR was used as the theoretical framework to guide this research study. This framework allowed researchers to engage community members and involve the stakeholders of the study in each stage of the research. This resulted in locally relevant results that are framed within a community-based context. Consequently, the social determinants of health that impact the sexual health of youth in Durham Region can be addressed.

Research Question & Objectives

This research project investigates the sexual health needs of Durham Region youth aged 15 to 24 years. There are four specific objectives that will be investigated in this exploratory research study.

Objective 1. To assess whether youth know about the sexual health services that are available to them.

- Identify the sources of sexual health education that youth are aware of
- Discover the barriers youth face when trying to access sexual health information

Objective 2. To discover how youth perceive the sexual health services they are aware of.

- Explore the attitudes of youth towards the sexual health sources
- Describe what the opinions of youth about the identified sources of information
- Discover why youth would or would not use certain information sources

Objective 3. To identify where youth currently receive sexual health resources.

- Learn where youth receive education about HIV/AIDS
- Discover where youth currently receive information about sexual health issues and services

Objective 4. To understand where, how and from whom youth would like to receive sexual health services and education.

- Discover the changes youth would make to current sexual health services
- Uncover where youth would prefer to access information about sexual health
- Describe why youth would like to receive sexual health education from these sources
- Identify who youth feel comfortable approaching concerning sexual health concerns

CHAPTER FOUR: METHODS

The Durham Region Healthy SexYouthality Project was a qualitative research study that employed a CBR approach that involved engaging youth in discussions pertaining to their sexual health. Qualitative research methods allow researchers to understand social phenomena by providing participants with the opportunity to express their views and experiences. Qualitative methods can also generate detailed and valid data (Powell & Single, 1996) and can add depth, clarity and a greater understanding of the social context of a particular occurrence (Robinson, 1999). The methods used to conduct this qualitative research study employed the use of a community-advisory committee to guide the stages of the research, including the recruitment and development of the focus group script and recruit participants.

Community-Advisory Committee

A community-advisory committee (CAC) was created to act as a proxy for the communities of youth in Durham Region. The CAC was also involved in identifying the objectives of the study and was composed of youth that identified as heterosexual, gay, lesbian and bisexual. Youth Advisory Committees have been cited as an effective way to involve youth in the planning and development of the programs that are created for them (Flicker & Guta, 2008). For this reason we included youth throughout the research process.

The CAC was made up of eight youth living in Durham Region that were recruited through several community agencies. They advised the research team on the development of the focus group guide to ensure that the questions were posed in a youth appropriate manner as well as the recruitment poster. Through their involvement, the CAC members had opportunities to build their skills around HIV research and CBR, thereby increasing their social capital. The CAC

was extremely important to the research process as it involved engaging youth to ensure that the research project addressed the needs and concerns of youth in Durham Region.

Development of Focus Groups

Recruitment

In November 2010 we began to recruit for the focus groups. Initially, recruitment started with the Coalition. A number of agencies approached youth that accessed their agencies to participate in the research. From there, snowball sampling was used to recruit several youth, as recruited participants were encouraged to share the information with other youth in the community to encourage their participation in the study. This recruitment strategy has been used in other research studies as well (Maticka-Tyndale, Shirpak & Chinichian, 2007; Reese & Dodge, 2004; Dean et al., 2000) and assisted with the challenging recruitment process.

Recruitment was conducted with the coalition and research team members. It was crucial that the connections and relationships that organizations had with youth in Durham Region were used to help recruit participants for the current study. By using community partners we attempted to ensure that the focus groups represent diverse youth. The research coordinator also participated in active recruitment by talking to youth about the research study in places that youth spend time including school, movie theatres and other popular youth ‘hangouts’.

The final recruitment strategy that was used included the use of the Internet. Recruitment was conducted through advertisements for the research study posted on online websites (e.g. kijiji.ca and craigslist.ca). This allowed youth to enquire about the research study by emailing the research coordinator. The research coordinator then gave them information regarding the details

of the focus group meetings. The research coordinator also conducted active recruitment by visiting community initiatives and high schools.

Each of these recruitment strategies contributed greatly to the overall study sample. Each method targeted different demographics, leading to a moderately representative sample of the youth living in Durham Region. Coalition members and the research team were able to identify at-risk youth, while the research coordinator was also able to recruit high school students living in rural areas of Durham Region. The use of snowball sampling allowed additional youth to be informed of the research study and Internet sites brought in youth that were not accessible through other community connections.

Sample

The study sample included 32 youth between the ages of 15 and 24 from Durham Region. The youth that participated in the focus groups ranged from 15 years of age to 24 years, with the mean age of 18.96 years old. Of the 32 participants, 18 were female, 12 were male and 1 identified as transgender. In an anonymous demographic survey, youth were also asked to state their sexual orientation and ethnicity, as well as where they were currently living. There were 16 participants that identified as heterosexual while the other 16 identified as either gay, lesbian, bisexual and pansexual; or were not sure of what their sexual orientation was. Youth also were able to self-identify their ethnicity, with 24 (75%) identifying as either Canadian, white or Caucasian, 1 (3.1%) black, 2 (6.25%) middle-eastern, 1 (3.1%) mixed, 1 (3.1%) Spanish, 1 (3.1%), Italian and 1 (3.1%) as half "native"-half white. Lastly youth indicated they lived in one of the following places; Ajax, Brock, Clarington, Oshawa, Pickering, Uxbridge and Whitby. Table 2. will provide a summary of the sample demographics.

Table 2. Demographic Characteristics of Sample

Demographic Statistic		Total Sample (n=32)
Age (years)	Mean	18.96
	Median	18
	Mode	18.88
	Range	15-24
Gender	Male	12 (37.5%)
	Female	19 (59.38%)
	Transgender	1 (3.125%)
Sexual Orientation	Bisexual	3 (9.37%)
	Gay	5 (15.6%)
	Heterosexual	16 (50.0%)
	I don't know	2 (6.25%)
	Lesbian	2 (6.25%)
	Pansexual	4 (12.5%)
Self-Identified Ethnicity	Black	1 (3.1%)
	Middle-Eastern	2 (6.25%)
	Mixed	1 (3.1%)
	Spanish	1 (3.1%)
	Italian	1 (3.1%)
	White/Caucasian/Canadian	24 (75.0%)
	White-"Native"	1 (3.1%)
	None Provided	1 (3.1%)
Where youth currently live	Ajax	2 (6.25%)
	Brock	2 (6.25%)
	Clarington	10 (31.25%)
	Oshawa	11 (34.37%)
	Pickering	3 (9.37%)
	Uxbridge	1 (3.1%)
	Whitby	1 (3.1%)

Description of focus groups

Focus groups are used for this study to understand the complexities involved with sexual health issues during adolescence in Durham Region. Past studies have evaluated the thoughts and opinions that youth have about the sexual health issues that are relevant to them through the use of focus groups (DiCenso et al., 2001; Byers, Sears, Voyer, Thurlow, Cohen & Weaver, 2003; Forrest, Strange & Oakley, 2004; Meaney, Rye, Wood & Solovieva, 2009). Focus group

methodology has also been used in the past to explore various issues surrounding teenage sexual health (DiCenso et al., 2001; Robinson, 1999), as they allow youth to express their concerns, perspectives and knowledge on sexual health. By using focus groups, a more in depth understanding of the myriad of perspectives of sexual health among youth can be gained (Robinson, 1999), as well as the use of a participatory CBR design.

The research team identified four different populations within Durham Region, which determined the number of focus groups needed. Community members wanted this because Durham Region has urban, rural and semi-rural populations as well as an underrepresented LGB population. The four populations included urban, rural, semi-rural and LGB youth.

Sample size was therefore pre-determined by the research team in the hopes that data saturation would occur. Saturation was a priority for this research study, however based on the resources for the study, saturation could not be guaranteed. Saturation is important in qualitative research; however specific guidelines regarding sample size in relation to saturation are lacking (Guest, Bunce & Johnson, 2006). In an effort to ensure that sample size was adequate, thereby increasing the likelihood of data saturation, recruitment was done for several months. The research team believed that data saturation was reached once new themes and ideas were no longer being identified by new focus group discussions, thereby allowing the data collection phase of the study to be completed.

Data Collection

Data collection was done using focus group methodology. This section will describe the agenda used to conduct each focus group meeting. The details of the different groups will also be discussed to provide a clear description of how data was collected.

Focus Groups

There were ten focus groups meetings in total, with four to nine participants attending each meeting. Each group was led by a youth facilitator and included males, females and transgendered youth, aged 15 to 24 years. As previously discussed, there were four different focus groups: an urban group, semi-urban group, a rural group and an LGBTQ group (Figure 1., p. 3). The LGBTQ group included youth living across Durham Region, while the other groups were divided specifically based on their geographical location. The urban group included youth living in Pickering, Ajax, Whitby, Brooklin and Oshawa; the semi-urban group included youth living in Bowmanville, Courtice and Newcastle; and the rural group engaged youth residing in Uxbridge, Port Perry and Brock. Each session was tape recorded and later transcribed by the note-taker/research coordinator.

Each participant was provided with an honorarium for their participation. The honorarium included a choice of either a movie pass or $10.00. Youth also received a goody bag containing information about the sexual health resources in their community and safer-sex resources, such as condoms and dental dams. Dinner, refreshments and snacks were also provided at each meeting and transportation was arranged for those requiring.

The research coordinator greeted each participant as they arrived at each focus group meeting. Once participants had an opportunity to mingle and retrieve refreshments, the facilitator began the meeting by introducing herself/himself and the purpose of the research project. The research coordinator then read over the consent and confidentiality form to ensure that each participant provided informed consent and were aware of their rights as a participant.

At each of the focus group meetings it was important that researchers gave participants a chance to meet informally at the beginning of the meeting and to provide refreshments. This also enabled the facilitator and research coordinator, who was also the note-taker, to introduce herself/himself to participants. Icebreakers were utilized as they made participants more comfortable and encouraged an atmosphere of honest discussion (Powell & Single, 1996). The first focus group meeting was used primarily to build trust and ensure that participants were comfortable sharing their thoughts and opinions. The second focus group meeting continued where the first focus group session left off and often included another ice-breaking activity to help engage the participants. The third and/or final meeting concluded the question period and provided participants with a debriefing of the prior discussions that had taken place and the participants were given the opportunity to share any of their other thoughts and/or opinions that had not been shared. This was an important part of the final focus group meeting as it gave participants the opportunity to voice any of their concerns that had not come up during the guided discussion period. By this time, most of the participants were comfortable with the group, as this had been established over the previous meetings.

The framework that was used gave youth the confidence and opportunity they needed to express themselves openly and freely. This was important to establish to ensure that participants responded to the questions that were posed and were also at ease with responding to one another. This is an important feature of focus groups as participants are able to question and challenge one another, while also have the opportunity to explain their beliefs to the rest of the group (Hyde, Howlett, Brady & Drennan, 2005; Morgan, 1996). Each participant was given equal opportunity to respond to questions and was also treated as valuable informants in the research

process. Each youth was encouraged to share their opinions and experiences openly allowing for effective data collection.

The focus group meetings were tape recorded, while a note-taker recorded the non-verbal cues and reactions. The focus group recordings were later transcribed for analysis. The transcripts were completed using Express Scribe to enhance accuracy and ensure that what participants said was written verbatim.

The same focus group guide was used for each focus group. The focus group guide was made up of 18 questions that were posed to the group, along with several probative follow up questions (See Appendix C). Each question was reviewed by the CAC of youth to ensure that they were clear and appropriate. The facilitator was able to use this guide to focus the discussion when needed and ensure that the issues being investigated were discussed. Youth were also invited to introduce other issues that they felt were important and allowed participants to lead the discussion. The meetings lasted approximately two hours (including one break). Each focus group meeting was held at a youth-friendly, accessible and comfortable location.

While each meeting was conducted in the same manner, each group differed slightly in both dynamics and structure. Some groups were extremely comfortable talking to one another and would freely offer responses to the questions that were posed, while other participants would occasionally wait until they were addressed by the facilitator. The role of the facilitator and note-taker also changed depending on the group; with their roles fluctuating between facilitator and educator, depending on the familiarity and knowledge youth had about sexual health issues and services. The structure also differed between focus groups as the number of participants, opposing opinions and the level sexual health knowledge often affected the length of the

meetings. The following will describe the agenda, demographics and dynamics of each of the four focus groups. Table 2 describes the number of participants at each focus group as well.

Table 3. Focus Group Data

# of Focus Group Meetings		# of Participants
Urban	3	7
Rural	2	6
LGBTQ	3	13
Semi-Rural	2	6
TOTAL	10	32

Urban Focus Group. The urban focus group met on three occasions over the course of a month. This group met on March 1st, 22nd and 29th, 2011 in Whitby. Five females and two males attended the discussions and group members took part in several icebreakers at the beginning of each meeting to make everyone at ease with each other. This group interacted well with one another and discussion flowed during the meetings. There were two quieter participants; however they often shared when the facilitator asked them directly what their opinion or experiences were.

Rural Focus Group. The rural focus group met on two occasions in May on the 16th and 31^{st,}, 2011. A male facilitator and research coordinator introduced themselves to each of the six participants, two males and four females, who attended the discussions. The group took a little while to warm up and efforts were made to make each participant comfortable with talking about sexual health through the use of two icebreaker activities. This group only required two meetings to pose all of the questions, as participants did not have a lot of knowledge regarding sexual health. This group often posed their own questions, including; what is AIDS? What is

Chlamydia? How do you use a Dental Dam? The facilitator and research coordinator acted as both facilitators and educators for this group, which differed from the other three groups.

LGBTQ Focus Group. The LGBTQ group met on June 21st, 28th and July 5th, 2011 in downtown Oshawa. This group included five females, seven males and one transgendered participant that identified gay, bisexual, pansexual or queer. Participants shared their experiences and opinions about the sexual health needs of youth and seemed to be quite knowledgeable about some of the services available, as they needed to seek additional support and information than youth that identified as heterosexual.

Semi-rural Focus Group. The semi-rural group met at a youth centre on July 19th and 26th, 2011 and was comprised of four females and two males. This group was small however they contributed valuable information. They often interacted with one another and responded to what others were saying. Due to the small size of the group, only two meetings were required, however the youth present provided beneficial and interesting points of view regarding the sexual health needs of Durham Region youth.

Data Analysis

Data analysis took place once all of the focus group meetings were completed and the research coordinator transcribed the audiotapes verbatim. In addition to transcribing the focus group meetings, the research coordinator was also present for each of the focus group sessions and was therefore very familiar with both the observational data and the recorded data. The transcripts from the 10 focus groups were analyzed using content analysis for common themes. This was done by using qualitative analysis software called NVivo 9. A mixed approach was used to analyze the data as some themes were pre-determined, as discussed in the development of the focus groups, while other determinants were discovered during the analysis of the data.

CHAPTER FIVE: RESULTS & DISCUSSION

A discussion of the findings and related literature will also be included so as to describe and contextualize the meaning of the results in relation to the overall research objectives.

Themes

Table 4. Identifies the major findings associated with each of the four objectives of this research. Themes that emerged include that there is an overall lack of knowledge of sexual health services among youth; that there are a number of negative perceptions that youth have regarding resources, including that they are not accessible, lack anonymity, confidentiality and knowledge and are judgemental; there are a number of sources that youth use to get information about sexual health including parents, school, sexual health clinics, peers, media, and the Internet; and finally, there are a number of ways in which youth would like to receive sexual health information, for example from parents that are open and accepting, improved sexual health education in schools, accessible sexual health clinics, youth-friendly print media, trustworthy Internet sources and new community programs.

Table 4. Research Objectives & Highlights of Findings

Research Objective	**Highlights of Findings**
1. To assess whether youth know about the sexual health services that are available to them	- There is a general lack of knowledge of sexual health services - Youth presented suggestions to increase awareness
2. To discover how youth perceive the sexual health services they are aware of	- Accessibility - Anonymity - Confidentiality - Knowledge - Judgmental - Youth-friendly

3. To identify where youth currently receive sexual health resources	- Parents - School - Sexual Health Services - Friends & Peers - Media (i.e. Television, movies, radio, magazines, books, pamphlets & posters) - The Internet
4. To understand where, how and from whom youth would like to receive sexual health resources	- Open and accepting parents - Improved sexual health education in schools - Accessible sexual health clinics - Youth-friendly print media - Trustworthy Internet sources - New community programs

Objective 1: To assess whether youth know about the sexual health services that are available to them.

While some youth were aware of the sexual health services in their community, the majority of the 32 participants did not know of the services. Many youth stated that they and/or their friends were not aware of the programs in place to promote sexual health. Youth also provided suggestions that could potentially increase the knowledge of the services offered for youth.

Lack of knowledge of services

Participants were asked several questions about where youth go for sexual health services and what programs are available to them. It is interesting to note that when these questions were first posed, participants often indicated that they did not know about the services that existed for youth that address sexual health, outside of the educational system. On further probing, youth indicated that they would find other informal sources of information from other sources such as the Internet. Outreach and marketing is an important step to increasing access by improving awareness, such as through the use of media (Ralph, Berglas, Schwartz & Brindis, 2011). Past

research suggests that awareness of sexual health resources is often the most limited among the populations that need it the most (Ralph, Berglas, Schwartz & Brindis, 2011).

Do not know where to go

One youth said, "No, I don't know I'm not really sure, I haven't really seen anything or heard of anything" [male, urban group]. Another participant at another focus group stated, "Honestly, I think that's how bad it is... I'm 21 now and I have no idea where any programs are set up or anything, absolutely nothing" [female, semi-rural group]. A general lack of access is not limited to rural schools as anecdotal evidence would suggest. Paucity of information continues in urban areas as well. Even youth living in more urban areas of Durham Region did not have sufficient knowledge about sexual health services in their community.

A participant was quick to point out that she was unaware of the programs in Durham for sexual health, while she knew of some in Toronto. She said, "No like it's all in Toronto. In Durham Region, I, can't think of any" [female, LGBTQ group] with other members of the group agreeing. This may be an issue that many youth in Durham Region experience, as they may not be aware of services in their community and therefore seek out sexual health resources in other areas. While some youth may have the means to do this, not all could access services in other areas, making it increasingly important to make sure that youth know about resources that are available within Durham Region. This is not restricted to Durham Region as another study conducted across Canada with 1171 youth, between the ages 14 and 17 years, found that lack of knowledge of sexual health services was a major barrier for youth (Frappier, et al., 2008).

Another youth said "smaller communities like Courtice and Bowmanville you don't hear about anything to reach out to youth to talk about sexual health" [female, semi-rural group].

Many rural youth did not know about sexual health clinics as they were not in their immediate community and they had not been provided with information about where these services are offered, how to access them and what services they offered. Youth living in rural areas have been found to have more difficulties accessed sexual health services and this needs to be addressed (DiCenso et al., 2001).

Sources of sexual health services varied depending on whether youth knew where to go. When facilitators inquired about sexual health services some discussed their family doctors. Youth often did not know about Sexual Health Clinics and services available for procedures and treatments related to sexuality and therefore went to their family doctors instead. Many youth however stated that they did not have a family doctor, making awareness of sexual health services increasingly important. According to Hock-Long, Herceg-Baron, Cassidy and Whittaker (2003), youth may not have adequate or correct information about the location of services or they may believe that they are not eligible to access them.

Outcomes of lack of knowledge

There can be negative outcomes for youth that are not aware of sexual health services. A female participant alluded to this when she said, “I just honestly think its lack of resources, lack of information” [female, semi-rural group] and,

> When I think of that I think of people who got pregnant in high school immediately. And I just I honestly think it’s because they didn’t have that support system or they didn’t know where to turn to [female, semi-rural group].

Other research has also found that youth often access sexual health services once they are already pregnant or have contracted an STI (Hughes & McCauley, 1998). This is an issue as youth should be aware of services as a possible prevention measure rather than only finding them

for secondary health care. This is especially true in small areas within Durham Region that are more rural and/or remote as many youth as not aware of the services for sexual health.

Identified sources of information about services

When youth were questioned if they know about the programs that are available to them 5 urban youth did not. A few others indicated that they would Google “sexual health services in Durham” if they needed them. Even then, youth have reported in past studies that they had trouble finding information about sex, as 69% could not find what they were looking for (Frappier, et al., 2008).

In our study, participants were generally unaware of the services, as demonstrated above. This may be due to many factors, some of which may be specific to Durham Region however studies in other regions have shown similar results. For example, a study conducted by researchers in Niagara Region in 2001 with youth ages 13 to 19 found that knowledge and use of services were low among all participants. Students had low levels of awareness of the services that were available to them and where to go to access these services (DiCenso et al., 2001).

Considering this evidence, it is crucial to ensure that youth are provided with information about where to go to access sexual health resources. Youth need to be informed of the sexual health services in their community, as many are not aware of their availability and promotional marketing strategies must effectively reach youth across Durham Region.

Recommendations for increasing awareness

Effective promotion to increase the knowledge of sexual health services among youth is crucial (Pearson, 2003). It was clear from the participants that there is a need for increasing the awareness and knowledge of the services that are available for youth, for sexual health services. A female participant said, “if I were to see a poster or something that said like yep unlimited free condoms when I was younger, I know I’d be like oh where do I get those? You know what I mean?” [female, semi-rural group]. Many youth said that proper advertising is needed to increase awareness of sexual health services in Durham Region. Media interventions have been seen to potentially change the way that youth feel about sex and can provide information in a youth-appropriate manner (Keller & Brown, 2002).

Youth made recommendations regarding social marketing and advertising of sexual health promotion programs. The first suggestion was to “make it appealing and bold” [male, urban group] as well as “humorous and eye-catching” [female, LGBTQ group]. Youth also stated that any advertising that is aimed at youth should not be overloaded with too much information or statistics, as they will not take the time to read it all. This is an important consideration to make as there are also limitations to broad advertising of sexual health, as youth may be intimidated or have a sense of stigma, especially if they are sexually active. While this may be the case, intentional uses of media to promote sexual health have been found to be valuable mediums (Pearson, 2003). This makes it increasingly important to include youth in the planning and development of campaigns aimed to promote sexual health among youth (Pearson, 2003). Articles 12, 13 and 17 of the Rights of the Child also support these recommendations as youth have a right to influence and participate in the decisions that are made related to the information they are given.

These are important recommendations for sexual health services to be aware of so that they can reach youth effectively and efficiently, so that they know of the programs and organizations that offer sexual health services. Similar findings were found by other researchers working with youth. For example, DiCenso et al (2001) found that better marketing is needed to inform youth of the services that provide sexual health resources and what they can offer youth.

