

Exploring the contraceptive experiences of adolescents living in rural Ontario

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Abstract

Women living in rural areas experience barriers in accessing contraceptives, including those related to geographic distance, cost, and the lack of health care providers. Further, conscientious objection to provision of sexual and reproductive health services has a more significant impact in these settings given limited alternatives. The overarching dynamics likely have an even greater impact on adolescents, as young people are less able to navigate complex systems or secure the necessary resources to overcome financial and travel barriers. This multi-method qualitative study investigated the contraceptive experiences of adolescents living in rural Ontario through the use of an online survey, in-depth interviews with adolescents, and key informant interviews. We found that the available sexual health information is difficult to navigate and inconsistent in quality. The services offered in rural areas are limited. The need for more readily accessible information and contraceptive services in rural Ontario is considerable.

Résumé

Les femmes vivant dans les zones rurales rencontrent des obstacles pour accéder aux contraceptifs, notamment en termes de distance géographique, de coût et de manque de prestataires de soins de santé (Leipert et al., 2011). En outre, l'objection de conscience à la fourniture de services de santé sexuelle et reproductive a un impact plus significatif dans ces environnements, dans la mesure où les solutions de remplacement sont limitées (Hulme et al., 2015). La dynamique globale a probablement un impact encore plus grand sur les adolescents, car les jeunes sont moins en mesure de naviguer dans des systèmes complexes ou d'obtenir les ressources nécessaires pour surmonter les obstacles financiers et de déplacement. Cette étude qualitative multi-méthodes a examiné les expériences de contraception d'adolescentes vivant en milieu rural ontarien au moyen d'un sondage en ligne et d'entretiens approfondis. Nous avons constaté que les informations disponibles sur la santé sexuelle sont difficiles à naviguer et de qualité inégale. Les services offerts dans les zones rurales sont limités. Le besoin d'informations plus facilement accessibles et de services de contraception disponibles dans les régions rurales de l'Ontario est considérable.

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List of acronyms and abbreviations

AR	Action research
CNO	College of Nurses Ontario
CVR	Contraceptive vaginal ring
FSA	Forward sortation area
HCP	Health care provider
IUD	Intrauterine device
IUS	Intrauterine system
KI	Key informant
MOHLTC	Ministry of Health and Long-Term Care
NGO	Non-governmental organization
OB/GYN	Obstetrician-gynaecologist
OCs	Oral contraceptives
ODB	Ontario Drug Benefit
ODSP	Ontario Disability Support Program
OHIP	Ontario Health Insurance Plan
OHIP+	Ontario Health Insurance Plan Plus
PC	Progressive Conservatives
PHUs	Public health units
PI	Principal investigator
REB	Research Ethics Board
RIO	Rurality Index Ontario
SIECCAN	Sex Information and Education Council of Canada
SRH	Sexual and reproductive health
STI	Sexually transmitted infection
TDP	Trillium Drug Program
UPA	Ulipristal acetate

Chapter 1: Introduction

Background

Rural health care in Ontario

Ontario is Canada's largest and most populous province. The majority of the population is concentrated in the southern part of Ontario, specifically in the metropolitan Greater Toronto Area, but 14% of the province's residents live in rural areas (Government of Canada, 2011). Statistics Canada defines rural populations as those "living outside centres with a population of 1,000 and outside areas with 400 persons per square kilometre." (Government of Canada, 2011). It has been well documented that populations living in rural areas in Canada have limited access to health care services. Access to services are not consistent in rural areas as some communities are expected to commute upwards of an hour to access care in other areas (Desmeules et al., 2006). In addition, rural areas very rarely offer specialized services in dedicated centres such as sexual health clinics (Browne, n.d.). In areas that have available health care services, booking an appointment or even being registered with a family physician has proven to be difficult (Hulme et al., 2015). These dynamics contribute to differences in service uptake between urban and rural populations as well as disparities in health outcomes (Ezer et al., 2016).

The aging of the population, economic difficulties, and geographic isolation are among the factors that contribute to specific health vulnerabilities in rural areas (Desmeules et al., 2006). In comparison to urban communities, most rural communities have high dependency ratios; large populations of children and youth as well as seniors are supported by a relatively small population of working age adults (Desmeules et al., 2006). Rural communities are also

known to have larger populations of indigenous people; these individuals may have a different perception of health and therefore use the services offered differently (Desmeules et al., 2006). Income disparities between rural and urban populations are apparent and compound the difficulty of accessing health services (Desmeules et al., 2006).