Objective 2: To discover how youth perceive the sexual health services they are aware of

Perception of a service is vital to its use. If youth are not comfortable they will not approach service providers. In the Toronto Teen Survey, youth said that feeling comfortable asking questions is extremely important (Flicker et al., 2009). We asked youth about their thoughts and perceptions of the sexual health services and education sources that they had heard of and/or utilized. There were a number of themes that they identified related to how sexual health services are perceived. The themes that youth discussed were that services are inaccessible; there is a lack of anonymity; there is a lack of confidentiality; educators are not knowledgeable; they are judgemental, and; educators are uncomfortable with the subject matter. While these perceptions seemed to be mainly negative, there were also several youth who had positive perceptions of services for youth, including that they were youth-friendly.

Accessibility

At each focus group meeting, at least one participant per group expressed concerns about accessibility of sexual health services, and other participants often agreed. There were several variables that participants said affected accessibility of services for youth and these include the hours of operation, appointment times and location.

Hours of operation

Accessibility was a major concern for all youth as it was important for them to know that the services that were offered would be there when they needed them, such as testing, counselling, free condoms, birth control, etc., One female participant said, "I just feel like the initiative is kind of there it just not like, made that accessible. I feel like they should make their initiative and make it more accessible" [female, urban group]. Youth seemed to feel that the services that they are aware of are not always available when they need them. This was expanded upon by a participant in the north when she said, "yeah well what sucks about them, is they they're not open late" [female, rural group]. This was a concern for youth as they believed that condoms would not be available when they needed them. Rural youth were especially concerned with accessibility and being able to go to get sexual health resources when they need them.

Appointment times

Youth were also concerned about having to make appointments as many times they find that they are too busy and are not always able to make it to the appointments they make. One female participant said, "I have to reschedule a doctor's appointment usually at least once a week. I don't have time" [female, urban group], with two other participants agreeing with this. This issue related to accessibility relates directly to the need for appointments and that youth are not always able to make appointments, as many times last minute priorities take over. Based on this, accessibility to walk in services would be a better way to service the sexual health needs and priorities of youth.

Location

Rural youth had additional barrier related to access of sexual health services as there were limited resources in their community and it was not always possible for them to have transportation options to get to the services they needed. When the facilitators asked youth about how they would get to a sexual health clinic or what transportation access was like a participant said, "we have the *Go*[1] bus" [female, rural group] with another participant adding that "it only comes every five days though" [female, rural group]. This highlighted the limited access to transportation for youth in rural communities and that this obstacle may affect youths' ability to access sexual health services, especially in the rural areas of Durham Region.

Similar findings resulted from a study conducted in Niagara Region that sought to discover the opinions of youth on the sexual health services in their community. This study found that many youth felt that the hours of operation and appointments times were insufficient and did not meet their needs. Those who lived in rural communities also had issues accessing services due to transportation limitations (DiCenso et al., 2001). Other studies have also emphasized the importance of suitable hours of operation, flexible appointment times and appropriate location, with public transport, that meet the needs of the target population (Nwokolo, McOwan, Hennebry, Chislett & Mandalia, 2002).

Anonymity

Youth participating in the focus groups also voiced their concerns about the level of anonymity of sexual health services. Many participants had concerns with being seen accessing sexual health services and/or resources, such as birth control and condoms. A male participant said that "most people that I know have issues about getting contraceptives because their

[1] The Go bus system is part of Ontario's public transit infrastructure which offers bus and train services

anonymity [or privacy] is at stake" [male, urban group]. The participant expressed that his friends did not like to go get condoms because people may see them do it, therefore making it public rather than anonymous. This is a major issue for youth as they are worried about being seen by someone that they know going into a sexual health clinic or buying contraceptives. On the other hand, some youth wanted to have access to condoms in a variety of places, including at schools, in bathrooms and in other easily accessible locations. This contrast seems to be large, however if condoms were readily available in the community, perhaps the embarrassment and stigma associated with access contraceptives would be eliminated or encourage youth to use them (Schuster, Bell, Berry & Kanouse, 1998).

Youth were especially concerned about protecting their anonymity when accessing sexual health services. This was expressed when a participant said,

> No one wants to go in because when someone sees them go in. That's the thing. And I know I've done that for doctor's appointments and things like that, you don't want to go in because you know if you run into someone they're going to know you're there for that. Right? And then it's just not something you want [female, urban group].

Privacy is important to youth when it comes to sexual health services and resources. According to the results youth prefer going somewhere they know is private and confidential. One participant said,

> I sort of like the way the Pickering Health Centre is set up for that in the mall because you have to walk kind of by the bathrooms behind everything else and like you can just [say] "I'm just going to the bathroom, but I've been gone a really long time, because I'm actually going to the room behind the bathroom" [female, urban group].

This service is located in a hallway that does not include any retail stores or other businesses and can be accessed without people seeing them entering the doors of a clinic, allowing for anonymity. Not all sexual health clinics are set up in this manner however. Our research suggests

sexual health services that are private and confidential are seen as positive and preferable to most youth. Other research also suggests that using private locations to deliver services is important, however they still need to be accessible and well-known (Pearson, 2003).

Going to a pharmacy to buy condoms or to pick up a prescription for birth control was seen as a threat to youth's need for confidentiality. One participant said "we have to go to downtown Toronto to buy condoms and birth control because … we couldn't even go into Pharma Plus without saying "oh well who is down this aisle"" [female, urban group], in fear of who may see them. Youth in the rural focus group also expressed similar concerns as they live in a small town, where youth often know the cashier at the local drug store. To solve this issue, several youth said that they would go to other towns to access sexual health resources, including condoms. Other solutions that were put forward were to offer sexual health resources in a private and confidential way. An example of this may be to have sites where youth can go for resources that are confidential and out of the public eye of those who potentially know who they are.

Many youth living in rural areas of Durham Region expressed that they feel uncomfortable accessing information and services in their community due to lack of anonymity. One youth stated,

> In a rural community, you are going to have a lot of people that you've seen before. So it might be like not a good idea, because they won't want to go to it, because [they may see someone they know] so they won't feel confident to go [male, rural group].

Lack of anonymity is a key concern that many youth have in relation to sexual health. Sexual health is often viewed as taboo and is often treated with secrecy and embarrassment. This was highlighted throughout the focus group discussions in Durham Region.

Confidentiality

Along with anonymity, confidentiality was also of utmost importance to youth that participated in the Durham Region Healthy SexYouthality Project. In a study of 295 youth in grade nine, 56.3% said that confidentiality was the most important feature of sexual health services and 86.1% said they would be more likely to access a service if it was confidential (Thomas, Murray & Rogstad, 2006). The topic of confidentiality came up in a number of different discussions regarding sexuality. Confidentiality was especially important to youth in relation to seeking out sexual health services and information. Confidentiality issues were brought up by participants when we discussed treatment. A male participant said,

> When I get tests done at the mall it makes me feel extremely uncomfortable when I go to the receptionist and say “I want to get tested” and then she asks “what are you here to get tested for?” I go up there and I’m whispering because I don’t want people to think that I have HIV when I'm just getting tested. It just feels so uncomfortable to ask them [male, LGBTQ group].

This experience greatly impacted the participant and affected his perception of sexual health services as well as the future likelihood of them accessing sexual health services and testing. This issue concerns confidentiality and the importance youth place upon feeling that the sexual health resources seek are kept private.

Lack of confidentiality extends to other aspects of sexual health. For example youth expressed difficulty with getting condoms and birth control. Many youth living in rural areas of Durham Region also expressed much distrust with those who provide them with sexual health education, such as teachers and guidance counsellors, due to a lack of confidentiality. Multiple participants said, “I don’t trust any of our school teachers to be honest…” [female, rural group] and “with the school, I don’t trust anyone. I’ve talked to people in the school and they just go tell

all their teachers and then you get judged from other teachers" [female, rural, group]. Youth suggested that there should be confidential resources they can use while at school to ensure that they have someone to talk to when they need it. This may include a school nurse or counsellors who are confidential. Off site resources may also be helpful; however accessibility needs to be a main priority, as youth need to be able to access them without any barriers.

Youth value confidentiality when seeking sexual health services. This was also demonstrated by DiCenso et al. (2001). Confidentiality was a prime concern when accessing services and resources such as condoms at a pharmacy or clinic (DiCenso, 2001). It is suggested that confidentiality will impact the likelihood of youth accessing services (Thomas, Murray & Rogstad, 2006; Nwokolo, McOwan, Hennebry, Chislett & Mandalia, 2002). This was also identified as a major concern by Durham Region youth and was communicated a number of times throughout all of the focus group discussions. A number of studies have identified confidentiality regarding sexual health services, including a study done by the Canadian Association of Adolescent Health that looked at the sexual knowledge, attitudes and behaviours of Canadian teens and mothers (CAAH, 2006; Thomas, Murray & Rogstad, 2006). A survey on 295 youth ages 13 and 14 to determine the importance of confidentiality of sexual health clinics and concluded that confidentiality was extremely important to young people when considering accessing clinics (Thomas, Murray & Rogstad, 2006).

Knowledge

Some sexual health service providers may also not be knowledgeable about the services offered in Durham Region. To clarify, sexual health service providers also include family doctors, general practitioners and health professionals working in clinics. One youth stated that

when she goes to the doctor for testing she feels that he is not knowledgeable and is going through the motions. She said,

> I feel that my doctor, he's practiced in everything, so he's not specialized in STIs. He's doing a swab, but he doesn't know what he's [testing for]. I'm a nurse [nursing student] and everyone expects me to know everything…but I don't. If I knew there was an STI doctor or like a person that is specialized in that area… if I knew there was a doctor that specialized [in STIs] in the community, I'd probably go there before my GP [female, urban group].

This participant felt that her doctor often was not knowledgeable in the area of sexual health of youth. However, while it is highly unlikely that her doctor did not know what he was doing, he may be older or uncomfortable discussing sexual health issues with a female youth. This perception could affect a youth's likelihood of asking their doctor questions if they feel that they will not know the answer. A participant confided, "certain places, you don't feel comfortable I guess or maybe you don't feel like your issues are being addressed, I just I know that from my experience, my doctor kind of brushes everything off" [female, semi-rural]. These feelings may cause individuals to not seek out information from their doctors and could be an issue.

While some youth go to their doctor for sexual health information, there may be a better resource that youth can access where sexual health is the main priority and the staff is all well versed in sexual topics. The true issue may not be a lack of knowledge as perceived by some of the participants, but rather the "age" or "technology" divide between patients and their doctors. Doctors often do not have a lot of time to dedicate to patients, therefore making it difficult for them to counsel their patients; emphasizing the need for other health professionals who are dedicated to providing information and counselling to youth about sexual health.

In a survey published in the Journal of the American Medical Association, 71% of patients were worried about their doctor dismissing their concerns and 68% thought that their

doctor would be uncomfortable or embarrassed if they brought up sexual matters (Marwick, 1999). This may suggest that the perception that doctors lack knowledge may be inaccurate, as it may be more related to lack of time, generational divide and a disconnect between the services offered to youth and what youth actually want and need. According to Wittenberg and Gerber (2009), patient-physician discomfort can lead to incomplete care. This was a concern brought up by participants in our study as well and is something that should be addressed as youth often look to doctors for information on sexual health (McKay & Holowaty, 1997).

Judgemental

When speaking about sexual health, youth were concerned about being judged for accessing information and services. Several youth said that when they visited a Sexual Health Clinic they felt that it was very judgemental. They said "it's very judgmental. But I understand the need to ask those for statistical purposes…but they don't explain that to you" [male, LGBTQ group]. Four youth agreed that it is important for clinic staff to express that they are not there to judge, but rather to find out important information pertaining to their sexual health. Another participants and her boyfriend had gone to a sexual health clinic for testing and felt that he was being interrogated about his sexual history. The participant said,

> I mentioned earlier that I am with a man and at some point we went in to get checked for various reason and he came out afterwards and said, "I've never been so uncomfortable to be like almost interrogated about my sexual history, you know my sexual health, this and that" and I'm like, "welcome to my life" you know because you know, comfort in terms of how you're asked questions and what, like I know some questions have to be asked but how you ask them and your tone and the order of them is really really important and not feeling like you're being interrogated" [female, LGBTQ group].

If youth feel that they are being judged, they will be less likely to access sexual health services (McKay & Holowaty, 1997). Acceptability and openness of sexual health service providers are

key principles of setting up services for young people, according to Rogstad, Ahmed-Jushuf and Robinson (2002). This means that services should not be judgemental and should have a youth-friendly environment (Rogstad, Ahmed-Jushuf & Robinson, 2002).

Youth-friendly

Several participants perceived that sexual health services were youth-friendly and were well versed in the issues that affect youth related to sex. For those who were knowledgeable of these services and/or had used them, they often agreed that they were fairly youth-friendly in terms of their expertise and delivery methods of information. One female participant who had accessed a sexual health clinic said, “They literally touch on every subject, they’re very thorough, they know their stuff, they make you feel super comfortable while you’re there” [female, semi-rural group]. This participant had very positive things to say about sexual health services and was adamant that every youth should know about what they have to offer.

A male participant believed that sexual health clinics and health centres at a university would be youth friendly because they work with a young population on a daily basis. He said,

> I have the assumption that a sexual health clinic specializes and campus health centres which deal with young populations would be queer positive. I expect that when I go there and if I don’t get it I'm very angry [male, LGBTQ group].

This expectation that sexual health services are youth and queer friendly was important to participants, and more specifically, youth that identified as not heterosexual. Youth want to know that they are accessing services that understand the issues that affect them.

They also want to feel comfortable knowing that the staff working at these services will be appropriate and understanding to their feelings and experiences. One way that this may be

possible is to have peer educators involved in delivering information and support where sexual health services are provided. One female participant said,

> It's kind of nice for me to talk to someone and they can relate to what you're going through, like they make it relatable so you don't feel like you're alone in it. You know when people have experienced what your experiencing like it helps, makes you feel like better or whatever...reassuring" [female, semi-rural group].

A review by Dehne and Reidner (2001) suggested that there are number of factors that make sexual health services "youth-friendly" and many of which were discussed by youth in our focus group discussions. These include services that are "confidential, strategically located, with special opening hours, and providers that have been specifically trained in youth issues" (Dehne & Reidner, 2001).

It is important to note that many of the issues discussed above were the perceptions of youth about sexual health services that may or may not be available to them in their communities. While this may be true, the perceptions that youth have about sexual health services are important to address as these perceptions may affect whether or not a youth chooses to go to a sexual health clinic. As previously discussed, accurate and comprehensive sexual health education is a basic human right and all children must be fairly treated as stated in article 17 of the Convention on the Rights of the Child. Article 3 also states that the best interests of the child must be taken into consideration and therefore, the perceptions youth hold about sexual health services are important to consider and acknowledge.

Objective 3: To identify where youth currently receive sexual health resources

Where sexual health services has an important impact on risk. Both physical location and sources of sexual health will impact on sexual health outcomes, which translate into risk

aversion. Several researchers have found a correlation between sexual health education and reduced sexual risk taking (Kirby, Laris & Rolleri, 2007). Educating youth about sexual health is an important part of the social and cognitive development of youth and therefore should be promoted through a variety of media (Maticka-Tyndale, 2001).

There are a variety of both formal and informal sources of sexual health information that youth seek out. Youth identified the current sources of sexual health information. These sources include traditional and contemporary sources such as parents; school; sexual health services; peers and friends; parents; media, including television, movies, radio, print media and; the Internet. Each of these sources of sexual health information were discussed by participants and their thoughts and opinions on the quality of the source were often debated among the youth.

Parents

Parents are youths' first teachers and it is expected that they would be an important source of sexual health information. However, the literature shows not all parents will provide the level of support or are comfortable talking to their children about sex (Guilamo-Ramos, Jaccard, Dittus & Collins, 2008). Youth in the focus group said it "depends on the parent, some parents are more open than others" [female, semi-rural group]. This seemed to be the case as some youth had gained information from their parents, while others had never approached the subject with them. "My mom was always pretty supportive about everything. She offered to take me to the doctors for birth control and even now if there's anything I'm worried about, she's good about it" [female, semi-rural group]. One male participant shared "my mom actually wrote me a birthday card that was like probably a paragraph a size of that and was just like a whole bunch of those funny things [about sex]" [male, semi-rural group]. He also went on to say "If I was really

concerned something was wrong I could talk to my parents and I wouldn't be worried about it just because I know again that they genuinely care" [male, semi-rural group]. One female participant said, "My mom talks to me about it. I talk to her and she tells me what to do" [female, rural group]. These youth represented some of the participants that were able to talk to their parents about sex and had been given information about sex at home. This relates to the evidence presented in the literature on parents wanting to take an active role in their child's sexual health and development as well.

While some youth were able to talk to their parents about sex and felt that they played a role in providing them with sexual health information, others did not. A female participant said, "My parents definitely did not ever sit down, we didn't even have the puberty talk, which was fine" [female, urban group]. Another female participant also said that "it's awkward if I talk to my mom" [female, LGBTQ group]. A male participant said, "I would not want to talk to my parents about it" [male, urban group]. When youth were asked if parents ever broached the subject of HIV or STIs, they all said "no", as that would mean that their child was having sexual intercourse.

The disparity in sexual health education delivery at home creates an interesting dichotomy as some youth receive information from their parents and others simply do not. One study suggested that possible reasons why parents may not talk to their children about sexual health is because they lack the knowledge, and being embarrassed, while mothers that felt they had knowledge to answer questions, felt relaxed and comfortable talking about sex and believed that it would make them a more responsible parent, were more likely to talk to their child (Guilamo-Ramos, Jaccard, Dittus & Collins, 2008). Another study stated that parents often have a difficult time talking to their kids about sexual health (Martin & Luke, 2010). Considering this,

youth that did not have a parent that gave them sexual health information had to rely on the sexual education provided in school for the information they need.

School/Teachers

School was also identified as a source of sexual health information for youth. While this was the case, there were mixed experiences and opinions on the usefulness and quality of sexual health education in schools as indicated by a number of participants. When the topic of sexual health education in schools was brought into conversation, one participant simply said, “The whole curriculum is just bad” [female, LGBTQ group]. Youth also tended to think that it was often skimmed over in school, one participant responded with “It definitely is [skimmed over] in high school too, and I think it’s the most important years for sexual health to be taught” [female, semi-rural group]. Another youth said, “It was like a brief, like here’s half an hour of your time” [female, urban group]. This was repeated again when another participant said, “I think my gym class really it didn’t teach me anything about sex. They did half a period, but I learned more about health and everything from other teachers” [male, LGBTQ group]. While this may be true, youth believed that school was a good place to teach them about sex. This was also found to be true in the qualitative research study done in Niagara on sexual health services. Schools are a good place to begin teaching youth about sexual health as a majority of youth attend some kind of formal education (DiCenso et al., 2001).

Despite school being identified as a source of sexual health information, youth expressed that sexual health education in schools was often not very interesting and provided only basic information. Youth felt that overall school was not a useful source of information, as the information covered was usually basic and a review of what they already knew. One participant

said, “Grade 6 was [interesting] because you first learn it and then it’s like wait what? And after that it just got boring and then when anyone talked about it because you already knew” [female, semi-rural group]. Youth also said that the education they were given were often not very informative or inclusive about certain contraceptives. One male participant said,

> Something I think they need to teach in like sex education classes or whatever though is that they stress condoms and female condoms and all that but like up until last year say, I never heard of a dental dam or anything like that [male, LGBTQ group].

The topic of contraception was identified as an important topic to discuss in sexual education in schools. This was also the case among youth that attended Catholic schools as they often felt that there was something missing from the education they receive as they do not get information about any forms of birth control, including condoms.

Youth who attended Catholic schools were not content with their sexual health education they received in school. It was clear that youth that attend Catholic schools face specific challenges in regards to sexual health education. A participant said “we went to a Catholic school so they had to be careful what they’re saying, what they’re doing” [male, semi-rural group]. This is especially the case when it comes to condoms. A male participant said that their friends were “taught how to put on a condom and our teachers whisper, “*condoms*”” [male, semi-rural group]. The participant also later said “condoms are bad” in a mocking way, as that is the impression that was given by his teachers. Another youth said that their sexual health education was,

> OH, Non-existent! No umm, in, yeah no in my Catholic school it was definitely just focused on the STIs. They talked about STIs without talking about the sex, if that’s even possible. It was really weird, they would have “OK today we are talking about STIs”, and at a certain age you know you get STIs from sex, because of their name, but they don’t actually talk about, that’s just the part you skip over, alright here are the pictures [female, urban group].

The participant expanded on this when she said,

> This is our sex teaching… sit us down, put us in front of a PowerPoint presentation to show us really disgusting pictures of STIs and say "Don't have sex". Because in a Catholic School you can't talk about condoms you can't talk about birth control. So it's literally show you, scare the crap out of you, show you these pictures and say "Don't do it" [female, urban group].

Youth that attend Catholic schools felt that the sexual health education they received did not include important information about contraception and safe sex. While it was not discussed specifically, it may not only be youth that are Catholic, as other denominations may experience similar issues. A male youth stated that he felt something should be done to improve sex education in schools. He said,

> We need to show the Catholic school board the difference, the gaping hole, or if you could get some outside person to teach sexual health education. Even if teachers take courses or something and everyone's comfortable with it [sexual health], I think the teacher leaves you more informed [male, LGBTQ group].

When youth spoke about sexual health education and the comfort of the educator, they emphasized its importance. This student's recommendation that a third party be brought into teach has also been recommended by participants in other studies as well. In a study conducted in Niagara Region teens thought that public health nurses would be better sources of information (DiCenso et al., 2001). A study completed in Southern Ontario also found that having outside professionals from community organizations was a useful strategy for improving sexual health education in school (Smylie, Maticka-Tyndale, Boyd & the Adolescent Health Planning Committee, 2008).

Youth in the LGBTQ group also pointed out that information about homosexuality was often not discussed in sexual health education classes. According to a study done with parents of youth, homosexuality was identified by 10% of the participants as a topic that they did not want

taught in schools (Weaver, Byers, Sears, Cohen & Randall, 2002). When it was discussed, it was brought up only briefly by the teacher. One youth said,

> My grade 9 gym class (I went to a public school though) mentioned it, homosexuality, really briefly. I think my teacher was just like really awkward about it and said like "some guys are like that and yeah don't hate on them [mistreat them]," that was basically it [male, LGBTQ group].

Many participants in the LGBTQ group agreed that homosexuality was often left out of the classroom and they believed that it depended on who the teacher was and how comfortable they were with discussing homosexuality. Considering this, many LGBTQ youth have said that homophobia is something that affects them (Flicker, Flynn, Larkin, Travers, Guta, Pole et al., 2009). The Canadian Guidelines for Sexual Health Education do include descriptions of sexual minorities; however it is still up to the teachers to introduce the topic in the classroom (Public Health Agency of Canada, 2003).

Youth said that the quality of education they received was dependant on their teacher. Youth were also questioned if sexual health education in school is interesting, youth responded by saying, "it could be", with another participant adding, "it depends on who teaches it" [male & female, LGBTQ group], with other participants agreeing with this. This demonstrates the important role that a teacher plays in the delivery of information to youth and emphasizes the importance of special training for teachers instructing this important subject.

Youth also indicated that the comfort of the teacher teaching sexual health education had a direct impact on the quality of the information that was delivered. A participant said,

> I think it definitely depends on how the information's being presented. Like if you have a person that presents it and seems really awkward about stuff and rushes over certain things, you feel like you can't ask any questions because they're not going to know how

to answer them anyway [female, urban group].

Many other participants agreed with this and echoed similar beliefs. Another participant later said, "I find most teachers are even awkward teaching it so if they weren't awkward than the students in the class might not feel awkward" [female, semi-rural group]. It was said in multiple different focus group meetings and in a number of different ways. The belief that a teacher's comfort level with the information they are delivering affects the quality of the sexual education class was also repeated by a male student when he said, "I think it just really depends on who was teaching you. Like if it was someone who was really open about the subject..." [female, urban group].

When asked whether schools play a role in delivering information about HIV/AIDS and sex a male participant said,

> I'm not really sure, I guess it depends. Like if you do it in like a gym class or something like that. And then maybe you'll learn in that, but it depends on how good the teacher teaches it to you [male, urban group].

This is an important piece of information as the youth that took part in the focus group meetings indicated that not all students receive the same level of education related to sexual health, including important topics such as HIV/AIDS and STIs. They claimed that the comfort of a teacher with the material affected both the quality and quantity of information.

While many students had a negative assessment or experience with the sexual health education they received in school, some participants indicated that they had positive experiences learning about sexual health in school. One youth that attended a public school recalled that her teacher made it interactive and interesting for the students. She described her experience in the focus group meeting as follows,

> My experience with my high school program, I liked it. I thought it was good. I liked that it was interactive, but they didn't really focus a lot of time on, like everything was anonymous. We'd pass around a question box and you could put anything into it. They'd post a lot of the answers on the Internet too because a lot of people found it embarrassing to just sit there and listen because people would be like "oh you are focusing hard on this", and like they found that it would be beneficial to put it online so people could view it from their home. I thought was good. They had like a lot of like activities. For like the HIV they did the cups and then like pouring like mixing the fluids and then having the indicator dropped into it so you could see like all the ones that were HIV turned pink. And it showed how it spread and I thought that was good because it got the ball rolling for me. Like, that's when I started thinking about it, because I think, I don't know, to me high school is kind of when it starts. And that's where you spend most of your time. Like that's where you are most of the time, like when do you have time to go outside of high school in high school? [female, urban group]

Other participants responded to this person's experience in her sexual health education class and seemed to respond positively as well to what she described. This suggests that this type of education may be beneficial. Despite this, a "one-size fits all" approach to sexual health has proven to be ineffective and improving sexual health knowledge among youth and therefore different methods of delivery need to be used to teach youth about sex (Flicker et al., 2009).

University students also had had positive experiences at their respective colleges and/or universities. One participant said,

> On campus, [we have] a Women's Centre and all that. And the Campus Health Centre. The professionals, like the doctors and nurses and counsellors would have [sexual health] information too depending on what kind of [information needed]. Whether you were looking for peer support, or like treatment you can go there [male, LGBTQ group].

These accounts and experiences suggest that sexual health education has the potential to be both effective and interesting for youth. Through the experiences of the participants in this research study it could be deduced that sexual health programs that are interactive and supportive will receive a more positive report from youth.

Other studies have suggested that having interactive activities are more effective at communicating sexual health risks (Smylie, Maticka-Tyndale, Boyd & the Adolescent Health Planning Committee, 2008; Kirby, Laris & Rolleri, 2007; Guzman, Casad, Schlehofer-Sutton, Villanueva & Feria, 2003). A study done on 240 grade nine students in Southern Ontario found that the use of peer educators and interactive sessions showed positive changes in the areas of knowledge, sex role attitudes, sexual interaction values and the perception of birth control (Smylie, Maticka-Tyndale, Boyd & the Adolescent Health Planning Committee, 2008). This finding was similar to a study that assessed the use of a teen theatre intervention, as they found that youth that participated in the theatre program reported intentions to delay sex and use contraceptives (Guzman, Casad, Schlehofer-Sutton, Villanueva & Feria, 2003). Sexual health programs are also seen to impact at least one of the following sexual behaviours; initiation of sex, frequency of sex, number of sexual partners, condom use, contraception use and sexual risk taking with effective programming. Effective programs are seen to include several characteristics including assessing the needs of the target group, pilot testing, involving different educators, designing appropriate activities, focuses on clear health goals, created a safe social environment and involve youth in the teaching methods, among others (Kirby, Laris & Rolleri, 2007). Incorporating these characteristics improved the success of the program in promoting positive sexual behaviours.

Sexual Health Services

Several youth in the Durham Region indicated that they get information about sexual health from a health professional, and most commonly, their doctor. One female participant simply said, “It’s better to go to the sexual health clinic because that's their job” [female, semi-rural group] and that “if I have any serious issues I go to my doctor [for] serious questions”

[female, rural group]. This was because some youth felt that doctors were knowledgeable and would provide accurate and confidential information, however as previously discussed, not all youth felt this way. Others indicated that they did not have a family doctor.

The Canada, Youth and AIDS Study indicated that respondents preferred getting information about birth control from a health professional (King, Beazley, Warren, Hankins, Robertson, & Radford, 1988). In another Canadian study however, health professionals were ranked as the sixth source of information about sexual health, following school, family, friends, television and print media (McKay & Holowaty, 1998).

Friends & Peers

Friends and peers play an important role in providing sexual health information to youth. A friend is a person whom one knows and shares a mutual bond, while a peer is defined as a person that is simply the same age or status. In a study of 406 youth, 32% of youth said that friends were an important source of sexual health information. In another study of 459 youth, 74.9% said that the most frequent source of sexual information was from friends (Bleakley, Hennessy, Fishbein, Coles & Jordan, 2009). This study also emphasized the need to ensure accurate information, as friends may not be the most reliable source. Friends and peers were also identified by Durham Region youth as a current source of information for sexual health. One participant said that the reason that they believed friends were an important source of information because they “spend a lot of time with friends” [female, semi-rural group] and that “I find when [you talk to] your friends, you get like deep and personal” [male, semi-rural group]. Youth said that they were more likely to learn from their friends as well through conversation. This was the case when a youth said,

> I definitely think that in terms of the emotional and good relationships and sort of the pleasure aspects of stuff. That's kind of what I think you get more of, or I got more of in terms of like peer groups [female, LGBTQ group].

Youth said that they were more likely to talk to peers and/or friends about the emotional parts of their relationship, as well as the pleasure aspect of sexual health. These topics seem to be more common among friends then other subjects that may be more serious, such as an STI. One youth said "If it's something, I don't think it's too serious, I just go to my friends" [male, semi-rural group], but if it was serious, such as suspecting they have an STI, they would not talk to their friends about it. While this may be the case, youth did communicate that they would approach someone that they viewed as a peer, or someone that they do not share a bond with, about a problem they are having. One female participant said,

> I feel more comfortable approaching someone that I view as a peer, like that is knowledgeable verses a person in front of a classroom of 100 people lecturing, I'm not going to be like "oh by the way I have this problem" [female, urban group].

This suggests that while youth talk to their friends about some topics concerning sexual health, they may prefer approaching a peer they feel may be knowledgeable if they have a specific issue.

Friends and peers have been identified as popular informal sources of information for youth in other studies as well (Turnball, van Schaik & van Wersch, 2010; Heisler, 2005; DiCenso et al., 2001; DiIorio, Kelley & Hockenberry-Eaton, 1999; Milburn, 1995). In a study of 759 youth aged 13 to 14 years, they found that more than half the participants felt that they can talk about sex and relationships with their friends and that there are gender differences regarding youths' ability to speak to their friends as girls can talk more to their friends than boys can (Turnball, van Schaik & van Wersch, 2010). In a study done in the United States on 176 students, 103 identified friends as their main source of sexual health information, with parents and school as the next most popular (Heisler, 2005). Youth noted that the type of information

that they could get from their friends, such as feelings, decisions and experiences, was not available from other more formal sources such as school (DiCenso et al., 2001).

Media

Other sources of information include general media. Media have been identified in other studies as one of the most important sources as well (Hughes & McCauley, 1998). When youth were asked where they gained most of their knowledge on sex, one of the group's most important answers was "the media". There were a number of media that youth learned about sex from including, television, movies, radio, magazines, books and pamphlets.

Television

Television has long provided information in sex and sexual health but more and bolder information is now presented through talk shows, music and other popular programming. Youth in the focus groups talked about television programs they had seen that provided sexual health education. One participant stated that she had gained information from the television,

> On Rogers TV on channel 10 and it was talking about [sexual health]. They'd have people call in but they also had little discussions with like doctors and sexual health professionals and stuff on the TV and [then] go back to calls and like whoever was on the show would like help answer the questions [female, LGBTQ group].

This type of show was a source of information for the youth that were aware that this type of program existed, however many had never seen this before. Youth also felt that some popular television shows contained sexual health information, such as Glee. One participant said,

> I think it's getting better. Um I mean teenage shows that are pretty popular… I mean look at Glee…look at how positively they've painted homosexuality in that. Um they even showed you know not only the coming out stage, the after efforts or even with the new character, the football player they had, showing what it's like, how it feels to be in the closet [male, LGBTQ group].

This television show also included an episode that showed the characters in a sexual education class in school.

Past studies have shown that television was a source of information about subjects such as AIDS, STDs, birth control, and sex (McKay & Holowaty, 1997). Television also would provide youth information that they were not able to get through more formal sources of information, according to DiCenso et al. (2001). In a study conducted by the Canadian Association for Adolescent Health (2006) they found that television was the fourth most popular source of information about sexual health issues, coming after only school, friends and parents, making it a very important source for many youth.

Movies

Much like television, movies were also identified by youth as a source of information about sex. Several participants also said that they learned a lot from movies and that they often "filled in the blanks" when needed. One person said,

> In high school when the most you've had is just your basic overview "this is what this is and this is what this does" and you catch a couple R-rated movies, and then you are like, "oh so that's what happens" [female, urban group].

Similarly to television, youth found that information that were not covered by formal sources of information, such as school, were provided by movies they had watched. One youth said that movies can sometimes take the place of sexual education in schools if someone did not get this type of information from a teacher. They said,

> Yeah or you get the movies like, Never Been Kissed. It's not even a R-Rated movie and there's a scene in there where they learn how to put a condom on and they talk about things like that, really briefly, but for some people that's even more seeing it, a sex ed. class in a movie, more than a sex ed. they might have gotten [in real life] [female, urban group].

This may be true for some youth, as other studies report that some youth, although not the majority, indicated that movies were their main source of sexual health information (Heisler, 2005).

Radio

Radio was also identified as media sources of sex knowledge. Several participants indicated that they enjoyed listening to a sexual health radio show with “Dr. Drew” where people can call in anonymously. Multiple youth, at two different focus group meetings, indicated that they listened to Dr. Drew’s radio show “Love Line” and had called in with questions before. One male participant said that,

> It’s on the Edge [radio station], I think every Sunday night and Thursday night, it starts at 11:00. People will call in…and he tells them exactly what to do, how to treat it…I learned part of it [sexual health information] from that [male, semi-rural group].

Another participant said,

> I listen to the radio a lot so I hear a lot of stuff from the radio but what I think the most information that actually sticks in my head are the radio shows that talk about sexuality and sexual health [female, LGBTQ group].

It seemed that youth in the Durham Region listen to this sexual health radio show and receive information that may be useful. Other studies have reported that youth use radio call-in shows for sexual health information as it was an accurate and confidential way to gain information (Hughes & McCauley, 1998).

Print Media

Magazines, books, pamphlets and posters were identified as a source of information about sexual health, both in the current studies and others alike (Canadian Association for

Adolescent Health, 2006). While magazines were cited as a possible source of information, however it may be somewhat limited. Cosmopolitan magazine was brought up as a place that youth, mostly female youth, could turn to for sex tips and stories. Male youth were far less likely however to read a magazine such as Sports Illustrated or Men's Health on a regular basis for information. While magazines may be a source of information, one participant pointed out that magazines often "don't have information about preventative or anything like that, they just have like how to enjoy it more" [female, semi-rural group]. A female participant also said, "I learn about it in magazines sometimes, like health magazines, I don't look at a lot health magazines, they would probably explain healthy relationships" [female, rural group]. While some youth used magazines for sexual health information, it was not the most popular source of information.

Some youth also indicated that their first lesson on sexual health had come from a book. One participant's parents had left it for her and she went onto explain,

> I first started learning about sex [when] they left information around the house like in books, but being Catholic of course it was all through that Catholic lens. I think I was like 4 and it was like a for kids book. It was conversation between like two 4 year olds all drawn and illustrated and whatever asking where babies come from [female, LGBTQ group].

While this participant did not recall having a positive experience learning about reproduction from a book, they later were given an anatomy book that helped her understand what she had read when she was four years old. She said,

> I got an anatomy like a giant size anatomy book when I was 6 and it had… a picture of the person going from a naked infant to adult and I'm like ohhh and then I kinda started figuring out [female, LGBTQ group].

Another participant had a similar experience as their first introduction onto the topic of sex was through the use a book. One youth said "I got handed the book and then I never heard anything

else" [female, semi-rural group]. This seemed to be a popular way for parents to introduce the topic of sex to their children. In a study by the Canadian Association for Adolescent Health (2006), mothers identified books as the number one source of information for their children, while youth cited other sources as first. This is an interesting point as it could be inferred that mothers believe this is the best source of information for their children.

Several Durham Region youth also indicated that pamphlets were also a source of sexual health information and could be found both at sexual health clinics and at schools. When youth were asked where they would go if they had any questions about sex, a participant said "you can get the right answers if you just go to the Pickering Town Centre and pick up a pamphlet secretly" [female, urban group]. Youth seemed to like that it was an anonymous way to get accurate information. High school students also acknowledged that they had access to sexual health pamphlets in their guidance departments. A student said, "There's a guidance office and they have pamphlets, sure most of them probably don't apply to you but at the same time if you're going there to get information" [male, LGBTQ group].

Another youth indicated that this was regular practice when he said, "[In] high school, you go into the guidance office and you look for your appropriate pamphlet and you leave" [male, LGBTQ group]. While there may be more favourable sources of information that youth get information from, the use of pamphlets have been identified as a good source of information by both mothers and youth (Canadian Association for Adolescent Health, 2006). A study conducted on 406 youth in grades 7 to 12 said that pamphlets and other print media, such as books and magazines, were the fourth most popular source of information following school, family and friends, respectively (McKay & Holowaty, 1997).

Posters were also considered a source of information about things such as STIs according to youth. According to one participant, effective advertising should “use humour… I think humour is a good thing” [female, semi-rural group]. Another participant also said, “I think those ads are good though like they kind of put a shocking picture and then they put the truth about something with it. Those are good” [female, rural group]. Youth often remembers shocking advertisements and posters about sexual health and found that they were a helpful source of information on things such as Chlamydia.

According to the Public Health Agency of Canada (2003), media plays a powerful role in “communicating norms about sexuality and sexual behaviour” and should be addressed when teaching youth about sexual health. Media, such as television, movies and magazines have also been shown to have an impact on youth sexual behaviour (L’Engle, Brown & Kenneavy, 2006). These sources of information may provide some youth with an introduction to many topics concerning sexual health.

The Internet

The Internet is now an important source of information for youth in almost all areas of the globe. This was also the case with youth in Durham Region as they discussed using the Internet for sexual health information frequently. Youth said that they would look for information that they wanted or needed about sexual health through personal research on the Internet. A male participant said, “I think the more average person would go to the Internet”, with a number of youth agreeing, “Just Google it!” This phrase was repeated by other participants in the other focus group meetings as well. Other participants said, “yeah, but I mean

it's so much easier to just Googling it right" and "I'm not going to lie a lot of how I learned was independent research, like if I had a question, I'd Google, there yah go."

Youth expressed concerns with the credibility of information found on the Internet. This is illustrated by one participant who said, "it depends what you are looking up, we know Wikipedia isn't that credible so we normally go to like government web sites and stuff and most relevant", with many of the other participants in the group agreeing with this. This may indicate that there are issues that need to be addressed regarding the reliability and accuracy of information accessed by youth on the Internet.

According to Ryan (2003), the Internet has provided youth with an important resource, especially for youth that are geographically and socially isolated. The emergence of the Internet has provided youth, especially LGBTQ youth, with a safe place to access information (Ryan, 2003). Williams and Bonner (2006) have said that youth often seek out information from informal sources on topics such as birth control, from the Internet. They also note that youth also may not be satisfied with one source, as they may not be accurate, causing them to use multiple sources, including the Internet. The researchers suggest that multiple sources are preferable when trying to access sexual health information (Williams & Bonner, 2006).

Discussions surrounding current sexual health services in Durham Region identified six main sources of sexual health information and they included the Internet; school; peers/friends; parents; media, including television, movies, radio, posters, and books, as well as; health professionals. From the perspective of Durham Region youth, these sources of information often had positive and negative aspects and there was definite room for improvement, especially in regards to trustworthy Internet sources, better in-school programs, youth-friendly media and

informed health professionals. According to article 24 of the Convention on the Rights of the Child, all children have the right to the best health services and highest possible stardards of care and that they should have access to health services. Therefore, while youth have access to a number of different sources for information not all children are provided with the same opportunities and access to sexual health services and therefore the rights of the child are not always followed when considering sexual health.

Objective 4: To understand where, how and from whom youth would like to receive sexual health resources

Youth discussed a number of ways in which they would like to receive sexual health resources. We often consider where youth receive sexual health information and how they get resources related to sexual health, however we may not think to ask where and how youth would prefer to get this information. The method that sexual health sources are presented may be important to youth access and the use of services. There were a number of preferences that youth communicated throughout the focus group sessions, including; open and accepting parents, improved sex education in schools, youth friendly and accessible health professionals, trustworthy Internet sources and finally new community programs.

Open and accepting parents

For those who have parents that spoke to them about sexual health, they expressed their preference speaking with parents, while those who did not would prefer to go to other sources for the information. While this was the case, those that did not have parents they could talk to about sex wished that they could. Past studies have indicated as well that parents are more likely to discuss sexual health matters with their children if they are relaxed and comfortable talk to them

about it (Guilamo-Ramos, Jaccard, Dittus & Collins, 2008). The reason youth also seemed to prefer to go to their parents for information if they felt they could was because they seemed to want to discuss their concerns with people they felt cared about them.

> If I was really concerned something was wrong I could talk to my parents and I wouldn't be worried about it just because I know again that they genuinely care. They're not going to be like "oh you're on your own sorry about that" [male, semi-rural participant].

One of the reasons some youth preferred to go to their parents when they have a sexual health concern was because they felt that they had their best interests at heart and cared about them. While youth with parents that were open about sexuality expressed that they would prefer talking to them about any questions that they had, this was more of an exception as many youth did not feel comfortable talking to their parents for a number of different reasons. These reasons included fear of judgement, religion, feeling uncomfortable, and not having a close relationship with their parents. For this reason, youth that preferred to go to their parents were not in the majority, however it was important to discuss as a possible preference as some youth that had approachable parents felt quite strongly about going to them for information and advice.

Improved sexual health education in schools

Schools were also discussed as a preferred source of information, however the main reason youth identified it as such a source is because many of them recognized that it is the best way to ensure that the majority youth receive sexual health education, as most youth attend school regularly (Guzman, Casad, Schlehofer-Sutton, Villanueva & Feria, 2003). Despite this, youth expressed the need for many changes to be made to the current curriculum and the way that sexual health is taught in schools before it is recognized as an optimal source of education

on these topics. This was expressed by one participant when she said, “I think that the best way for number wise…but not the most effective at all” [female, semi-rural group].

According to youth living in Durham Region, the changes that need to be made to make school a more effective and preferred source of information include the person teaching sexual health education, what is being taught and how it is being taught. Once these issues are addressed, according to Durham youth, schools would become a main source of sexual health information and a preferred source at that.

Who is teaching?

The first changes that need to be made to the current sexual education programs in schools according to youth is the person standing at the front of the room teaching. Youth had four recommendations about who should be teaching sexual health in schools. They included someone that is comfortable teaching the material, is interested in what they are teaching, is relatable for students and is an external instructor.

Comfortable teaching the material. Youth in each of the four focus groups suggested that a teacher’s comfort level with the material they are teaching, affects the quality of the education. This is an important factor to consider as it is possible that a teacher’s comfort level will affect how youth receive information. This was expressed by youth on several occasions when they spoke about their teachers being awkward and uncomfortable teaching students about sexual health, therefore skimming over important details and skipping certain topics. One youth said, “I find most teachers are even awkward kinda to teach it so if they weren’t awkward than the students in the class might not feel awkward” [female, semi-rural group]. Other youth agreed with this observation and thought that this was a common problem for some teachers that are

trained to teach other subjects but not sexual health. One male participant emphasized the need for special training for sexual health teachers when he said, "In general the important thing is to have them go through training. I mean it shouldn't matter whether they're gay straight, they should all have to go through the training anyways to enable them to [teach sexual health]" [male, LGBTQ group]. Teachers often do not receive special training on how to teach sexual health classes effectively (Ninomiya, 2010; McNamara, Greary & Jourdan, 2010). Other qualitative studies have cited that staff who were uncomfortable with youth sexual behaviour was a major barrier for youth (DiCenso et al, 2001).

Interested in the material. Youth also wanted a teacher that was interested in what they were teaching. Youth indicated that having someone that wanted to teach sexual health education will do a better job reaching students and informing them of everything they need to know. One participant said,

> I'd want someone who actually takes a general interest in it, instead of just "oh I'm only doing this because I have to"…if the teacher actually takes an interest into it and actually wants to teach it, then that would be better than someone that's like "I'm only doing it because I have to [male, urban group].

This statement shows that youth respond to a teacher's reasons for teaching sexual health education and can distinguish between someone who has to teach the material because they are required to, versus someone who wants to teach the information because they are interested in it, and passionate about promoting sexual health in youth.

Relatable to students. Youth also said that having a peer or someone that is relatable to students teaching the information, students may be more likely to respond to and listen to what they have to say about the subject of sexual health. One male participant said,

> Again it's like relating to someone who's telling you the information so if you've got like a 50 year old, 55 year old teacher telling your like "alright, cool man" (sarcastically). But I would have no problem going, talking to a health class about something like [male, semi-rural group].