Sexual and reproductive health services are also impacted by these dynamics. The dearth of providers creates both financial and geographic barriers to access, which in turn impacts consistent and continued use of contraceptives (Leipert, Wagner Delaney, Forbes, & Forchuk, 2011). Geographic barriers present as an issue for rural adolescents who do not have health services within their region (George et al., 2015; Kennedy & MacPhee, 2006). Transportation to and from the appointment, including use of a personal vehicle, may be unavailable to younger adolescents and those living in rural areas and the costs associated with travel may be prohibitive (Kenney & MacPhee, 2006; Ezer et al., 2016). Public transportation is also not widely available in rural areas. Finally, adolescents often have less flexibility and autonomous control over their time than adults; it can be difficult for adolescents to seek services during school, for example, unless they get permission from a parent or guardian (Kennedy & MacPhee, 2006). In addition, many clinics do not offer hours that are convenient for adolescents (i.e. weekends or evenings), which limits their options even further (George et al., 2015). These barriers, both individually and in combination, contribute to both poor sexual health knowledge among and low use of sexual and reproductive health services by adolescents in rural areas.

Further, in areas that tend to be more conservative, conscientious objection impacts sexual and reproductive health knowledge, access, and service utilization (Kennedy & MacPhee, 2006). There is some evidence that some health care providers (HCPs) refuse or are reluctant to

disclose sexual health information or provide prescriptions for contraception. In Ontario, a policy now requires that health care providers who are unwilling to provide certain services, such as prescriptions for contraception, refer patients to a “non-objecting, available and accessible physician or other health-care provider” (Kirkey, 2015; Globe and Mail, 2014). However, in rural areas, the impact of clinician refusal can be especially significant, as locally available alternatives may not exist. For adolescents, who already have difficulty navigating health systems, this can be particularly devastating (Kennedy & MacPhee, 2006). Refusal also contributes to shame and stigma as a clinician’s conscientious objection, due to religious or personal beliefs, to providing reproductive health care “is a reflection of stigma against women’s autonomy and sexuality” (Arthur, 2014).

Sociocultural influence on sexual health

Constraints are placed on some adolescents because of the community’s interest in and judgement of a rural adolescent girl’s choice to engage in sexual activity (Ezer et al., 2015). Consequently, adolescents are often particularly concerned about confidentiality when accessing sexual and reproductive health services within their community (Ezer et al., 2016; Kennedy & MacPhee, 2006; George et al., 2015; Dicenso, Borthwick, Busca, Creature, Holmes, Kalagian & Partington, 2001; Frappier, Kaufman, Baltzer, Elliott, Lane, Pinzon & McDuff, 2008). Research indicates that HCPs often misunderstand or are confused about how and when to offer confidential health care to adolescents (Wadman, Thul, Elliott, Pritchard Kennedy, Mitchell & Pinzol, 2014). Acknowledging the complex nature of a guardian-child relationship in the context of a family-centred approach to care while respecting an adolescent’s need for autonomy can be

challenging for health service professionals (Wadman et al., 2014). As a result, adolescents may be reserved in discussing their sexual health needs with HCPs out of fear of their parents finding out, especially in a community where their family may know the health care provider well.

In addition, adolescents often place importance on the traditions and values instilled in them from their parents and communities. As a result, some adolescents are fearful of judgement from HCPs when disclosing their sexual health and behaviour history. In rural areas, conservative values can stem from a religious presence in the community. In one study conducted by Ezer and colleagues (2015), the participants stated that their hometowns had a prominent Christian following that subscribed to traditional and conservative values. One participant said: “Almost everybody goes to a church and they have some...kind of religious upbringing” (Ezer et al., p. 6, 2015). The sociocultural values of adolescents remain a barrier to sexual and reproductive health (SRH) services, in general, and contraceptive methods in particular (Kennedy & MacPhee, 2006).

Research with adolescents indicates that familial values, peer groups, personal views, and religious views all play into their decision making about overall health (Ezer et al., 2016). The fear of a discredited reputation within the community may also steer adolescents away from accessing sexual health education and services (Ezer et al., 2016; DiCenso et al., 2001). Although youth-specific services are offered in some areas, there is a deficit of specialized sexual health clinics especially in rural areas (Hulmes et al., 2015), which means there may not be many vehicles for expressing sex positive approaches and values.