This youth stated that having someone his age teach youth about sexual as a peer would be something that students may respond to, more so than having a teacher that is older by saying, "alright, cool man" in a sarcastic manner, indicating he would be less likely to listen. Peer education has been shown to be effective in school-based programs (Smylie, Maticka-Tyndale, Boyd & the Adolescent Sexual Health Planning Committee, 2008) as youth feel more comfortable receiving information. This recommendation was also made at a separate focus group meeting when one person said, "I think someone around the same age level speaking about it and being enthusiastic about it would definitely make it more memorable and make sense of it all" [female, semi-rural group].

Another youth indicated having the same feeling about who teaches them about sexual health issues when he said he would prefer, "someone you can relate to kinda like a lot better than an adult" [male, semi-rural group]. This applied to sexual health education in school as participants found it difficult to listen to teachers talk about sex if they feel they can't relate to them. "It's easier if it's a younger teacher too, like I had Mr. [name]. He's like [in his] twenties, early thirties kinda thing so it was relatable kind of" [male, semi-rural group] while another participant added, "I'm thinking even younger than that though for the younger kids" [male, semi-rural group]. For this reason, peer educators may be a preferred source of information. A female participant suggested the idea of peer educators when she said,

> Someone who I think [could] get information across to children in high school, to have kids from other schools in the areas who've gotten teenage pregnancies even who have been infected with STI's to come and speak to them [female, semi-rural groups].

Youth in several focus groups had similar feelings about the idea of peer educators that youth are able to relate to. By providing instructors that students can relate to, youth may feel more comfortable asking questions. Youth also indicate that they believe the information to be more credible when it comes from a peer, rather than an adult (Smylie et al, 2008). Durham Region youth also indicated that they would be more likely to listen to what they have to say because they felt that what they have to say is relevant and current.

Third party teaching the material. The final recommendation that youth made in reference to who teaches sexual health education in school is to have someone external to the school come in and teach. Other studies have also suggested that having 'visitors' teach sexual health in schools is a more effective way of delivering the information (De Vries, Mayock, Higgins, Sherlock, Doyle, Andrews et al., 2009). Youth living in secluded areas of Durham Region identified school on a number of occasions identified school as the main source of information on sexual health; however they indicated that the current method of teaching may need to be changed. Suggestions on how to improve sexual health education in schools to better meet the needs and expectations of youth included, health forums, guest speakers, school groups and third party counsellors that are experts in the field. This preference was articulated when a participant said, "I think having a separate teacher to come in, I'd vote for it" [male, LGBTQ group] with another participant adding, "someone professional" [female, LGBTQ group]. Another youth said, "Someone you don't know on a day to day basis" [male, rural group] with another one adding, "you know like nurses and stuff" [female, rural group]. Reasons that youth gave for bringing in someone to teach sex education in schools were because it would increase the consistency of sex education across different schools and school boards. This was expressed by a student that said,

> It was a public health nurse… [Would be the] ideal situation. And like some people would give vastly different accounts of like what your sex ed. was like but we're all under the same, theoretically, curriculum right? So I think it's be great if there was an organization that they brought in to teach it properly to everyone consistently, would be the best way to do it [male, LGBTQ group].

Not only did youth indicate that there would be greater consistency in teaching but youth also believed that having an outside instructor would make sexual health education more interesting. A female participant said,

> I find that I'm a little more interested in what like, 'cause like you're with your teacher the whole semester. I find that when there's someone new, you're a little more interested in the subject [female, LGBTQ group].

These recommendations and reasoning for having a third party instructor come into schools to teach sexual health in the classroom displays how important the instructor teaching the material is to the students.

Youth made it clear in the focus group discussions that the person teaching sex education affects the quality of the class and how the information is received by the students. Youth indicated that an educator's comfort level with the material, the interest they have about sexual health, whether the teacher is relatable by students and lastly if the teacher was a third party educator, all play a role in quality of their sexual health education. Youth identified that these four factors are important to them and the education they receive.

What is being taught?

Youth also indicated that what is being taught was also important. Many youth agreed that the education they receive in school is often lacking and only covers "the basics". As a way to ensure that youth gain the knowledge they need in regard to sexual health, many participants

thought that they should have some input on what is taught in sex education classes in schools. This would ensure that youths' sexual health concerns were addressed. One participant said,

> I think students should have a say in what they want to learn in health. Say you did like a voting thing. The whole class can [choose what they want to] learn, three different things throughout the whole semester…but you also learn what the teachers want you to learn. [That way] you're also [learning what] you want to know [female, rural group].

Youth would like to have input in what they learn on the topic of sexual health. Other suggestions youth had was to give students the opportunity to anonymously ask questions that they wanted to answers to by writing them down and putting them into a sealed box. One participant indicated that this had been done in their class and she found it to be very effective. Other participants also indicated that they would have liked to have this opportunity as well.

The content of sexual health education in schools is very important. If youth do not feel that their sexual health concerns are being addressed, they will not be satisfied with the education they are receiving. Youth preferred a sexual health education course that allowed them to have input on the material being taught. Instead, there are provincial guidelines that dictate what topics that are covered in the classroom (Maticka-Tyndale, 2008). The Public Health Agency of Canada (2003) has developed the Canadian Guidelines for Sexual Health Education, which is a document that includes guidelines for teachers how how to deliver information and what information should be covered. Despite this youth would like to opportunity to make requests and suggestions on additional information that they would like covered. This is the only way that sex education can be done in a way that addresses all of the questions and concerns that students have about their sexual health.

How it is being taught?

How the information is presented is important for comprehension. Youth said that the use of humour, technology and spare time during the school day could improve how sex education is delivered to students in school.

One youth stated that humour was a method that he responded to in sexual health education. He said, "Well what I liked was that the one teacher that taught me, he would make jokes about it too so that everyone found it funny and remembered it and stuff" [male, semi-rural group]. This was an interesting statement as the youth suggested that by making sexual education humorous, youth felt more comfortable and were more likely to remember the information. This could suggest that the effectiveness of education could be improvement for Durham Region youth when humour is incorporated.

Another student proposed that using technology in the classroom could enhance the education opportunities and experiences of youth. One female participant said that they thought technology could be used in schools to improve how information is given to students. She said,

> Having the technology side, like that's the way the world is going. Like put your question in the box and I'll put your answer online for you to view after class time is over. Like that's the way it would have been nice to be [given information]. Not that I'm that old, but when I was in high school, not everyone had a computer. So it's like, not one of those things that we did, but now like that's the way the ball is rolling. So it's like you're anonymous kind of thing. You get the information you want to know from a source that will give you the right answer but everyone in the world doesn't need to know who you are and why you want it. Like but it's not just like going to Wikipedia or something [female, urban group].

This recommendation speaks to opportunities that technology provides and the potential for improving information delivery to students. Utilizing technology may improve how sexual health is taught in classrooms and could provide students with the chance to receive information they

otherwise are not getting from school on this subject as they can ask their questions anonymously. This would alleviate one participants concern regarding asking questions in class as they said,

> [Asking questions] just gives you so much more stress and then its like, do I even want to say it now? Because, I don't know how to word it in a way that people aren't going to pick me apart and make fun of me for it [female, urban group].

Considering this, a creative use of technology could alleviate these feelings of embarrassment; yet still provide the information youth want and need. While many youth would like this method of sexual health delivery, some would prefer other more traditional mediums as well.

A final suggestion on how to improve the way sex education is taught to youth to meet their preferences is to provide students with the opportunity to receive information outside of formal class time. A participant that lived in a rural area of Durham Region stated that youth should have a place to go to ask about sexual health concerns on any occasion and not necessarily during class time. She said,

> There should be a group in schools or something that people [can go to], and there should be some teachers, phys ed. teachers, even if it's after school or at lunch, you take your lunch talk about [sexual health]…there's lots of kids that want to learn about things like this [female, rural group].

By providing youth with a place to go for information that is in schools but not necessarily in the classroom, students may feel more comfortable accessing information and asking questions. They will also know where to go when they need help with a sexual health concern.

Youth provided suggestions about how sexual health education is taught and what can be done to improve the delivery. It has been noted that curricular approaches are extremely important in school health promotion programs (McNamara, Geary & Jourdan, 2010). Youth prefer to receive information in a way that is not extremely serious and provides some humour at

the appropriate times. Youth would also like to see technology used to enhance the learning experience of sexual health. Lastly, youth would like a place in schools that they can go during spare time to discuss sexual health concerns that may arise. While this may be the case, there are guidelines that are given to teachers on how to deliver sexual health information (Maticka-Tyndale, 2008; Puclic Health Agency of Canada, 2003). These guidelines may need updating to reflect the preferences communicated by youth. Students in Niagara Region also had a preference for educators that were specially trained in sexual health and used humour to deliver the information to students (DiCenso et al., 2001).

Considering these various recommendations made by youth regarding sexual health education in schools, changes need to be made regarding who is teaching in the classroom, what is being taught and how the information is being delivered. Youth also suggest that there are other ways to deliver information to youth in school as well, such as through posters and advertisements for sexual health information and services.

Accessible sexual health clinics

While not all youth had access to family doctors or health professionals, several youth preferred getting information from these sources over others that they felt were less reliable and/or knowledgeable on the topic of sexual health. One youth said, “I have a really nice family doctor. I’d rather go to him if I ever had the option” [male, LGBTQ group], while other youth said that they wouldn’t want to go to their family doctor because they were uncomfortable with it and said, “if you have a family doctor that your parents go to and you’ve gone to him since you were 6 and its really really awkward” [female, LGBTQ group]. While some youth prefer to get information from a health professional, only those who had access to a doctor and had a rapport

with them identified this as a preferred source of information. This is congruent with a past study that discovered patients prefer to receive sexual health concerns with health professionals that are knowledgeable and comfortable with the information (Wittenberg & Gerber, 2009).

Youth also had a preference regarding the gender of the health professional they spoke to. In the case of female participants, they preferred going to a female doctor. Past studies suggest that there are complex gender concerns related to sexual health education (McNamara, Geary & Jourdan, 2010). A male participant however also stated that he would rather talk to a female doctor as well. He said, "I've gone to a male and female doctor and I can much say I'd rather a female" [male, semi-rural group]. This is an interesting preference as males expressed a higher level of comfort going to a female doctor. He also added, "I think it would be kind of weird if a guy [doctor] was touching me" [male, semi-rural group], while another male participant agreed. Despite this, males expressed that they would like to be able to talk to either genders when looking for sexual health information.

Youth also identified sexual health clinics as a possible source of information and access to health professionals. Youth often responded fondly to the prospect of accessing information from a sexual health clinic or youth focused service that provided sexual health resources. When youth were questioned about the prospect of a Sexual Health Clinic in their community, youth said,

> I think it'd be good. I think if it's in Cannington or like this area somewhere more people would engage to it. Like and they'd be like "Oh wow this is actually going to help me, I have someone to talk to that's not going to go tell me information to everyone [female, rural group].

Youth preferred having a confidential and reliable place to go for sexual health information. Youth want somewhere that is accepting, especially LGBTQ youth. One youth said, "I mean if

there was a clinic sort of associated with the sort of sexual diversity and queer services at my school that'd be awesome" [female, LGBTQ group]. This type of sexual health service was identified by youth as a preferred source of this type of information. Youth also cited the importance of ensuring that this type of resource is important for youth to have access to in the case that they can't get information from other sources. This was highlighted by a female participant who said,

> Sexual health is very important to teenagers... I think teenagers should learn about it more in school because it's really important for teenagers to learn it so they have they know there is somewhere else to go to talk about it. Like they should say the sexual health clinics and stuff. Like adults will probably know it more than students but what if you don't feel comfortable going to your like parents or somewhere. I think there should be more advertisements too [female, semi-rural group].

This student felt it was crucial that schools inform students about the sexual health services that are available and that this is extremely important to youth especially as not all youth can go to their parents for that type of information.

Print Media

Youth also discussed other more passive ways of receiving sexual health information, such as from advertisements and posters in their community. Youth friendly advertisements in places that youth spend time such as the bus, school, and malls. Several youth across different focus groups recommended using buses to advertise sexual health services and information as many youth use public transportation to get back and forth to school. Youth said, "Bus ads are another really good one" and "on the inside of the bus because, especially when it's packed and you don't have someone to talk to, you like either staring at your feet or looking at something" [female, urban group]. Another youth said "I always read them" [male, LGBTQ group] in reference to bus ads. Youth seemed to prefer getting some types of information in this way

because people would not know if you were reading an advertisement. Youth said that youth will be likely to read something that stands out. One female participant said, “You could always start it with ‘SEX!’ And then other people would read it” [female, LGBTQ group]. By grabbing their attention, youth will read the information and may remember what they read as well.

Other places where youth spend time, such as schools and malls, are also thought to be a preferred place to get sexual health information. Youth said having posters up in school would also be a beneficial way to provide information. A female participant said “You go to a class, you make an announcement like that's an easy thing but I mean we just mentioned that we might, we would look at a poster” [female, urban group]. This may be a preferred way to deliver sexual health facts to youth as well. A male participant also said that malls were a good place for these advertisements as well. He said, “Have posters in the mall or something because the health department is right upstairs. Like having posters in the mall” [male, semi-rural group]. This recommendation highlighted the need for more advertising of sexual health services to ensure that youth know about them and that youth will read youth-friendly advertisements that catch their eye about sexual health.

By having sexual health advertisements containing sexual health information about services and interesting facts, youth may receive information that they may not get otherwise. By displaying posters in areas that youth spend time, they are more likely to see the information. Posters are an anonymous and easy way of getting information about sexual health, which are qualities that Durham Region youth value according to our research, as previously discussed.

Trustworthy Internet sources

The Internet was identified as a key source for information and was also preferred medium by youth for sexual health information. The reason that participants gave for choosing to use Google to for information about sexual health were that it was accessible, easy, anonymous, safe and convenient.

Participants were asked if they ever used Google to investigate a topic, many said they had, with one participant saying "yeah, especially with the Internet being so accessible now" [female, semi-rural group]. Participants also said, "it's so much easier just Googling it" [female, urban group] and "its quick and easy" [female, urban group]. A female youth said, "You get rid of that stigma and the confrontation and all that" [female, urban group], with another participant pointing out that "it's anonymous online; no one can see who you are or watch you" [female, urban group]. This was important to youth as another participant said, "You're not going to get yelled or screamed at by the Internet as well. So it's just a very safe medium to go to" [male, LGBTQ group]. These reasons were key to youths' preference to use the Internet for sexual health information.

Convenience was also a reason that youth often turned to the Internet. A male participant said, "Umm I'd still go to the Internet because it's more convenient" [male, semi-rural group]. Another participant also said "you can ask the Internet anything" [female, semi-rural group]. This value of convenience is an important thing to consider when providing sexual health services and education to youth and could also be applied to other sexual health resources as well.

Another reason youth preferred to go to the Internet for information was because they felt

that they were more likely to find the information that they were looking for. This was expressed with a participant saying, “I mean if you're saying it to a person you're not necessarily going to get the information you're looking for. I mean the Internet’s got everything” [male, LGBTQ group]. Other youth agreed with this statement, and it seems that the Internet is a preferred source for this reason.

While this may be the case, as previously discussed, youth have said that when they Google information, unreliable websites can come up and forums often appear. One female participant said, “Forums pop up when you ask sexually related questions or and that's not legitimate at all” [female, semi-rural group]. Considering this youth preferred to go to websites of reputable organizations. A youth said,

> If it’s like on the Durham Health Department Page there could be a link that specifically to that [sexual health] stuff that way it would be reliable and we know it’s all updated that way it’s still private and confidential and you'll still get both full of information [female, urban group].

This awareness and concern expressed about the credibility of information is a clear sign that youth want information about sexual health that is correct and easily accessible, as well as confidential. Youth prefer to have information that is accurate and convenient to access. The Internet provides youth with the opportunity to find the information they want and need, that they may not be receiving in other places, such as their schools.

New community programs

Youth indicated that having programs in the community would be a preferred resource for sexual health information. Youth recommended having a drop-in centre that could provide sexual health resources in the community. They said, “If there was just a drop in centre where

you would go for information for condoms. They could run workshops or run them in schools too but I don't know if youth would come to something like that" [female, semi-rural group], with another participant answering by saying, "Yeah probably if they offered free stuff" [female, semi-rural group].

Another recommendation made by a participant was to have a program in the community that provided activities and resources for youth, but did not have to be dedicated solely to promoting sexual health. She said,

> Well I definitely think there should be more youth collective activities and stuff for, it's not necessarily that sexual health is the main focus, but that it's accessible, its available, there's someone trained to talk about it you know [female, LGBTQ group].

This could also be a recommendation that could be useful for health organizations and services. Youth like the idea of a community program that allows them to seek information, but also serves youth and the community in other ways as well.

Youth also thought it may be a good idea to hold a forum or convention in their community about sexual health, much like racing against drugs. Several youth said that they would like this idea, as "it's a day for kids to go and learn in a fun type of way, kinda make it easy, something memorable, like I remember racing against drugs like it was yesterday" [female, semi-rural group]. They went on to say that this type of event should "make them feel more comfortable too" and have "more of a fun environment and their walls come down and they get to learn" [female. Semi-rural group].

The reason youth wanted to see more community programs for youth that could also address sexual health concerns was because "there's nothing else." Youth indicated that they had looked for social groups in the community for youth but were unable to find anything. This was

especially the case with socially isolated youth, such as LGBTQ youth. One male participant that identified as gay said "I was trying to look for groups for a long time and there was nothing" [male, LGBTQ group]. Two other youth agreed with this when they said "more need to be created in Durham Region for one" [male, LGBTQ group], with another saying "yeah its true" [male, LGBTQ group]. Past studies have shown that LGBTQ youth have often not been addressed (Fikar & Keith, 2004) displaying the need for more programs geared towards this population.

Youth indicated that community programs would be a potentially preferable resource for sexual health information. They also indicated that sexual health clinics and health professionals were preferred sources of reliable sex education and information. Aside from professional sources, the Internet, school and advertisements were also preferred sources that were identified; however they suggested that a number of improvements need to be made to make these sources of sexual health information better for youth.

Youth talked about a variety of places that they like to receive sexual health information, some of which were also discussed when youth identified the source where they currently get information. These sources include the Internet, school, parents, posters, health professionals. While these sources were currently being used by youth for information, youth had a number of recommendations to improve these sources to meet their preferences and needs. There were also new sources of information named by youth as potential preferred sources of information and they were sexual health clinics and community programs.

While many members of each focus group often agreed on these sources of information there was not always consensus, especially when it came to parents as a preferred source. There

was consensus however amongst the group that the Internet was the place they prefer going for quick information on something they needed to know concerning sexual health. Youth listed a number of reasons why they would choose to access certain sexual health resources. They included: anonymity, accessibility, comfort, free, knowledgeable, non-judgemental, relatable, private and trustworthy. The LGBTQ group also added that they prefer gay-friendly services as a source of sexual health education, which was not cited by participants in the other focus groups. Based on the preferences youth have identified regarding sexual health services and education, current services can use these concepts and values to improve their current programs.

These preferences should be considered when referencing the Convention on the Rights of the Child under articles 12, 13 and 17, as youth have the right to both participate and share their opinions on what information they receive about sex. Articles 2 and 3 are also relevant here as the best interests of the child must be considered and therefore the preferences of youth should be incorporated into the services offered in Durham Region. Finally, article 24 also states that "the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health". This would be possible to attain if the thoughts and recommendations made by youth were taken into serious consideration when delivering sexual health services within Durham.

CHAPTER SIX: CONCLUSIONS

Conclusions

According to the Convention on the Rights of the Child, it is the fundamental right of all children to have access to quality health care services and information about sexual health. There are a number of different improvements that can be made to increase youth's awareness of these programs in Durham Region. When youth were aware of sexual health services they also had a number of perceptions of these services, including that they are not easily accessible, lack anonymity, confidentiality and knowledge about specific sexual health issues, and are judgemental. Based on these perceptions, youth may not access sexual health resources when they need them, thereby impinging on their right to quality healthcare service that promote their sexual well-being.

Youth also recognized however that many services, such as the sexual health clinics in Durham are welcoming and youth-friendly so youth feel comfortable turning to them when they are needed. While this may be the case, there are barriers (accessibility, anonymity, confidentiality, etc.) that may prevent them from accessing services.

Youth also identified where they currently receive sexual health services and education. The most common places that youth went for information included the Internet; media sources including television, movies, radio, magazines, books, pamphlets and posters; friends and peers; school; their parents; and health professionals. These sources of information provide youth with information about sex, however not all are equal in the quality or quantity of information. An important point to make as well is that youth identified school as the main source, if not only source, of HIV/AIDS education. This makes it especially important to ensure that all youth

receive appropriate and comprehensive sexual health education. Based on these findings of where youth access sexual health information, more can be done to improve their quality, to ensure that they are accurate and informative resources for youth.

While youth stated where they currently receive sexual health information, participants also identified a number of places they would prefer to receive this type of information. Durham Region youth stated that they prefer to get information from: parents that are open and accepting; sexual health education in schools that are interactive and interesting; youth-friendly health professionals that are aware of youth specific issues; accessible sexual health clinics; trustworthy Internet sources that can be accessed from anywhere, at any time and; new community programs that provide youth with peers and support.

Several youth indicated that they liked to talk to their parents about their sexual health questions or would go to them if they had any sexual health issues. This was not always the case among many of the youth participants however; as many indicated that they did not feel comfortable speaking to their parents and were concerned about how they would respond if they did. While this was the case, the youth that did not feel comfortable speaking to their parents, wished that they had open and accepting parents that they could approach about sex.

Youth also suggested that Internet resources were a good way to provide youth with the sexual health information they need. Youth said this could be done by providing reputable websites that contain accurate and youth focused information. By providing youth with Internet resources, they can access information whenever they need it, from wherever they are. This could be very useful for youth that live in rural areas of Durham Region and youth that are uncomfortable accessing sexual health resources in person. Some youth do not feel comfortable

using sexual health services as they may be seen by someone they know or do not want to talk to someone in person. Based on this, Internet resources would be helpful for many youth that cannot or do not use sexual health services.

Participants also identified school as a preferred place to receive information, however stated that there needed to be changes made to who was teaching them, what was being taught and how it was being taught. These factors were important to youth, as they wanted a sexual health instructor that was comfortable with the material, interested in what they were teaching, were relatable to their students and were external to the school. They also wanted to have input on what they were learning and believed that the use of technology and humour in the classroom would improve the quality of education. Literature suggests that a majority of youth receive some form of secondary education in Canada, therefore making it an inclusive and efficient way to deliver sexual health education to youth. Education plays an important role in peoples' health as it is considered to be a social determinant. This being said, the quality of education youth receive has a direct impact on their health and behaviours. There is an opportunity to provide informative, inclusive and interactive sexual health education in schools, thereby ensuring that all youth are being given the same level of sex education.

Outside of formal education, youth made recommendations on how to reach youth through the use of advertisements as well. They recommended that posters should be used to deliver sexual health information regarding both facts and resources. Posters about sexual health services and clinics would also be helpful and could potentially increase awareness of these services. Youth provided a number of recommendations on how to make posters relevant and attractive to youth. Recommendations included: bright colours, large font, catchy slogans or highlighted words and putting them in places that youth go. They said that posters should be put

in buses, malls, schools, movie theatres and other popular places that they spend time to ensure that they are seen. These recommendations will allow health services, organizations and educators to make youth-appropriate advertisements.

Health clinics and professionals were also preferred mediums for the delivery of sexual health information and services. In our investigation we found that many youth did not know about the services in the community; however the youth that participated in the focus group meetings may represent youth that are more informed than those who did not participate. Sexual health services were a major topic that was discussed and were presented to youth in a way that allowed them to explore their attitudes and perceptions of these services. The results found that more information about the resources these services offer and the people that work there may improve youth perception and attitudes. By doing this, youth will gain the perspective that services are youth focused, sensitive and understanding. This could, along with raising awareness, increase the number of youth accessing sexual health services in Durham Region.

In addition to sexual health services, more community programs for youth were also identified as needed and were something that youth wanted more of them to be available. Several youth who participated in the research study said that they would like to see more groups, similarly to the ones we conducted, where they could discuss sexual health, ask questions and explore the attitudes of their peers related to sex. Those who expressed this need were youth in the LGBTQ and rural groups, thereby suggesting that socially and geographically isolated youth are in need of more programs that meet their needs.

By looking at the perceptions that youth have of the sexual health services in Durham Region and where youth currently receive sexual health information, we can improve our

understanding of how youth would like to receive sexual health services and education. Youth provided a number of recommendations on how to improve current sources of information in order to make them meet the preferences youth have regarding how they would like to receive sexual health education.

The Durham Region Healthy SexYouthality Project began to address several social determinants of health such as access to services and education opportunities. It was clear from the results of this study that many youth in Durham Region are not aware of the sexual health services and programs that are available to them. This is an access issue as many youth were not given the information by their schools or at home about the services and some rural youth were not able to find transportation to access these services. Education disparities also existed between Durham Region youth, which is a social determinant that can affect the health of youth. The Rights of the Child also states that no child should be deprived of their right to access health services, which is an issue for youth living in rural areas of Durham Region.

Under articles 2, 3, 12, 13, 17 and 24 of the Convention on the Rights of the Child, health care providers and educators have a responsibility to do all that they can to provide youth with proper sexual health resources that they need to protect their health and well-being. The Convention of the Rights of the Child is important to consider in this CBR project as we tried to address the social determinants of health of youth living in Durham Region. The Rights of the Child, along with the Social Determinants of Health, play a role in guiding services in Durham Region and must be considered in sexual health service delivery.

The social determinants of health, the Convention on the Rights of the Child and CBR were the conceptual frameworks that guided this research. CBR was used to empower youth and

give them a voice regarding the decisions that are made on their behalf by health providers parents and educators regarding sexual health education that they receive, as it is recommended in the Convention on the Rights of the Child. The social determinants of health also played an important role as age can have a large impact on youth's sexual health, as can the environment in which they live. These elements were important to consider and therefore The Rights of the Child, Social Determinants of Health and CBR all played a key role in shaping this research.

Figure 3: Sexual Health Objectives

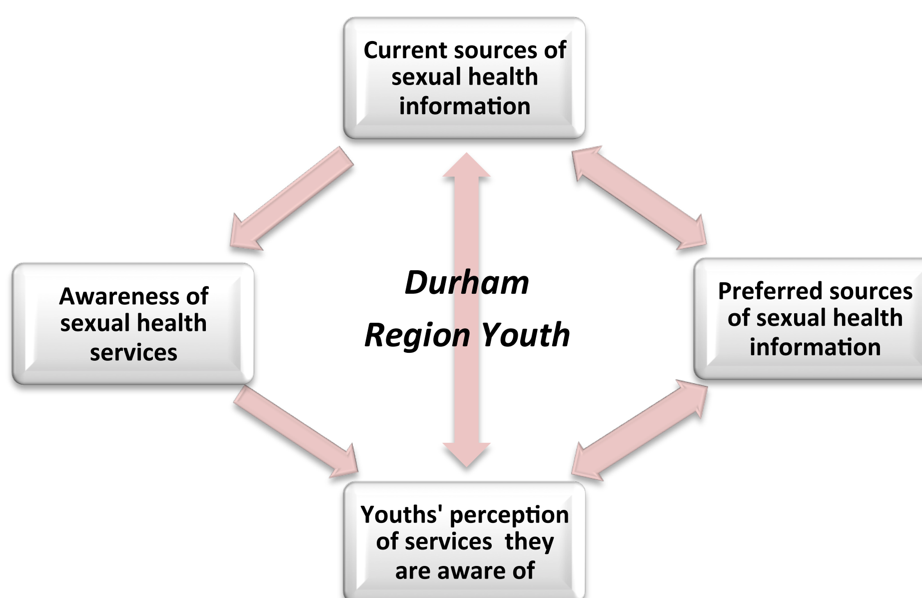

Figure 3. displays how the four objectives of this research study are interconnected. The awareness of sexual health services impact youths' perception of the services that they know about. The current sources of sexual health information also play a role in whether youth are made aware of the services in their community that can provide them with sexual health services and treatment. The current sources of information and the perceptions youth have about these service directly affects the sources of information youth prefer to access sexual health services

and information. These relationships are important to understand to better serve youth in Durham Region to improve their sexual health.

Strengths & Limitations

This research study included questions about sexual health the issues that Durham Region youth face, which is a sensitive topic for many people. There were a number of strategies that were incorporated into the data collection process to ensure that, although sexual health is a sensitive topic, youth could provide open and honest perspectives, without being afraid to share within the group. These strategies included: (a) creating a place where youth felt comfortable by providing food/drinks and beginning the session with an icebreaker; (b) encouraging youth to speak in third person and provide the perspectives and experiences of their friends so they felt more comfortable sharing truthfully; (c) asking questions that were identified by health professionals working with youth and a youth advisory committee related to sexual health; (d) ensuring that all youth were told there were no right or wrong answers to any of the questions; (e) emphasizing that all discussions were confidential and that nothing they shared would be attached to their name or personal information; (f) ensuring that participants could share whatever they felt comfortable sharing.

A major strength of this research study is that it was conducted using a CBR framework. Two main advantages of this study was that there was a high level of relevance, usefulness and application of the research findings and it utilized the diverse skills, knowledge, expertise and sensitivities of the research partners to address complex problems (Israel et al., 1998). This was possible because the coalition members were involved in each stage of the research process, lending both their opinions and resources to define many aspects of the research design.

The use of CBR also enhances validity and quality of research by including local knowledge and theory based on lived experience of those involved and seeks to improve the health and well-being of the community (Israel et al., 1998). The findings of the research were presented to the stakeholders, which allowed them to provide feedback, thereby validating the results. The stakeholders also had the opportunity to implement the suggestions and preferences voiced by youth on how to improve their services, to better meet their needs after the results were presented to them. The knowledge gained can direct resources and guide policy that can benefit the community (Israel, Schulz, Parker & Becker, 1998). This was the case in the current study, as several presentations have been made in the community in the hopes that it will promote change related to sexual health services in Durham Region.

The involvement of the coalition in the recruitment process was also strength, as well as a limitation of this study. The recruitment process was a strength of the study as professionals were able to identify youth that would be interested in participating and may have a unique perspective regarding sexual health. It could also be viewed as a limitation however as the youth that were recruited by community agencies were using services and/or accessing programs in Durham Region. Considering this, participants of this study may have been more informed or proactive in regards to seeking out programs or information about sexual health. However, some youth were also recruited in the community; both in high schools and using social media. While this is the case, only seven of the 32 participants were recruited in this manner.

Other limitations of this research study also relate to the study sample. This research study was conducted as a first step to identify the sexual health concerns of youth in Durham Region and therefore is specific to this local population. Therefore, the generalizability and transferability of the findings of this research may be restricted to Durham Region and its unique

characteristics and other regions that share similar qualities, as the challenges related to the sexual health of Durham Region youth may not differ greatly from youth living in other areas. It is important to consider that the purpose of the investigation was to find out the sexual health concerns of Durham Region and therefore the study met these criteria and consequently may not be a major limitation of this research.

The study sample was also small and was not representative of the overall population in regards to ethnicity, as many participants identified as Caucasian. According to Statistics Canada, Durham Region is made up of 88% white and 12% are a visibly minority (Statistics Canada, 2007b). For this reason, the results may not be representative of all of the other ethnicities and the sexual health issues they face in regards to services and education.

Implications & Knowledge Translation

This research study was conducted as a preliminary exploratory study to discover the sexual health needs of youth in Durham Region. The findings of this study will advise a larger future research study in Durham Region. The results of this seed grant will be used by the organizations on the Durham Region Healthy SexYouthality Coalition to better meet the needs of youth in regards to their sexual well-being.

Capacity building was also a major outcome of this research study. As previously discussed, Coalition members and youth that took part in the CAC, were included in the research process, thereby increasing their capacity and understanding of community-based and evidence-based research. The capacity of the community was also increased by supporting and improving their ability to provide youth in Durham Region with the resources they need for sexual health.

The research team has been actively engaging the Durham Region Healthy SexYouthality Coalition during the study and we will continue to work with its members to support them in modifying their sexual health programs to meet the needs of the Durham youth population. The purpose of the research study was to discover how health services could better meet the needs of youth. As cited in the original research protocol for the Durham Region Healthy SexYouthality Project, the findings of this research project can be used by youth agencies to create programs and services that better meet the needs of Durham Region youth. Moving forward, the hope is that the sexual health services will be able to make small changes recommended in the discussion section to better meet the needs of Durham youth. This research project has provided evidence that can assist organizations to make informed decisions in health care; an important facet of knowledge translation.

Knowledge translation refers to translating knowledge to action and is defined by the U.S. National Center for Dissemination of Disability Research and the WHO as “a dynamic and iterative process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products and strengthen the healthcare system” (Straus, Tetroe & Grahanr, 2009b). Knowledge translation also involves exchange of information gained by researchers to those who use it (Canadian Institutes of Health Research, 2008)

Knowledge exchange for this research project included several mediums that were developed for a target audience, which included: health care providers, youth, community members, local politicians, and individuals affected by HIV/AIDS. Dissemination methods included: reports for a local community health centre and the OHTN, a formal presentation at the 2012 OHTN Conference and 34th Annual Sexuality Conference in Guelph, a community launch

held in conjunction with the Durham Regional HIV/AIDS Conference, a community launch for youth in Durham Region, a press release and media interview for a local newspaper.

The reports developed for this research project included the research goal and objectives, methods and preliminary results. One of the reports was developed for a community health centre in North Durham, with the purpose to support the need for program development for youth living in that area. The report that was written for the OHTN was more detailed and included a description of the major research outcomes, the knowledge exchange outcomes and future research plans.

The presentations and community launches that were done included a description of the research process. The objectives, methods and results were discussed and questions were answered regarding our study. We also had a panel of community representatives that spoke about the challenges that youth face and engaged the audience in a discussion about sexual health. The final community launch was done at a local health centre and included interactive booths and activities that 34 youth living in Durham Region participated in. Attendees of this research launch were given USB keys that were encrypted with the research results.

Finally, a press release and newspaper article was published in the community that included details of our research and some of the major findings. The article also promoted local testing facilities for STIs. These reports were distributed to many residents across the Durham Region, allowing for many community members to be informed of our research and some of the findings that may have not had access to it otherwise.

Knowledge translation is important as it involves the use of research evidence to inform decision making in regards to health (Straus, Tetroe & Grahanr, 2009b). Each of the

dissemination methods that were used during the knowledge exchange process of the Durham Region Healthy SexYouthality Project allowed for community to be both informed and in some cases, involved, in the research study. Current recommendations that have resulted from this research study include: the need for more youth focused programs where youth can access sexual health resources and improved educational resources that are accessible for youth. Future research possibilities may develop from this study that will include a larger sample of youth from Durham Region that can be used to further explore the sexual health concerns and attitudes of youth.

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Appendix A: Research Protocol

A. Background

The purpose of this capacity building grant application is to engage youth in the Durham Region in a youth lead capacity building process to create *Healthy*[2] environments in which youth could identify their sexual needs and priorities for HIV prevention and healthy sexual development. Durham Region has experienced an increase in the number of sexually transmitted infections in recent years, particularly among youth, and this has led to the need to provide programs and services for youth that are youth informed and youth friendly. Durham Region Healthy Sexuality Coalition and researchers from the University of Ontario Institute of Technology (UOIT) will facilitate the development of this capacity building process. To be successful in reaching our overall goal [which is "to encourage young people aged 15-24 to engage in making healthy decisions related to their sexuality."] we will engage in a collaborative process that includes youth, agencies working for and on behalf of youth and university researchers. This will result in identifying factors related to youth sexual health vulnerability for a fuller research grant proposal to examine youth sexual health services and to identify factors that optimize healthy sexual decisions.

In Canada, there is an increasing number of youth[3] infected by HIV and other sexually transmitted infections, (STI) but the prevention needs of these youth are often unknown. In Ontario, when HIV and STI data are closely examined, a close link is noted between younger age and STI prevalence. In the case of Durham Region, the epidemiology of HIV is not clearly understood due to its proximity to Toronto where many residents in the region work and access health services *(Remis, R. Personal communication)*. As such, the results of HIV testing outside of Durham may be delayed or not reported to Durham Public Health.

This capacity building research grant application is a community-based research effort initiated by the Durham Region Healthy SexYouthality Coalition and one that embodies the Coalition goals; being youth centred to incorporate the needs of diverse youth in Durham Region; that information gathered can be used to help youth make healthy sexual decisions; and be done in a way to empower youth rather than negatively focusing on a specific aspect of youth behaviour. The project is called the Durham Region Healthy SexYouthality coalition project as was suggested by an earlier meeting with youth (henceforth called the SexYouthality project).

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[2] Healthy environment or rather Healthy Sexual Environment is a term that has been agreed on by consensus among coalition members. The goal of the Coalition is to "To encourage young people aged 12-24 to engage in making informed choices related to their sexuality."

[3] In this literature review, the terms youth, young people, adolescents and children are used interchangeably.

Objectives

The aim of this capacity building grant is to work with youth to identify their sexual health for the development of a larger representative research.

The specific objectives of this capacity building application are:

1. **To understand how youth perceive their role in creating a healthy sexual environment in Durham Region.**
2. **To examine whether youth's understanding of their sexual health determinants is congruent with agencies' perceptions.**
3. **To understand the issues that increase sexual vulnerability and how to meaningfully engage youth in sharing their information.**
4. **To determine the best recruitment strategy with regards to community and institutional feasibility.**
5. **To produce a full CBR grant to explore the sexual health needs of Durham youth.**

At an earlier meeting, the Coalition was engaged in a brain storming activity to identify youth sexual needs and priorities, based on their respective agency's work with youth. Through this brainstorming session certain overarching themes essential for the provision of sexual health programs and services for youth were nominated. These themes will be used as the departure point for the dialectical process of youth engagement and are as follows:

1. Gender and its relation to sexual health - What are the factors associated with high risk sexual behaviour among youth, particularly young males in Durham Region?
2. Barriers to health services - What are the barriers to health services and health programming by gender [particularly among young males (where do they access services, what modalities are best for receiving information)]?
3. Sexuality and Sexual behaviour - Why are the rates of sexually transmitted infections especially Chlamydia increasing? Where do youth get information and support on issues related to sexual orientation?
4. Home and School environment – Are youth comfortable in discussing sexual health in the home environment? What kinds of pragmatic information are presented at schools?
5. Influence of drugs - Is there a recreational drug use problem among Durham youth and if so, is it associated with their sexual decision making?

Literature Review

Epidemiology of HIV in Durham Region

The Regional Municipality of Durham lies east of Toronto and has a population of 561,258[1]. It is a mix of the following urban and rural areas: The City of Pickering, the Town of Ajax, the Town of Whitby, the City of Oshawa, the Municipality of Clarington, the Township of Uxbridge, the Township of Scugog and the Township of Brock. While Ajax, Whitby and Pickering are often considered part of the Greater Toronto Area (GTA), Oshawa, Whitby and Clarington are also notable as part of the separate Oshawa Census Metropolitan Area[2] . Due to its close geographical and social and economic proximity to Toronto, and the social stigma associated with infectious diseases particularly in areas with small populations, data available on infectious diseases from the Durham Region may under represent the realities there.

According to the information provided by Durham Region Health Department, there were 227 cases of HIV/AIDS reported among Durham Region residents from 1991 to 2003 [3]. HIV incidence rates have been declining since 1991 from 6.4 per 100,000 persons to 1.2 per 100,000 persons in 1999. Between 1999 and 2003, there appears to be an increase in incidence rates. However, there were no cases of perinatal HIV cases in the regions between 1991 and 2003. Effective antiretroviral therapy became widely available in Canada in 1996 and as such a corresponding decrease in AIDS mortality was noted in Durham Region. However the trend in decreasing death due to AIDS had begun before 1999. Data is not available by age-groups in that report.

Data obtained from the Ontario HIV Epidemiologic Monitoring Unit for the Durham Public Health Unit (DPHU) estimates a population of 445, 480, 18 years and over at risk for HIV infection (*personal communication, Robert Remis, Ontario Epidemiologist).*. The modeled population estimates indicate an HIV prevalence of 5.9%, 12.7%, 1.9%, 0.21% and 0.01% in the MSM, MSM-IDU, HIV endemic and heterosexual categories. From 1985 to 2007 there were 192 cases diagnosed by DPHU, 81% among men and 19% among women. Of note is that 12 cases were diagnosed in 2007, the largest count since 1993. By age-group and sex, 44 individuals between the ages of 10 – 29 years were diagnosed with HIV, making up 25.8% of those with data for age. By sex, 35 in that age group were males and 7 were females. By risk category, MSM (51.4%) continue to be the group most highly at risk, followed by low risk heterosexuals (LRHet – 18.1%), intravenous drug users (IDU, 9.7%), and individuals from countries where HIV is endemic (Endemic, 8.3%). For the period 2002 – 2007 a similar trend was observed however with increasing acuity in the MSM (55.6%), LRHet (29.6%), and Endemic (11.1%) categories. For males by age group, males between 15 – 29 years contributed 13 of the 37 MSM cases for the period 1985-2007 and 35 of the total 149 individuals diagnosed with HIV. For females, 7 of the 35 diagnosed cases of HIV during 1985- 2007 were between the ages of 10 – 29 years. For the period 2002- 2007, 13 of the 15 cases of HIV among MSM were between the ages of 15 and 29 years and this young group also contributed 35 of the 149 cases of HIV diagnosed. Young women 15-29 contributed 6 of the 35 cases of diagnosed HIV for 2002 – 2007. In essence this indicates that recent HIV infections have been burdensome for youth (*personal communication, Robert Remis, Ontario Epidemiologist).*

General characterization of HIV among youth

While young people represent a small proportion of the HIV/AIDS cases in Canada, the importance of HIV in this population cannot be understated. The HIV prevalence for Street Youth was measured at 2.2% in 1991, with prevalence of 4.4% among young men 20-22 years and 10% for those 23-25 years [4]. Data from the 2002 – 2005 I-Track surveillance study of intravenous drug users in Canada showed an HIV prevalence of 5% among youth ages14 – 25 years [5]. In Montreal street involved youth (ages 14 -25 years), an HIV prevalence of 1.4% was shown in 1995 at study enrolment and an incidence of 0.69 per 100PY was shown in 2000. When sexuality was taken into account, the prevalence of HIV among MSM in that Montreal cohort was 4.9% in 2000 and the incidence was 1.2 per 100 PY [5]. While AIDS data is a less sensitive indicator of HIV acquisition, its effect on young people's lives is not less important. At the end of 2005, youth (10 – 24 years) represented 3.5% of the 20,669 AIDS cases in Canada [5]. Although progression to AIDS is related to access to HIV treatment and care, and some youth may have perinatal acquired HIV, the data still attests to the significance of HIV in this population.

In Toronto, surveillance data show that young people aged 15-19 years had high HIV incidence rates in 2006 with female incidence rates being almost twice that of males (5.2/100,000 male: 2.8/100,000 female) [6]. While ethnicity data is not given in that report, ancillary information does affirm its preponderance in Black

communities [7]. Further, epidemiologic data indicate that Black women, 15-29 years, accounted for 35.8% of all HIV cases among women in the endemic category [8].

In the United States, youth represent a significant proportion of new HIV/AIDS cases. In 2004, based on data from the 35 areas with long-term, confidential name-based HIV reporting, an estimated 4,883 young people aged 13 – 24 years received a diagnosis of HIV infection or AIDS, representing about 13% of all persons given a diagnosis during that year [9].

DETERMINANTS OF HIV AMONG YOUTH

Adolescence is a time of development characterized by rapid fluctuations and changes including the need to be unique yet at the same time, to be part of a group. Hence young people are easily influenced by peer pressure. It is at this time that youth usually begin to explore sex and sexuality, and experiment with drugs and other high risk behaviours [10-14]. Further, habits developed during those early formative years may continue into adulthood [15]. In the US, the most important risk factor for HIV among youth was sexual intercourse. While clear risk-outcome association is not available in Canada, HIV outcome among youth may be influenced in similar ways.

Sexual debut and practice

It is expected that young people will engage in sexual intercourse but delaying sexual intercourse, and reducing the number of partners are important HIV risk reduction strategies [16, 17]. Delaying sexual intercourse allows young people to enhance their psychological development and be able to negotiate safer sex. While there is no publicly available data on Durham youth's sexual debut, inference drawn from Canadian data indicate that Durham youth may commence sex at an early age.

Adolescents in Canada are highly sexually active, beginning their sexual activities at an early age, many of them engaging in multiple sexual activities. In the Canadian 2005 national online survey of 14 to 17 year olds, 27% reported being sexually active [18]. About half of these sexually active teens had three sexual partners and 24% had not used any protection against STIs the last time they had sex. Further, 38% were engaged in casual sex and 16% had partners who were engaged in multiple partnerships. In an earlier Canadian study among school aged youth (CYSHHAS), 23% of boys and 19% of girls in Grade 9 reported having had sexual intercourse, while 40% of boys and 46% of girls in Grade 11 reported having had sexual intercourse. Further, at least 2% of Grade 7 students reported having had sexual intercourse [19]. While only students up to Grade 11 were surveyed in the CYSHHAS, the average age of first sexual intercourse was 14.1 years among boys and 14.5 years among girls. In that study, 50% of the students who had initiated sex had only one sexual partner but many students reported having 4 or more partners [19]. Further, few students used contraceptives, and use seemed to decline with age[4]. Thus adolescent early sexual practice increases their risk for HIV and other STI infection. While delaying sexual debut is often viewed from a female perspective, young men also need to be included if we are to fully address HIV among youth.

[4] Condom use and other forms of contraception were not clearly disassociated.

High risk sexual behaviour outcome

Co-infections with STI increases the risk of HIV infection but STI infection rates among Durham youth may be higher than in other youth populations[3, 20]. In Durham Region in 2003, Chlamydia was the most common reportable disease with highest rates in 20-24 years and 15-19 year old females. In 2006, there were 359 cases reported in 15-19 year old: 287 in females and 72 in males. While rates generally declined from 1992 to 1997, reaching the lowest point in 1997, from 1997 to 2006, the trend reversed and the rate increased 86% in Durham Region and 43% in Ontario among those 15-19 years old, especially among males. Rates among 15-19 year old males in Durham Region increased 214% from 1997 to 2006, compared to 104% in Ontario. Rates in females aged 15-19 increased 68% in Durham Region compared to a 33% increase in Ontario. Reported rates were about 6 times higher in females than males, reflecting the fact that females are more likely to be screened than males when they present for routine medical visits for birth control or Pap tests. Similarly in Toronto in 2006, young people 15-19 years, had the second highest incidence of Chlamydia; young females having fourfold rates compared to males (342/100, 000 male: 1384/100,000 female)[6].

An indicator of high risk sexual behaviour among Durham youth is also indicated by high gonorrhoea rates. While there was a period of declining gonorrhoea rates in Durham Region among those aged 15-19 years, rates have been increasing since 1997. There has been an 80% increase in rates between 1997 and 2006. In 2006, 39 cases of gonorrhoea were diagnosed in Durham Region adolescents aged 15-19 years, resulting in a rate of 133 cases per 100,000 in females and 44 /100,000 in males. Rates were about three times higher in female adolescents in Durham Region than males, compared with two times higher in Ontario. This pattern may reflect screening practices; females aged 15-19 may be screened more systematically than males of the same age. In Toronto in 2006, gonorrhoea incidence rates were also high for this group with females being twice as likely to be infected as males (114/100,000 male: 204/100,000 female).

Pregnancy

There may be a close association between poverty, teenage pregnancy and HIV in Canada. While individual studies have found positive associations between poverty and HIV, and between poverty and teenage pregnancies, a synergistic effect may hold for all three [19, 21]. Durham teen pregnancy rates are dropping and reflect that of Ontario. However, from 2001 to 2007, on average about 570 teens in Durham Region became pregnant each year (*Personal communication – Durham Public Health).* Data from Toronto indicates high rates of teenage pregnancies in Toronto's poorest neighbourhoods. In an analysis of Toronto Public Health teenage pregnancy data maps, Robertson (2007) states "When comparing the map of teen birth … with the map of the Black population in Toronto, … we noted that 11 of the 15 neighbourhoods that had [a large proportion of] Black persons were also included in 9 of the local health planning areas that had the city's highest teen birth rates" [7]. Many of these Black neighbourhoods were also ranked below the poverty index as reported by Ornstein [22]. Therefore, considering the social and economic consequences that young mothers and their babies may face due to adverse birth outcomes, neonatal death, lower education and employment opportunities, it is critical to know why these young women are becoming pregnant, in order to develop programs to protect this young population [23].

Sexuality

Gay, bisexual, lesbian and transgender youth may have equal or greater health risk factors than their heterosexual counterparts but often do not readily access health care services due to perceived or real stigma

and discrimination. In Ontario, many of the HIV cases among young males may be due to same sex activities but due to the stigma attached to homosexuality, MSM may not report that activity [24]. Risk factors and barriers to prevention are different depending on whether young men are infected heterosexually or through MSM activities. In the Toronto Teen Survey, sexually diverse youth (term that includes Gay, Bi, Lesbian, Transgender, Questioning, queer and other sexually diverse youth) identify homophobia as an important concern. This may help to explain why they were more likely to use the mass media for information related to sexuality, more likely to practice high risk behaviours and to have been involved in a pregnancy compared to their heterosexual counterparts[25]. There is a need to understand the role of sexuality as a determinant of HIV epidemic among young people, since sexual acts and sexuality may always not coincide in this population.

Substance use

Youth in Canada and the United States use alcohol, tobacco, and other drugs at high rates [19, 26]. It has been shown that substance users are more likely to engage in high-risk behaviours, such as unprotected sex, when they are under the influence of drugs or alcohol [27]. Studies in Canada also show that street youth are at high risk for HIV infection if they are exchanging sex for drugs or money. Marijuana use is common among youth and has been found to be associated with early sexual activities which place youth at a higher risk for HIV [28, 29]. Marijuana use may influence the level of consciousness and may cause mental slowing and feelings of heightened sexual arousal [30-32]. As youth often smoke with peers, their normal inhibitions may be compromised, leading to an increased likelihood of sexual activities [28, 33].

Sexual education, sexual oriented services for youth

In Canada, approximately a quarter of the population would have become sexually active by age 16 years and the majority of them would be sexually active by age 20 [34.] The school environment presents an optimal opportunity for providing sexual health education that goes beyond the biomedical context but also includes the social context of sexual behaviour and sexuality. Several studies have indicated that schools are the key site for the provision of knowledge and skills that young people need for healthy sexual decisions for the prevention of STI/HIV and unintended pregnancies [19]. Over 20 years ago, Marsman and Herold did not find a unified curriculum application for sexual health education in Ontario [35]. In some schools there was little support for including topics such as sexual intercourse and masturbation. While progress has been made with more schools offering information in this area, more recently, topics such as sexual orientation have been highly contested at the school level. [36]

Canadian youth experience barriers when trying to access information and lack sufficient knowledge about sexually transmitted infections as found in a survey conducted on sex and sexual health with 1171 youth between the ages of 14 and 17. It was found that 62% of youth reported obstacles in finding information and 69% could not find the information that they were looking for [37]. In Toronto, while a majority of youth reported that they received some form of sexual education from single or multiple sources, 8% reported that they received no sexual education at all. Further, when the data was stratified by length of residence in Canada, new comer youth possessed lower levels of sexual knowledge compared to Canadian born and those who were in Canada 4 years or more. Sources of information varied but the rigour of information from these sources could not be assessed in that study [25]. Therefore, this information suggests that there is a great need for youth to be more informed on sexual health issues and to have access to reliable information on sexuality.

B. Partnership
The Durham Healthy Sexuality Coalition

The Durham Region Healthy Sexuality Coalition is made up of a group of over 10 agencies in Durham Region that provide sexual health resources, services and programming for youth aged 15 – 24 years. Work in developing the coalition began in January 2006 due to a need to be more proactive in helping youth make healthy sexual decisions. The goal of the coalition is to encourage young people aged 15-24 years to engage in making healthy decisions related to their sexuality with the following objectives: to facilitate communication and coordination among health care and community service providers who provide sexual health services and programming in Durham Region; to work collaboratively in identifying potential (or actual) needs or gaps in sexual health programs and services in Durham Region; to provide a forum for networking and information sharing; to provide support to members as a voice for lobbying for resources, developing programs, proposal submissions or other similar activities; and to identify duplication of resources and streamline resource use if identified.

Membership in the Coalition is open to all community groups in the Durham Region that work with or on behalf of youth and have signed on to the Coalition terms of reference. Currently the Coalition membership includes the following agencies: The AIDS Committee of Durham Region; Ontario Aboriginal HIV/AIDS Strategy; Eastview Boys and Girls Club; Brock Community Health Centre; Durham Region Health Department; Community Living Durham North; John Howard Society; Kennedy House; Oshawa Community Health Centre and The Youth Centre.

The Durham Regional Health Department has been providing meeting space and minute taking for the Coalition. The AIDS Committee of Durham Region has taken on the fiduciary responsibility for the grant and will provide office space for launching the youth capacity development. All Coalition members will provide youth friendly space for youth meetings (as needed), help identify youth leadership in their area, and contribute towards the success of this capacity building research through tangible (meeting space, etc) and intangible (advocacy, etc) means. Lindsay Chartier, from the AIDS Committee of Durham Region is a co-principal applicant on this capacity building application. The Coalition has been collaborating with the University of Ontario Institute of Technology, as a member of the coalition to move this process forward.

C. Capacity Building approach

The aim of the Capacity Building fund is to engage youth in Durham Region, in a **youth lead process**, to respond to their sexual health needs by influencing the direction of the inquiry and shaping the specific details of the study. This supports the broader goals of strengthening communities and improving quality of life through placing the issues and questions of community organizations and the communities they serve at the centre of research[38]. While the Durham Healthy SexYouthality Coalition has identified important research needs, it is imperative to involve youth in validating and prioritizing those areas. This benefits the research process by empowering youth through self determination and creating avenues for research capacity building. The particular process pieces of capacity development are imbedded in the methods below and illustrated through the timeline.

D. Detailed Curriculum of Activities

Creating Healthy SexualityYouth Groups

The intent of this initiative is to engage youth in determining their research needs and priorities. There are wide variations in the socio-cultural norms and by extension needs of youth in the region and one group may not represent the values of all groups. Therefore, any research targeting youth in the area should be determined and agreed to through a consensus process, by the many sectors of this diverse youth population.

Researchers at UOIT will work with the Durham Healthy Sexuality Coalition to create youth groups that are reflective of the diversity of Durham youth. Guided by discussions with the Coalition, we have identified the need for the creation of 4 such groups. Reflecting on the mandate of the Coalition, we will recruit young people between the ages of 15– 24 years old residing in Durham Region for the following groups:

1. **A group for gay, lesbian, bisexual, transgender and other sexually minority youth:** It is recognized that sexual minority youth have traditionally faced stigma and discrimination that is tied to their sexuality. These youth often face ridicule in society but have been known to also experience violence from peers. We believe that creating a group of individuals who share similar experiences related to sexuality may increase their participation in talking about their sexual health needs.
2. **An Urban group: Pickering, Ajax, Whitby, Brooklin and Oshawa**. These areas represent the urban region of Durham and may be influenced by sociocultural trends in Toronto, in addition to their unique characteristics of being influenced by the industrial nature of the region.
3. **A group for youth living in Bowmanville, Courtice, and Newcastle**: The Coalition members believe that this may be a particular sub-cultural niche area and the needs of these youth may be influenced differently from that of youth in other area of Durham.
4. **A rural youth group**: Uxbridge, Scugog and Brock. As this rural area covers vast regions, the network will be "regionalized" to sub-network meetings that will be facilitated by one group leader. Transportation is always a critical issue for youth in more remote/less serviced regions so at any one time, the youth facilitator may only meet with 3- 4 persons. We have included additional funds for the facilitator's transportation cost.

Ethics approval for the research instrument and process will be sought from UOIT and Durham Public Health.

Role of Group

It is expected that each group will be led by a youth facilitator (university /college student) who has some skills in group dynamics. The groups will meet on three occasions. At the first meeting, the group will participate in "ice-breaker" activities after which the facilitator will introduce the topic areas for discussion. Youth will be given the opportunity to freely express their views and opinions and what they would like to see coming out of the following two meetings. At the second meeting, the facilitator will work on a list of activities that were previously prioritized by youth. Youth will engage in discussions around those items (leaving the opportunity for the introduction of new items). At the last meeting, the facilitator will present feedback to youth and engage in further discussions around topic areas. This third meeting will end with a "debriefing" session. At each meeting, youth will be provided with a snack and beverage. A return bus ticket will be provided and information related to sexual health clinic services, sexually transmitted infection pamphlet, *FACTS ABOUT* sheets, and availability of anonymous testing will be provided. Group discussions

will be recorded and a note taker will be present to record non-verbal cues. Meetings are expected to last for two hours and youth will be given an honorarium of $10 per meeting.

At least two members of the research team will be present at each meeting – the Research Coordinator or Co-PI and facilitator. One team member will be a note taker and the other will ensure that the meeting runs as planned (the facilitator). The meetings will be audio recorded which is a criteria for participation as outlined in the consent process. We may also enlist another volunteer from the Coalition or student body (in exchange for course credits) to help the team with setting up the refreshments (This individual would also sign a confidentiality form- as per appendix).

Group Member Recruitment

The Coalition recognizes that organizing youth groups should go beyond the immediate research priorities and needs and possibly become a catalyst in creating a future cadre of individuals interested in youth sexual health. Therefore we will work towards: gathering a diverse population of youth to set the research priorities and assist in the dissemination of the study results; create a roster of youth who are interested in being trained in carrying out peer-to-peer community-based research; create a cadre of youth who are interested in continuing to work on issues of the social determinants of health as they relate to their peers.

Members of the Coalition will put forward the names of young people for the group but composition of the membership will be youth driven. We will create recruitment flyers and post them at the various Coalition member agencies sites. Youth will also engage in peer-to-peer recruitment. To be included in a group, youth will be asked to agree on fundamental guiding principles such as being courteous and having mutual respect for each other, taking turns speaking and behaving in ways that are not oppressive. These guiding principles will be negotiated between the youth themselves. We will recruit 7 members per group. This size will help youth to be acquainted rather quickly and hence improve group communication dynamics.

Consent

Adolescence is a developmental stage when youth are tasked with making complex decisions, including ones about their health. Healthy Sexuality development means that they learn how to make informed choices, manage risks and negotiate options. Despite this, researchers continue to exclude youth because of the need for parental consent and likewise, youth are hesitant to seek health services and participate in research when parental permission is required [39]. Experts in the field of adolescent development have outlined the benefits to both youth and society when young people are provided with opportunities to contribute to policy development and community change [40-43]. In particular, youth involvement in community-based projects increases their sense of control over their own lives while also improving the relevance and appropriateness of programs and services [44-46].

In some contexts, parental permission is not appropriate as demonstrated in the Toronto Teen Survey study; a research study with underage youth [39]. In this study there were a number of concerns with requiring parental consent as researchers believed it was unwarranted, unjust, confusing and could silence the voices of those who most need to be heard [47]. Under other circumstances the requirement for parental permission could be waived and the assent of "mature minors" (i.e., minors who are "of sufficient intelligence to understand and appreciate the consequences of the proposed…procedures for themselves) could be sufficient to involve them in research [48]. Although the Toronto Teen Survey was of a highly sensitive matter

and involved youth aged 12 to 18, the study received Research Ethics Board approval from the respective partner universities.

Once the participant has passed the screening process (geographic and age verification) and is willing to enrol in the study (that he/she is willing to talk about HIV, STIs and sexual issues)the participant will then be given a time to meet with the study coordinator to review the consent form together. The interviewer will provide information about the research, including the focus group, study outcome, what procedures will be followed, potential risks, discomforts and benefits to the subject or others and that participation is voluntary. Informed consent will be explained and obtained in writing from each participant before partaking in the focus groups.

Youth will consent to the study and we will not seek parental consent for participation. Our belief, grounded in the literature and current practice, is that youth who are sexually involved or may soon be sexually involved do not require parental consent as they poses capacity for decision making. Access to regional Sexual health clinical services does not require parental consent. In fact, consent in this study may be counterintuitive to guarding youth confidentiality since it may implicate youth in sexual activities. In Ontario, there is no age of consent for this type of study as it is dependent on capacity [49]. Although standard practice is to obtain assent from youth and consent from the parent(s) or guardian(s) of anyone under the age of 18 prior for engaging in health research, this practice fails to recognize the capacity of youth to provide informed consent [39]. Youth poses capacity and build confidence and life skills as they partake in autonomous decision making, a requirement of healthy adolescent growth and development.

Creating a Community Advisory Committee

As the goal of this grant is to develop a large research proposal, we will create a community advisory committee (CAC) consisting of youth across Durham Region. The CAC will be lead by the research coordinator and there will be a note take present to record verbal and non-verbal cues. The CAC will be guided by terms of reference. It is expected that the CAC will meet at least 3-4 times during the grant development process. The CAC's input is essential, however final decision making is with the Coalition.

E. Impact, Synthesis and Evaluation:

The ultimate aim of the project is to develop a research protocol which will elucidate the sexual health needs of youth and identify ways in which youth leaders and youth agencies can unite to create such programs and services. As such by the end of the project, we expect to present a full research protocol to the OHTN or CIHR for funding. The research process embodies the principles of CBR whereby the needs are community indentified and driven. The academic researchers have also been invited to be a part of the community engagement process as collaborators rather than consultants. Both academic and community researchers will gain better understanding of research and researching community and principles of ethics tied to researching human subjects. In addition, many of the group participants (youth) may themselves be trained and become research assistants in future funded activities tied to this research. The whole process of engagement will become one of empowerment, where youth will direct us in how and why their issues should be studied rather than one of banking whereby community agencies create programs and services for youth aimed at behavioural modification, with little or no input from youth. As being derived from a need identified by agencies working with youth and having the active involvement of Coalition members in the research, update of the project will be done at Coalition monthly meetings and at the respective agencies. Therefore, information will be taken "upstream" to policy makers working on behalf of youth. As part of this seed grant and the larger study, a final report will be produced for agencies with a youth mandate and the information

will also be presented at schools, conferences (including the OHTN) and health authorities.. We will engage in process evaluation, through our CAC and general Coalition members' discussion concerning the study. At each meeting, difficult and unresolved issues arising during the study will be shared and solutions sought to address these areas of differences. We will also highlight "what works" with respect to the research process, as part of our CAC and Coalition members' group meetings..

Data Analysis and Dissemination

The focus groups interviews will be analyzed using standard constant comparative methods for qualitative data. Data collection and analysis will occur simultaneously. All interviews will be audio taped and transcribed verbatim. These transcribed texts will be coded in QSR N9 into a number of emerging themes. Where new themes are identified in later transcripts, all previously coded transcripts will be searched to determine whether the new theme should be assigned to them, or a new category assigned to existing themes, or whether the new theme is redundant. The data analyst will also engage the research team in a process of triangulation to ensure that themes are understood and appropriately describe the data.

Results will be published as a Coalition community report and fact sheet, both of which will be widely distributed to Coalition members and stakeholders, researchers, community members, and government policy makers. The report and fact sheet will also be available on the ACDR website. The results of the study will also be presented at major Canadian HIV/AIDS conferences (the Ontario HIV Treatment Network conference, the Canadian Association for HIV/AIDS Research conference). Additionally, with assistance from our Coalition members, we will also organize a community forum for service providers and other interested organizations to focus specifically on implications of the study findings for program development.

The Research Team

The research team includes a vibrant group of individuals many of whom have collaborated in the past on community-based research projects. During the grant development process, we hope to identify additional community research partners. The following are investigators on this capacity building grant:

Clemon George, PhD: Clemon has been a founding member of the African and Caribbean Council on HIV/AIDS in Ontario (ACCHO) and continues to contribute to the work of that community-based organization on an ad hoc basis. He was a co-PI with Dr. Winston Husbands, on a CIHR funded study with the goal of demystify Black MSM in Toronto through understanding their behaviour, needs and concerns, and co-PI with Dr. Saara Greene on a capacity building grant on the housing and health needs of Black PHAs in Ontario, Nova Scotia and Alberta.

Lindsay Chartier, B.A (Hons.)

Lindsay is a recent graduate from the University of Ontario Institute of Technology (UOIT) from the Faculty of Criminology and Justice Studies. She has worked as a teaching assistant and research assistant for various academics within the criminology department at UOIT, where she has gained extensive knowledge in the field of social justice. Lindsay is the Youth Outreach Worker for the AIDS Committee of Durham Region and through her position she has created and facilitated a Youth Advisory Committee, Peer Educators Training and a HIV/AIDS awareness campaign targeting youth in the Durham Region.

Robert Weaver, PhD: Bob has participated on a wide range of community-based projects in Hartford, Connecticut and Northeast Ohio These projects include: socio-demographic surveys, elder housing needs assessments, neighbourhood-based computer needs surveys, unintended pregnancy risk assessment projects, health planning and promotion projects for the year 2000 and 2010. Dr. Weaver has published and presented numerous papers and reports related to this work. This varied experience with collaborative, community-based research, with survey research, and quantitative analysis will greatly enhance the capacity and quality of our "Durham Region SexYouthality" project.

Wendy Stanyon, **RN, BN, MAEd., EdD**

A member of Durham College's nursing faculty for more than 20 years and currently a faculty member in the UOIT/Durham College Collaborative BScN program, Dr. Stanyon is recognized for her practicum expertise and strong links with clinical practice partners. She has extensive experience in curriculum development with a particular interest in integrating interactive learning activities & technologies into the classroom to facilitate students' understanding of mental health nursing and therapeutic communication skills. A strong advocate of collaboration, Wendy has developed numerous partnerships with health & social services groups through her participation on community-based committees. Her primary interests are education and community-based research with a focus on the determinants of health, vulnerable populations, and mental health.

Cathy Kurelek, B.Sc., M.A.

While completing her Master's degree at Carleton University, Cathy's thesis, conference papers, and publications focused on participatory action research. Cathy has carried out community action research in Toronto and Ottawa with newcomer communities and with the Innu of Sheshatshiu, Labrador. Cathy is currently a health promoter at Oshawa Community Health Centre where she trains and supervises staff and nursing students delivering health promotion initiatives. These initiatives include community development programs and sexual health workshops in the multi-needs community of south Oshawa. Cathy has also carried out youth needs assessments in south Oshawa. She is a member several committees representing the needs of youth in Durham.

Chris Mallias is the Program Coordinator for the AIDS Committee of Durham Region's Prevention Department. He brings with him a range of experience including a background as an educator. He has been involved in the HIV/AIDS movement in various capacities since 1992 and has direct experience with the AIDS Committee of Durham Region by participating on committees such as planning *A Taste for Life* and the AIDS Walk for life as well as sitting on the Board of Directors from 2008 to 2009.

Dorothea Service, RN, BScN, B.A., MN. Dorothea is a Public Health Nurse employed within Sexual Health, Infectious Diseases Control & Prevention program at Durham Region Health Department. Dorothea has previous experience in pain needs assessment clinical trials as an RN Clinical Research Assistant. As part of the Health Departments initiatives Dorothea sits on the Healthy SexYouthality Coalition. In the clinical services setting, Public Health nurses provide individual counseling services. Services provided include health education and health communication related to sexually transmitted infection transmission and prevention, birth control, decision making, life skills, risk reduction and building healthy relationships. Public health nurses also provide training and support to enhance capacity building related to group facilitative methods for community based initiatives.

Amy Nagel, B.A., is a Health Promoter at The Youth Centre, a Community Health Centre (CHC) working with youth aged 13-19 in Ajax & Pickering. Amy designs and implements programs to engage youth in issues affecting their health, such as active living, healthy eating, sexual & reproductive health, mental health, and others. She is the chair of the Durham Pride Prom planning committee, and has been instrumental in other innovative initiatives addressing sexual and gender diversity in Durham Region. Amy is actively involved in community development, and various region-wide capacity-building and advocacy initiatives. She has had experience working with youth, the LGBT community, intravenous drug users, HIV positive individuals, new Canadians, and young people with special needs.

Alyssa Higginson, BHSc., is a recent graduate from the University of Ontario Institute of Technology (UOIT) from the Faculty of Health Sciences. She is continuing her education at UOIT in the Master's in Health Sciences program, with a specialization in Community Health. She is outcome oriented and highly motivated and will add to the youth "cultural competence" that is needed for the project and will also perform the role of research coordinator for the research study.

Work plan

The work components are presented below by quarter (i.e., 3 month intervals). Individual activities scheduled for a quarter will take place in that quarter but do not necessarily take up the entire quarter.

	Q1	Q2	Q3	Q4
Hiring Community Research Coordinator				
Identify network members and form networks				
Create CAC; develop questions; Ethics; Create terms of reference;				
Network meetings to identify pertinent issues Investigators and CAC agree on study dimension				
Investigator CAC face to face meeting to discuss proposal and next steps				
Submit fully developed research proposal; submit reports; dissemination				

Budget with justification:

ITEM	Year 1 ($)	Budget Notes
Personnel		
Community Coordinator/ Research Assistant	8,400.00	One individual - 20 hours/wk x 21 wks. = 420hrsx$20/hr.
4 Facilitators	540.00	4 individuals x 3 meetings x 3hrs. X $15hr.
Training day		
Honoraria	630.00	4 + 1 (trainer) facilitators x 7hrs x $18/hr
Food	300.00	4+1 (trainer) facilitators + RA @ $50
Community Advisory Committee		
Food (Agency & Youth Committees)	420.00	4 meetings x 7 people x $15
Honoraria (Committees)*	600.00	4 meetings x 7 (3 youth) x $50
	60.00	local travel for youth CAC meetings $5 per person x 4 meetings * 3 youth
Research Collaboration		
Focus group meetings	1200.00	4 groups x 3 meetings x 10 people x $10 per person (participants +facilitation team)
Travel	420.00	local travel for focus groups $5 per person x 3 meetings * 7 youth*4 groups
Additional travel cost for peer rural travel	384.00	4 meetings x 2 team x 120km x $.40
	192.00	4 meetings x 2 team x 60km x $.40
Honoraria (focus groups)	840.00	4 groups x 3 meetings x 7 x $10 per person (does not include facilitator/team member)

Transcribers	2520	108-126 hours work * $20/hr
Data analysis/report writing	3680	One individual - 20 hours/wk x 8 wks x$20/hr.
Dissemination (Community Launch)	1,500.00	Material and supplies
Subtotal	23,036.00	
Administration Fee	1964.00	AIDS Committee of Durham Region (~8.5%)
Total Grant/Expenditures	25,000.00	

Note *

Honoraria provided only to Youth CAC members and not agency CAC members

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Appendix B: Consent Form

CONSENT TO PARTICIPATE IN RESEARCH

Dear Participant

Researchers from the University of Ontario Institute of Technology (UOIT) and the AIDS Committee of Durham Region (ACDR) as members of the Durham Region Healthy Sexuality Coalition are asking you to participate in this research study. Your participation in this study is voluntary.

Purpose of the Research

The purpose of the study is to help identify youth sexual needs and priorities for healthy sexual development in Durham Region. The information you provide will be used to develop a larger representative research project about Durham youth in relation to healthy sexuality. The information will also be used to develop better health services for young people in Durham region and to develop policies, programs and services to prevent new HIV and other sexually transmissible infections from occurring.

Procedures

Your participation in the project is strictly voluntary. By volunteering to participate in this study, you will be asked to participate in a series of group discussions (three times) that will be lead by a peer facilitator. The topics will centre around youth sexual needs but may include other topics that the group feels are relevant. It is estimated that the discussions will be about two hours. The discussions will be audio-taped. Only your gender will be recorded on the tapes/ notes. The audio files will be deleted on completion of transcription and data analysis.

Confidentiality

All information that you provide will be treated with strictest confidence. All information related to this study will be kept in a secure place where only members of the research team will have access to it. It will be used only for research purposes. You will not be identified by name in any documents related to this research. You should **not** provide any identifying information, such as your name or telephone

number during the discussions. If you inadvertently do, that information will be deleted from all transcripts.

Potential Risks and Discomforts

Some participants may feel uncomfortable with discussing information about sexual health, sex and sexuality. The research team has made information available to you related to safer sex counselling, HIV/STI testing and referral options where you can further discuss any personal issues or concerns that may arise during the interview.

Potential Benefits of the Research

The information will be used to develop better health services for young people living in Durham Region, and to develop policies, programs and services to prevent new HIV/STI infections from occurring.

Participation and Withdrawal from the Research

You can choose whether or not to participate in the research. If you volunteer to participate, you may withdraw at any time without consequences of any kind. You may also refuse to answer or discuss specific questions/issues.

Rights of Research Participants

You may withdraw your consent at any time and stop participating in the research without penalty. This study has been reviewed and received ethics clearance from the Research Ethics Board at the University of Ontario Institute of Technology. If there are any ethical concerns regarding this study, please contact the Compliance Officer at 905 721 8668 – 3693.

Ms. Lindsay Chartier (ACDR) and Dr. Clemon George (UOIT) are co-principal investigators on this research project. Dr. Clemon George is the nominated principal applicant. If you have any questions or concerns about the study, please contact Clemon George at 905 721 8668 - 3659.

Thank you for your participation

I understand the information provided about the *Healthy SexYouthality Study*. My questions have been answered to my satisfaction and I agree to participate in this study. I have been offered a copy of this form.

_____________________________________ _____________________

Participant's initial

In my judgement, the participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

____________________________________ ___________________

Signature of interviewer

☐ Participant accepted and received a copy of the signed consent form.

Appendix C: Focus Group Guides

Focus Group Session 1

Good Evening everyone! I would like to thank everyone for joining us and taking part in our discussion. This evening we will be talking about sexual health. Your input tonight is very valuable and will help identify sexual needs and priorities for healthy sexual development in Durham Region. Your contributions will help community organizations in Durham Region better meet the sexual health needs of our youth.

My name is ___________and I will be your facilitator this evening. My role is to encourage and guide our discussion by listening and asking questions. I will be asking lots of questions because I would like as much feedback from you as possible. Your participation and opinions are important! There are no right or wrong answers.

This session will last about 2 hours. There is dinner provided and a bus ticket for everyone. Bathrooms are located ________. There will be a 10 minute break at the 1 hour mark. Also, if at any time you feel uncomfortable or wish to leave, exits are located _____________.

Because we are here to talk about sex if at any time you would like to talk to someone about a personal situation please feel free to approach me.

Previous to tonight's meeting you have met with the Alyssa Higginson, the research coordinator who has reviewed the consent form with you. I would like to take a minute to review the content on the consent form and to answer any further questions you may have. (Read consent) Does anyone have any questions? (answer questions) Our discussion will be tape recorded and all of your comments will be kept confidential. All information including your name will be removed from all written documents. Only research personnel will have access to our discussion. All documents will be kept in a secure location.

I have handed out the confidentiality form and would like to review it with you. (Read form) Does anyone have any questions? (answer questions) if none Can you please sign the form and pass them to me?

On our agenda tonight we have 2 objectives; first to get to know one another through an icebreaker, and second to discuss sexual health I encourage everyone to participate and for everyone to voice their opinion freely. Does anyone have any questions before we start?

Let's start off by getting to know one another (icebreaker)

Now that we've gotten to know one another a little let's get down to business and talk about sexual health.

Timing for Session 1

Introductions (Icebreaker)/Review of Consent: 25 minutes

Question 1: 5 minutes

Question 2: 15 minutes

Question 3: 15 minutes

10 minute break

Question 4: 15 minutes

Question 5: 15 minutes

Question 6: 10 minutes

Wrap up and thank you: 10 minutes

1. How do you feel about your health? **(5 minutes)**

2. What are the most important sexual health issues facing you and your friends? **(15 minutes)**

   Probe:

   a. Why do you think these issues happen?

3. Do you and your friends feel that your sexual health is important? **(15 minutes)**

   Probe:

   a. (Your sexual health)

   b. How do they make you believe your health is important (or not important)?

10 minute break

4. How important is your sexual health to your parent(s) and/or guardian? **(15 minutes)**

   a. (Your sexual health)

   b. How do they make you believe your health is important (or not important)?

5. Do you and your friends ever talk to adults about sexual relationships? **(15 minutes)**

   Probe:

   a. What things do they say?

   b. Why or why not do you choose to talk to adults about sexual relationships?

   c. How does this conversation come about (who initiates it?)

   d. How comfortable are you talking to your parents about sex?

6. Where have you gained most of your knowledge on sex? **(10 minutes)**

   Probe: (school, radio, internet, tv, etc)

   a. Who are you most likely to talk to about sex?

      Probe as above

Wrap up and Thank you (10 minutes)

Focus Group Session 2

Good evening everyone! I would like to welcome you back for our second focus group session. Thank you for joining us again to take part in our discussion on sexual health. Your contributions will help community organizations in Durham Region better meet the sexual health needs of our youth. Your input tonight is very valuable and will help identify sexual needs and priorities for healthy sexual development in Durham Region.

Just a reminder, my name is _______ and I will be your facilitator tonight. This session will last about 2 hours. There is dinner provided and a bus ticket for everyone. Bathrooms are located ______. There will be a 10 minute break at the 1 hour mark. Also, if at any time you feel uncomfortable or wish to leave, exits are located _____________.

Because we are here to talk about sex if at any time you would like to talk to someone about a personal situation please feel free to approach me.

At the first focus group session we went through the consent form that you signed with our research coordinator Alyssa Higginson. I would like to take a minute to review the content on the consent form again and to answer any further questions you may have. (Read consent) Does anyone have any questions? (answer questions) Just a reminder, our discussion will be tape recorded and all of your comments will be kept confidential. All information including your name will be removed from all written documents. Only research personnel will have access to our discussion. All documents will be kept in a secure location.

On our agenda tonight we have 2 objectives; first to continue our discussion on sexual health from the last session and second to bring up any areas of new interest that you wish to discuss. I will be asking many questions tonight because I would like everyone to participate and for everyone to voice their opinion freely. Does anyone have any questions before we start?

Let's start off by reminding everyone where we left off last session (give a brief summary of session 1).

Now that we've caught up lets continue our discussion on sexual health.

Read focus group guide from where you left off last time.

Timing for Session 2

Review of Consent: 5 minutes

Update from Previous Session: 10 minutes

Question 7: 10 minutes

Question 8: 10 minutes

Question 9: 10 minutes

10 minutes break

Question 10: 15 minutes

Question 11: 15 minutes

Question 12: 15 minutes

Question 13: 15 minutes

Wrap up and thank you: 10 minutes

5 minutes to play with

Focus Group 2 - Last time we met you said that you gained most of your knowledge _____, ______, _____. **(10 minutes)**

7. Do these sources talk about HIV or AIDS and other STI's? (If it is a person, give a name for them … Priest, friend, etc) **(10 minutes)**

   Probe:

   a. What do they say?

8. (If parents not identified as one of the people- direct at those that have not mentioned parents) Do your parents ever talk to you about sex HIV/AIDS and STIs? **(10 minutes)**

   Probe:

   a. Why do you talk to your parents?

   b. Why don't you talk to your parents?

9. How does the question/conversation about HIV/AIDS come up? **(10 minutes)**

10 minute break

10. How important is your school (teachers/nurse) in delivering information on HIV/AIDS and Sex? **(15 minutes)**

    Probe:

    a. How often is sexual health talked about? Is it interesting?

11. From your perspective what programs are available to you for sexual health information? *(sexual health education in communities, schools, and education of health policies regarding HIV testing, etc.)* **(15 minutes)**

    a. What types of programs do you think would be helpful for addressing these issues that we have been talking about?

12. What would make you comfortable to access these programs and services? **(15 minutes)**
13. Where do you go for sexual health services (specific)? **(15 minutes)**

    Probe:

    a. Why do you go there?

    b. Why don't you use these services?

    c. Where would you like to go?** (PLEASE ASK)

Wrap up and Thank you (10 minutes)

Focus Group Session 3

Good Evening everyone! I would like to welcome you back for our third and final focus group session. Thank you for joining us again to take part in our discussion on sexual health. Your contributions will help community organizations in Durham Region better meet the sexual health needs of our youth. Your input tonight is very valuable and will help identify sexual needs and priorities for healthy sexual development in Durham Region.

Just a reminder, my name is _______ and I will be your facilitator tonight. This session will last about 2 hours. There is dinner provided and a bus ticket for everyone. Bathrooms are located ________. There will be a 10 minute break at the 1 hour mark. Also, if at any time you feel uncomfortable or wish to leave, exits are located __________.

Because we are here to talk about sex if at any time you would like to talk to someone about a personal situation please feel free to approach me.

In both of the previous focus group sessions we went through the consent form that you signed with our research coordinator Jennifer Alyssa Higginson. I would like to take a minute to review the content on the consent form again and to answer any further questions you may have. (Read consent) Does anyone have any questions? (answer questions) Just a reminder, our discussion will be tape recorded and all of your comments will be kept confidential. All information including your name will be removed from all written documents. Only research personnel will have access to our discussion. All documents will be kept in a secure location.

On our agenda tonight we have 2 objectives; first to give feedback to you on the previous two sessions, creating room for any further discussion you wish to engage in and second to go through a debriefing session with you. I will be asking many questions tonight because I would like everyone to participate and for everyone to voice their opinion freely. Does anyone have any questions before we start?

Let's start off by talking about the previous two sessions (give youth feedback on information gathered from the first two sessions).

Begin the debriefing session.

Timing for Session 3

Review of Consent: 5 minutes

Update from Previous Session: 10 minutes

Question 14: 10 minutes

Question 15: 10 minutes

Question 16: 5 minutes

Question 17: 10 minutes

Question 18: 5 minutes

10 minute break

Debriefing Session: 50 minutes

5 minutes to play with

Focus Group 3- Last time we talked about _____, _____,______ **(10 minutes)**

14. How do you like to receive information on these topics **(10 minutes)**

    Probe:

    a. Let's explore the different ways you can receive this information (Eg. Facebook, magazines, radio, school, one on one counseling)?

15. Do you think that youth use many street drugs in Durham? **(10 minutes)**

    Probe:

    a. What kind (Eg. Weed/marijuana)?

    b. How do you think it affects their sexual health?

16. What is the best way to reach youth and get them interested in sexual health issues? **(5 minutes)**

17. If we want a diverse group of people to participate in a future study, where do you think we could recruit them? **(10 minutes)**

18. Are there any other comments you would like to make about sexual health? **(5 minutes)**

10 minute break

Debriefing session (50 minutes)

Thank you very much for your time and input!

Appendix D: Brock Community Health Centre Report

Sexual Health Clinic Evidence Report

Alyssa Higginson

Background:

There are increasing rates of STIs in Durham Region with 1250 cases of Chlamydia reported in 2009 (Durham Region Health Department, 2009). Pregnancy rates remain high with approximately 570 youth girls becoming pregnant each year (Durham Region Health Department, 2010). HIV rates in Durham Region is reported at 2.3/100,000 youth aged 15 to 24 that are infected annually (Durham Region Health Department, 2011, unpublished data).

Factors such as a lack of sexual health resources and community programs that are both easily accessible and youth friendly, isolation due to lack of transportation for information and services related to sexual health may increase rural youth risks for HIV risk behaviours. Youth who face isolation may resort to negative coping mechanisms such as excessive alcohol and drug use and unprotected sex. Without adequate support such as those found in a sexual health clinic, the lives of youth that live in rural regions are unnecessarily endangered.

Methods:

In early/mid 2011, we engaged youth living in northern areas of Durham Region, including Brock area, in focus groups to talk about their sexual health needs. Data was collected as a part of the *Durham Region Healthy SexYouthality Project*. A coalition of youth friendly organizations in Durham region including The Brock Community Health Centre, Durham Public Health, AIDS Committee of Durham and the University of Ontario Institute of Technology. There were 32 youth that participated in the focus groups, with 6 being from northern areas of Durham Region.

Findings:

According to the data collected from youth living in the northern areas of Durham Region, youth discussed the following issues that impact on their sexual health well-being:

- *need better access to health professionals specialized in sexual health matters*

When we asked youth about who they talk to about sexual health, youth often thought of teachers, as they are available to youth on a daily basis. Despite this however youth voiced concerns about talking to their teachers as they did not trust that their information would be kept private. One youth expressed this as, *"…I know some people*

talk to like their gym teacher about birth control but then they don't really believe their teachers as much as they would a doctor." This demonstrates the need for youth to have better access to health professionals to discuss sexual health matters as they do not feel confident speaking to other adults in their lives, such as teachers as they may not be knowledgeable. Currently, youth do not feel they can go to health professionals because they may not accessible.

- *lack education related to sexual health and early sexual debut*

It was clear that youth were lacking access to appropriate information about sexual health education. One youth expressed this belief as "most people in Brock have lost their virginity by grade 9." This highlights the importance of timely sexual health education and the fact that youth need to have the information they need to protect their sexual well-being due to early sexual debut. For many adolescents, the first sexual intercourse happens at 16-18 years of age (Maticka-Tyndale, 2008) and therefore youth living in north Durham may have an earlier age of first sexual intercourse as youth are approximately 14 or 15 in grade nine.

A female youth expressed some insight into the need for more education around birth control, abstinence and other ways of averting pregnancy when she said , "I think you'd see a lot [less] people ... teenagers getting pregnant if they knew where to go for programs [as they would]have somebody to talk to."

We also found that many youth were not educated on matters related to STIs. For example, one youth did not know of Chlamydia. When the peer facilitator explained that it was a sexually transmitted infection, the participant said, "I've never heard of it." This is of great concern as Chlamydia is the most prevalent sexually transmitted infections diagnosed in Durham Region. Chlamydia is the most common sexually transmitted infection in Durham region adolescents and has significantly higher rates than Ontario (Durham Region Health Department, 2011). Youth need to be educated STI's how they are transmitted, how to protect themselves and where to get tested for STI's.

- *require more resources associated with safer sex practices*

Youth wanted to have free access to safer sex materials such as condoms, birth control and other contraceptives. One youth said "I think there should be condoms allowed in our school, because there are probably a lot of people at our school that would use them," while another said that youth are "probably afraid to go and get them themselves." This emphasizes the need to provide sexual health resources that youth are comfortable accessing.

While condoms and birth control services are freely available through the Durham Public Health system, some youth did not know of this resource. They often thought of condoms as an expensive option. One youth said, “you know there’s a lot of people out there who cannot afford condoms. Like it’s expensive, birth control is 84 dollars for 3 packages, I’m like are you kidding me. Like with my doctor if you can’t afford it he’ll just give it to you for free.” This displays the need for youth to have access to free condoms and birth control at a discounted rate.

When asked why youth thought condoms weren’t available at their school one youth said, “umm I think because they [the teachers] don't want to promote sex in our school. That’s a big thing that we learned about in parenting [class] and that’s what was a problem. They didn’t want to promote it. But it’s better to promote condoms so that you have that safety. So people aren’t like pregnant. Like I’d rather see 150 people use condoms than 30 girls [becoming] pregnant. Which is like an average thing in a year 30 girls at our school would be pregnant.”

Youth also said that they often do not get the information or support related to sex at school. One youth said, “I think teachers and principals [are] scared to promote [sexual health] because promoting condoms and stuff comes with questions. So like “why do we need these” and I guess they’re scared to teach [about] them but when they are supposed to be there for us and telling us this stuff there are so many [unanswered] issues.” Another youth thought it was, “kinda like out of sight out of mind for them. Like, if they’re not giving away condoms, sex isn’t happening...people out here are still like, “oh no people don’t do that”.

- *want more programs related to sexual health in their community*

In relation to health programs and services, youth said that the community health centre should offer more programs where they can go to with their friends and/or partners and talk to a health professional. “I think there should be ...a little section [at the centre]... if you want to go with your partner or something, like a couple friends, you can go in and talk to them about [sexual health], get information you don’t know, cause you don’t want everyone to judge you and you don’t always want to go to your parents because you don’t know how they’ll react. So I think there should be something like that where you just go with your partner if it’s with between you two, you learn that information and they can help you, give you the resources and go from there.” This need was also related to the lack of confidentiality and trust in other places youth spend time, such as at school.

Awareness of sexual health programs was also important to youth. One participant emphasized the need for schools to tell youth about sexual health services and resources

such as a clinic (if it exists?). She said, "sexual health is very important to teenagers,... I think teenagers should learn about it more in school because it's really important for teenagers to know there is somewhere else to go to talk about it. Like they should say the sexual health clinics and stuff. Like adults will probably know it more than students but what if you don't feel comfortable going to your like parents or somewhere. I think there should be more advertisements too.

- *want access to confidential services*

Youth said they would be comfortable accessing sexual health programs from "Trustworthy people." Confidentiality was of great concern to youth as they were worried that their information could be shared with other people without their permission. This was also highlighted when one youth said "I'm afraid to talk to my teacher..., I don't know my teacher's a guy so I can't really be [give my information] but like I'm just afraid to talk to teachers because what happens if they call your guardian or whatever."

- *need a sexual health clinic for services and information*

Participants agreed that there should be a sexual health clinic in their region. When youth were asked about having a sexual health clinic in their community, one participant said, "I think it would be good to have a sex clinic in this region. Like they said, Cannington, Beaverton."

The same participant also said, "I think it'd be good. I think if it's in Cannington or like this area [name of area??] more people would engage to it. Like and they'd be like "Oh wow this is actually going to help me, I have someone to talk to that's not going to go tell me information to everyone". with the school, I don't trust anyone., I've talked to people in the school and they just go tell all their teachers and then you get judged from other teachers."

When asked where they thought they would most likely access a sexual health clinic, there were a number of recommendations made by the participants. Many of them related to accessibility; as youth wanted to be able to easily get there, and anonymity; with many concerned about being seen accessing sexual health services. Youth were also concerned with the services offered at a sexual clinic, and that there were confidential, as many youth didn't feel that they could share their sexual health information with the adults in their lives, and therefore wanted to go somewhere that was private.

One youth said "Yeah there should be places [to go]" with another adding, "Even like malls, there are big malls, there could be like a place in like, the mall, in a mall, a lot of people go there so like I think they'd get a lot of [youth]." Another youth said a sexual

health clinic could be provided "even in in Keswick at the new Walmart there should be a sex clinic like right behind the washroom...[they could use strategies such as] ok I'm just going to freshen up for an hour or two, I'll be back in a minute."

The participants also thought that a walk-in clinic that also specialized in sexual health matters would be helpful. "We could also have [clinic in] a town center or something, you know [...] walk in clinics, there should be more walk in sex clinics."

Lastly, another youth said, "I think it'd be good. I think if it's in Cannington or like this area somewhere more people would engage to it. Like and they'd be like "Oh wow this is actually going to help me, I have someone to talk to that's not going to go tell me information to everyone."

Conclusion:

Brock township youth expressed a need for more sexual health resources and services that can be easily accessed. It can be recommended that youth living in Brock Township need to have accessible sexual health resources available in their communities in order to promote healthy living. This parallels the directive of the Public Health Agency of Canada which states that effective sexual education is important for youths' overall wellbeing (Public Health Agency of Canada,2008).

It appears that youth do not receive adequate sexual health in the schools. One Canadian study showed that many students receive less than 20hrs sexuality education in all of their elementary school and high school years (Eisenberg, Bernat, Bearinger & Resnick, 2008). Also, quality of education is a concern as stated by many participants that didn't know about Chlamydia and that they did not feel that they could talk to teachers about sexual health issues due to a lack of confidentiality.

Youth in northern Durham expressed issues with accessing contraception, such as condoms and often did not know where to go for information. This is congruent with findings of a survey on 1171 Canadian youth between the ages of 14 and 17, youth experience large barriers when trying to access sexual health information pertaining to sexually transmitted infections, with 62% of youth reported obstacles in finding information and 69% unable to find the information they were looking for (Frappier et al, 2008).

The evidence presented in this report from the data collected in the *Durham Region Healthy SexYouthality Project* shows the need for a Sexual Health Clinic in Brock Township and highlights the urgent need for health resources for youth living in northern areas of Durham Region.

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Appendix E: Community Launch Report

■ *"It definitely needs to be talked about, there needs to be more places where kids can go get the information" – female participant*

The Research

About the Study

The Durham Region Healthy SexYouthality Project was a community-based research study conducted by the Durham Region Healthy SexYouthality Coalition. The Coalition is made up of health professionals who work with youth in Durham Region.

This study was undertaken as a capacity building venture to engage youth in Durham Region to explore their sexual health needs and priorities including pregnancies, STIs and HIV infection. This information will support programs aimed at youth sexual health development and HIV prevention.

What did we do?

We spoke to 32 youth! These young men and women were between the ages of 15 and 24 years that were identified by the research team and coalition. Some were also recruited from the community. Our conversations were in the form of group discussions (focus groups) and were divided into four groups – a group for:

- Youth in Pickering, Ajax, Whitby and Oshawa (Urban group)
- Youth living in the Clarington area (Semi-rural group)
- Youth living in Brock and Scugog (Rural group)
- Youth that self identified gay, lesbian, and other sexual minorities living throughout Durham Region, however many were from the urban areas (LGBTQ group).

We planned 3 meetings per group at a youth-friendly location that was easy to get to by bus if needed. Discussions lasted for about two hours per meeting and the first meeting started with an icebreaker activity. Snacks made it easy to have fun while talking about sensitive issues.

Our goal is to encourage young people aged 15-24 to engage in making healthy decisions related to their sexuality.

-Durham Region Healthy SexYouthality Coalition

What did we find?

There were many issues common to all groups (themes) that came up with regards to their sexual health needs. We illustrate this through the following examples.

1. Sexual health education disparities exist in Durham Region.

Many of the youth said that their school based sexual health education was inadequate. However from the discussions, it appeared that some youth get better sexual health education at school than others. It appears that the quality and quantity of sexual health education is dependent on the school board and the teacher's comfort with discussing sex.

"We need to show the school board the difference, the gaping hole, or if we could get some outside person to teach sexual health education. Even if teachers take a course or something and everyone's comfortable with it, I think the teacher leaves you more informed."

2. There are barriers related to sexual health education.

It is not easy for youth to get sexual health information that they need. It is also more difficult for them to access resources, such as condoms and birth control, as they fear that they will be judged or recognized.

"It definitely needs to be talked about. There needs to be more [in] place where kids can go get the information."

"I guess the thing is lots of people don't have protection like birth control now, condoms yeah, but birth control costs money and if you don't have benefit[s] then it's not necessarily something that you can afford.

3. There is a need for more community programs for youth.

Sex and sexual health are important for youth but youths' lives go beyond sex. Youth believed that there were not enough or adequate programs where they can hang out and talk. This was especially important for the LGBTQ group and those who live in more remote communities in the North.

One rural youth said,

"I think you'd see a [lot of] teenagers if they know where to go for programs because they'd have someone to talk to."

LGBTQ youth also highlighted that there were a lack of programs, with a male participant stating,

"I was trying to look for groups for a long time and there was nothing."

Appendix F: OHTN Final Report

Final Report – CBR Capacity Building Fund

Award Information			
Recipient Name:	Lindsay Chartier	Award #:	
Award Title:	Durham Region Healthy SexYOUTHality Coalition Project		
Term of Award (year(s)):	2009 - 2012		
Signature of Recipient:			
Date Report Received (to be completed by OHTN):			

Final Report (maximum 5 pages)

Plain Language Summary *(maximum 500 words – Describe, in lay language: the problem your research sought to address, an overview of project activities, paying special attention to CBR-specific activities, significant findings or outcomes, capacity building activities and outcomes, knowledge transfer and exchange activities, and impact on policy, practice, etc.):*

According to Durham Region Public Health Department, 40% of youth, aged 15-19, living in Durham Region said that they had engaged in sexual intercourse in the last year, with 570 youth becoming pregnant, a proxy marker for high risk behaviours. This study was undertaken as a capacity building venture to engage youth in Durham Region to identify their sexual needs and priorities for HIV prevention and healthy sexual development. The study also had four objectives and they are: (1) to assess whether youth know about the sexual health services that are available to them; (2) to discover how youth perceive the sexual health services they are aware of; (3) to identify where youth currently receive sexual health services; and (4) to understand how youth would like to receive sexual health services and education.

The Project was a qualitative research study that employed focus group discussions involving youth in discussions pertaining to their sexual health. The study sample included 32 persons (18 females, 13 males, 1 transgender; age range 15 - 24 years) from10 focus groups as follows: urban, rural, semi-rural and LGBTQ youth. Themes emerging from the data include: youth's lack of knowledge of services; negative perceptions about health services; multiples sources of sexual health information and youth choice of sexual health sources.

The results from the project have assisted in guiding the programs and services offered at the AIDS Committee of Durham Region. A new youth friendly program for HIV positive youth "Young Poz & In Charge" has been launched following the completion of the focus groups. This program is offered to HIV positive youth in Durham Region and the Peterborough area. It is a program created for youth by youth, following the research results in that youth expressed that they want to be leaders in their own programming, services and education. It offers not only youth friendly social events but education through workshops and a Peer Mentor component in order to combat the social isolation expressed by HIV Positive youth.

Project Outcomes *(describe all significant outcomes and results of the project. Emphasize the implications of your work for building capacity within the community, especially as it relates to community-*

based research. Comment on the potential long term impacts of the project, including the need for additional research, submission of a subsequent grant proposal(s), capacity building, stakeholder development and/or KTE (knowledge transfer and exchange) work):

The results of the study found that there are many challenges faced by youth related to sexual health education in Durham Region: (1) sexual health education disparities exist at home and in schools; (2) youth face barriers to sexual health education, including poor access, fear of judgment and lack of anonymity; (3) community programs are needed for geographically and socially isolated youth; and (4) youth have preferences related to sexual health services.

The first theme identified in the data was that sexual health education disparities exist in Durham Region, both at home and in schools. Some youth receive sexual health information from their parents and/or other family members, while others receive no information at all. This seemed to be dependent on how comfortable and open parents were with discussing sex. Differences in sex education programs at schools also differed greatly, depending on the school board and the comfort level of the instructor. Youth that attended Catholic schools indicated that they especially did not feel that they had received the information they needed about sexual health. Youth also said that some teachers seemed uncomfortable teaching the content or skipped over certain topics. With school being the main source of HIV/AIDS education as identified by the participants, it is especially important to ensure that all youth receive the same education pertaining to sexual health.

Youth also said that they faced barriers when trying to access sexual health education. Poor access to both sexual health services and resources, such as contraceptives were identified. Youth often indicated that they were not aware of the services in the community. They also were not aware that these services often offer free condoms and birth control pills at a reduced cost. For those that were aware of the resources in their area, many felt that they would be judged for accessing them. This fear of judgment made some participants uncomfortable and unwilling to access them, turning to other sources, such as the internet because they found that they were anonymous. Lack of anonymity is a major concern for youth in Durham Region as many participants feared that someone they knew would see them accessing sexual health information or services.

The data from this study also signifies that additional community programs are needed for youth that are geographically and socially isolated. Many youth living in rural areas of Durham Region said that they did not have enough resources that they could access for sexual health concerns. They had limited education and information that would allow them to practice safer sex, such as where to get condoms. They also did not know who they could talk to about their sexual health concerns. Socially isolated youth (youth that identified as sexual minorities) also felt that more programs were needed for them to meet their needs and concerns related to sex.

Our research study findings show that youth have preferences related to sexual health services. These preferences include: trustworthy internet sources, as this is often where youth go first for information; improved sexual health education in schools; as youth spend a great deal of time in schools and many youth attend some form education; parents that are willing to talk to them about sexual health, as youth felt that having supportive parents is reassuring for them; health professionals that are youth-friendly, to ensure that they are not judgmental and will have the information they need; accessible sexual health clinics, that youth can locate and turn to

whenever they need it; and new community programs that will give them sexual health resources and support when they need it. These preferences were discussed by youth and were identified a number of times by different participants and in different focus group meetings.

The results of this study will contribute to the knowledge transfer and exchange of the Coalition members and their respective organizations. The organizations will have the opportunity to learn from the results and make appropriate changes, if needed. Changes may include: program delivery to better meet the needs identified by the participants in the research study related to sexual health resources and the types of programs provided. The results were also presented at conferences and events in the community that were attended by health professionals, politicians, community members and youth, which could lead to positive change in the community regarding sexual health.

Capacity building was also a major outcome of this research study. As previously discussed, Coalition members and youth that took part in the community advisory committee were included in the research process, thereby increasing their capacity and understanding of community-based and evidence-based research. The capacity of the community was also increased by supporting and improving their ability to provide youth in Durham Region with the resources they need for sexual health.

Major outcomes:

1. We successfully formed a community advisory group of youth and had their input

2. We completed our target focus group interviews with youth participants

3. We were able to stay within budget

4. Our coordinator Alyssa Higginson received a CIHR Master's award based on the project

5. Unintended results – those involved in the focus group for gay, lesbian and transgender youth identified a need for social support and continue to meet to provide that forum for each other.

6. A community collaborator on the project has formed formal links with the University of Ontario Institute of Technology as a Research Associate and will be avialable to supervise student's community based research activities.

Community Engagement *(describe how the community was engaged in the research process, from the development and implementation of the project, through to analysis, dissemination of results, and beyond):*

The community was essential to all aspects of the research process from the design through to the dissemination of research results. Community includes the members of the Healthy SexYOUTHality coalition and the community at large, inlcuding youth.

The Healthy SexYOUTHality coalition is composed of 13 community agencies with the goal to encourage young people aged 12-24 to engage in making healthy decisions related to their sexuality. In 2007, the coaltion approached the University of Ontario Institute of Technology (UOIT) to develop a research project that would address the goal of the coalition. UOIT and the coalition decided to develop a commuinity based research project that would engage youth

aged 15-24 to identify sexual health needs across Durham Region. The coalition and UOIT decided to have the AIDS Committee of Durham Region (ACDR) represent the coalition as a co-principle investigator for the research project. Coalition agencies were asked to provide support for the research project and developed a research subcommittee group that consisted of co-investigators for the project. The subcommittee group reported back to the coalition on research progress as well as engaged the coalition agencies as needed throughout different stages of the research project.

The research subcommittee included the research coordinator, ACDR, UOIT, the Youth Centre, Oshawa Community Heatlh Centre, and Durham Region Health Department. Members were responsible for reviewing the focus group guide for content accuracy, facilitating a youth advisory committee meeting to focus test recruitment posters and have youth review the content of the focus group script for clarity. Subcommittee members were also responsible for the development and revisions of the focus group guide, revisions to the research protocol, training and recruiting a research coordinator, and training youth facilitators for the focus groups. During the initial development of the research design, the coalition decided upon the study population to be inclusive of all geographical locations of Durham Region as well as a group specific to LGBTQ needs.

Once the research protocol was developed, the subcommittee asked coalition members to assist with the recruitment of participants. Coalition members recruited peer facilitators and participants by posting posters at their facility and by asking youth to participate in the research project. The majority of youth were recruited through coalition agencies who participated in the focus groups. The research posters were also posted on the coalition website https://truth4youth.ca.

Coalition members provided educational references and promotional materials that were handed out as Swag Bags after the initial focus group and provided accommodation for the focus groups at their respective agencies. A research subcommittee member was present for each focus group to provide support and referral to coalition agencies if required.

Once data was collected, the research subcommittee was responsible for reviewing and revising a research report to be distributed to the community at large. The coalition and subcommittee were engaged in the planning and delivery of a community launch geared towards health care providers and youth. Coalition members were asked to host information booths from their organizations and were also invited to the community launch as participants of the event. 3 coalition agencies were invited to a panel to discuss issues facing Durham youth.

Youth aged 15-24 were also engaged in all aspects of the Health SexYOUTHality Coalition research project. A youth community advisory committee consisting of 8 youth was asked to review the recruitment poster for the project as well as the content of the focus group guide. Feedback received was incorporated into the focus group script and the recruitment poster was revised to appeal to youth. Youth were also asked to recruit peers through word or mouth and by using Facebook. During the implementation of the research project, youth were hired as peer facilitators and trained on focus group facilitation skills and sexually transmitted infections including HIV/AIDS. Youth were engaged in the delivery of the focus group where they were responsible for facilitating 3 focus group sessions for each subgroup for the project. Youth were also recruited as participants for the focus group sessions. Youth attended a total of 3 focus groups identifying sexual health priorities and needs.

During the dissemination of results, youth were invited to a community launch geared directly towards those aged 15-24. During the planning, youth developed and delivered a game to educate others on identified sexual health needs from the research report.

Finally, we successfully engaged in building youth capacity. We hired and trained two youth for the role of coordinators. Our present coordinator, Alyssa Higginson will be soon be submitting her Master's thesis for oral presentation. Thorought the research, we continued to engage the Durham SexYouthality Coalition composed 13 agencies. Members are now aware of youth's sexual health needs from the view of youth.

Partnership Development *(Please complete the following table)*:

Please indicated the number of New & Existing Partnerships developed/strengthened as a result of this project:	New	Existing
Community	2	11
Academic		1
Policy		1

Project Dissemination and KTE Activities *(describe all KTE activities undertaken and identify target audiences of the project. Include a description of dissemination of knowledge/results at conferences and other settings such as community forums, as well as any publications and/or reports developed – attach any materials that you feel are relevant to this report)*:

Our dissemination included :

a. an oral presentation at the OHTN conference in November 2011

b. a workshop at the AIDS Committee of Durham Region HIV/AIDS Conference in March 2012 targetting youth workers

c. a youth focused research day targeting youth.

d. Conference presentations at the Guelph Sexuality Conference and at the University of Ontario Institute of Technology student day.

e. We had local press coverage of our research

f. We produced two 'popular' brochures outlining our outcome- one specific for the general yyouth community and another for our rural collaborators in the North of Durham (Brock).

Future Plans *(describe next steps for the team, project, partners, etc.)*:

The intended outcome of this project was to plan a larger more representative study of youth in Durham region. We have identified the elements of that larger study and will work towards implementing that plan. In the meantime, our stakeholders are using the results of the study to advocate on behalf of youth for the needs for better services.

Appendix G: Press Release

PRESS RELEASE

For Immediate Release:
"Let's Talk About Sex": A Community Launch for Durham Region Youth

OSHAWA, Ontario – Youth in Durham Region have the opportunity to take part in an interactive, fun event that will fill them in about what was found from research done with youth, about youth. The research team asked what young people think about their sexual health, where they look for info, and where they go for sexual health services.

They talk the talk—but do they really walk the walk? Be a part of the conversation!

This free event will take place from 6:00 – 8:00 p.m. on April 11, 2102 at Oshawa Community Health Centre, 115 Grassmere Ave., Oshawa. Dinner & Refreshments will be served, and there will be games, prizes, and lots of give-aways.

For more info, please call Amy N. at 905-428-1212, or at: amyn@theyouthcentre.ca

The Durham Region Healthy SexYOUTHality Coalition is made up of professionals who work with youth in Durham Region. Members include representatives from The Durham Region Health Department, The Youth Centre, AIDS Committee of Durham Region, Oshawa Community Health Centre, Murray McKinnon Foundation, Durham Children's Aid Society, Brock Community Health Centre, Community Living Durham North, John Howard Society, Kennedy House,

For more information about The Durham Region Healthy SexYOUTHality Coalition and program information visit the coalition's website at www.truth4youth.ca.

Media Contacts:
Amy Nagel
Health Promoter
The Youth Centre
905-428-1212
amyn@theyouthcentre.ca

Appendix H: Newspaper Article

Jillian Follert | Mar 21, 2012 - 4:30 AM | 2 | Report a Typo or Correction

New research shows disparities in sex ed for Durham youth

Healthy SexYouthality study findings unveiled at local AIDS conference

DURHAM -- Youths in Durham don't have equal access to safe sex information.

A recent study recruited 32 youths ages 15 to 24 from across the region and asked them frank questions about where they get sex information.

The most common answer? Google.

"There are youth that have lots of information and youth that have none," said Alyssa Higginson, a UOIT grad student and research coordinator for the Healthy SexYouthality project.

She said major education disparities exist both at school and at home.

For example, there are differences in the information being delivered in classrooms based on the school board and the comfort level of the instructor.

New research shows disparities in sex ed for Durham youth. OSHAWA -- Dr. Clemon George, Lindsay Chartier youth outreach co-ordinator with the AIDS Committe of Durham Region, and Alyssa Higginson, research co-ordinator for the Healthy Sexyouthality Research Project, were at a conference featuring speakers talking about at-risk communities including youth and women, held at the Best Western March 16. March 16, 2012 *Sabrina Byrnes / Metroland*

The Healthy SexYouthality Project is a community study conducted by a team of local agencies including the AIDS Committee of Durham Region, UOIT, Oshawa Community Health Centre, John Howard Society of Durham and Girls Inc.

The findings were unveiled March 16 at a regional HIV/AIDS conference hosted by the AIDS Committee.

Researchers said the information comes at a crucial time when teen pregnancy and sexually-transmitted infection rates are on the rise in Durham.

In Oshawa and Brock Township, teen pregnancy rates sit well above the provincial average of 3.7 per cent. Some parts of those communities have rates as high as 15 or 17 per cent.

Durham saw 572 teen pregnancies in 2008 and more than 1,500 chlamydia infections in 2010.

AIDS Committee staff said it's difficult to get concrete HIV statistics for local youth, however the Durham Region Health Department reported 10 new HIV cases in Durham in 2010.

Globally, about 50 per cent of new HIV infections occur in people under 25.

There are youth that have lots of information and youth that have none. -- Alyssa Higginson, researcher

Funding boost to help local youth program

On March 15 Oshawa MP Colin Carrie announced $168,000 in federal funding to help the AIDS Committee of Durham Region support the HYPE -- HIV and Youth Peer Engagement program.

"The HYPE project is an opportunity for youth to become involved in the planning and delivery of educational tools for their peers and improve access to HIV/AIDS information and services in the community," said Adrian Betts, executive director at the AIDS Committee.

The funding is part of $72 million invested through the Federal Initiative to Address HIV/AIDS in Canada.

To get a snapshot of the sexual health needs and priorities
of local youth, researchers divided the study participants into focus groups and recorded their discussions over several meetings.

The three major conclusions are that sex education disparities exist in Durham, youth face barriers to sex education and there is a need for more community programs for youth.

"There is a real need for programs for socially and geographically isolated youth, and for sexual minority youth," Ms. Higginson noted. "There also needs to be more marketing and promotion of the programs that already exist."

She said programs need to fit the needs of youth which include an accessible location, confidentiality and being LGBTQ friendly.

With the initial focus groups complete, researchers hope to learn more about sex education disparities and gaps by doing a larger study that involves distributing questionnaires through local school boards.

Durham residents who want to be tested for HIV have the option of a "point-of-care" rapid test, which takes about 60 seconds to determine if you are HIV reactive based on a finger-prick blood sample.

The entire testing process takes 20 minutes, which includes pre- and post-test counselling.

Anonymous rapid tests are available by appointment or drop-in at sexual health clinics in Oshawa, Pickering and Port Perry.

To learn more visit www.durham.ca or call 905-576-1445.

Reporter Jillian Follert can be found on Twitter @JillianFollert and on Facebook by searching Jillian Follert

Appendix I: Research Timeline

SEXYOUTHALITY RESEARCH PLAN

SEXYOUTHALITY PROJECT

ALYSSA HIGGINSON

The timeline included projected times for the 4 focus group meetings and when each will be completed.

The time line for transcription is an estimation and is dependent on how many people are transcribing and how long each focus group meeting is.

The data analysis will be done using NVivo 9 and is also an estimation.

After preliminary analysis is done in NVivo preliminary findings will be brought to the group for interpretation.

Report writing will take place once the data is analyzed and interpreted. Written reports can then be disseminated to the community.

PROJECT PHASE	START DATE	END DATE
Urban Focus Groups	03.1.11	03.29.11
LGTBQ Focus Groups	06.21.11	07.05.11
Rural Focus Groups	05.16.11	06.31.11
Semi-Urban Focus Groups	06.20.11	07.07.11
Transcription	03.02.11	07.31.11
Data Analysis	08.01.11	10.31.11
Research working group data analysis	11.01.11	12.30.11
OHTN Conference Presentation	11.14.11	11.15.11
Report Writing	01.02.12	02.15.12
Dissemination	02.27.12	06.30.11

2011