Sexual health education in Ontario

Comprehensive sexual and reproductive health education, covering topics like contraception and sexually transmitted infection (STI) testing, can be effective in promoting behaviours that may prevent unintended pregnancies and the acquisition of STIs (Phillips & Martinez, 2010). Through formal teaching adolescents are taught the basics of human anatomy with goals of enhancing sexual health and well-being and preventing outcomes that can have a negative impact on sexual health (DiCenso et al., 2001; SIECCAN, 2015). Several studies document that a well-designed sexual health education program can have a positive impact on youth sexual health (McCall, McKay & SOGC, 2004; Haruna, Hu, Chu, Mellecker, Gabriel & Ndekao, 2018; Crocker, Pit, Hansen, John-Leader & Wright, 2019). For many adolescents, schools are commonly used as sources of SRH information (McKay & Bissell, 2010). However, even with formal education adolescents may still have difficulty understanding and accessing sexual and reproductive health services, especially the full range of contraceptive methods (Sokkary et al., 2013).

In 2015, the Ontario Liberal Party introduced a new curriculum entitled “Reproductive Health” in an attempt to modernize the out-dated 1998-Ontario sexual health curriculum (Grondin, 2016). In this update, new topics including sexual orientation and gender identity were introduced to cover appropriate subject matter for today’s society. In 2019, the Progressive Conservatives of Ontario introduced an amended curriculum after hosting consultations with the public (Ontario Progressive Conservatives, 2018). The new curriculum is to be introduced in classrooms beginning Fall 2019 with the intention of covering new topics, including an emphasis on healthy relationships and consent (Ministry of Education, 2019). Despite the Ontario mandate

to provide sexual health programs in schools, rural areas may experience less support due to fewer staff being available (SIECCAN, 2015; Ezer et al., 2016). Above and beyond the reduced risk of STIs and unintended pregnancies, sexual health programs provide an opportunity to teach body positivity, gender identity acceptance, and autonomous decision-making (SIECCAN, 2015). It is therefore critical to ensure sexual health education is consistently offered to enable youth to make informed decisions.

Contraception in Canada and Ontario

Across both Canada and Ontario, trends in contraceptive use are poorly documented. Statistics Canada focuses on producing nationally representative estimates of oral contraceptive use (Government of Canada, 2015). Of all women across Canada aged 15-49, approximately 16% used oral contraceptives (OCs) from 2007-2011 (Government of Canada, 2015). Among urban populations, the prevalence is expected to be higher due to the greater availability and accessibility of OCs (Hulme, Dunn, Guilbert, Soon, & Norman, 2015). The Ministry of Health and Long-Term Care (MOHLTC), through the Canadian Health Measures Survey, released data on adolescent contraceptive use in Ontario that suggested teens were even more likely than the general population to be using OCs: from 2007 to 2011, 24% of women and girls aged 15-19 used oral contraceptives (Government of Canada, 2015).

Despite the availability of a robust range of contraceptives, women and girls in Ontario are still at significant risk of unintended pregnancy and acquisition of STIs (Sokkary et al., 2013; Black et al., 2009). In 2005, it was estimated that approximately 6.9% of reported pregnancies

were of women and girls aged 14 to 19 (Government of Canada, 2008). In Canada, the rates of gonorrhoea increased by 61.3% from 2005-2014 (Government of Canada, 2017). In addition, the rates of Chlamydia increased by 49.2% from 2005 to 2014 (Government of Canada, 2017).

Contraceptive policies in Ontario

Contraceptive policies in Ontario also shape knowledge, access, and use. The MOHLTC offers the Ontario Drug Benefit (ODB) program for individuals, who qualify for the Ontario Health Insurance Plan (OHIP) and are eligible for OHIP+, are 65 years or older, living in a long-term care home, or are enrolled in the Trillium Drug Program. OHIP+ was introduced on January 1st 2018 for neonates, children, and youth aged 24 and under. This program provides full coverage for approximately 4,400 prescriptions that were already covered by the original ODB program. The enrolment for OHIP+ is automatic if the individual is a resident of Ontario and meets the OHIP eligibility requirements.

This policy change has significant implications for contraception. Currently the ODB covers oral contraceptives, the hormone-releasing intra-uterine device (IUD), and emergency contraceptives, such as ulipristal acetate (UPA) that require a prescription (Government of Ontario, 2019). However, other forms of contraception, including the Copper-T IUD, hormonal patches, and contraceptive vaginal rings (CVR), are not covered. As a result, individuals who want to use these methods are required to have private or supplementary insurance or pay out-of-pocket. For adolescents this can create a significant barrier to access (Hauck & Costescu, 2015).

OHIP+ alleviated some of the financial burden associated with contraception by offering full coverage for some methods offered in Canada. Prior to its enactment, adolescent girls and young women with little to no income who also did not have extended health benefits were unable to afford a wide variety of available contraceptive methods (Kennedy & MacPhee, 2006; Hulme & Costescu, 2015). Private insurance also presented accessibility constraints, as most plans require parental action in applying for coverage of specific drugs or services (Hauck & Costescu, 2015; George, Weaver, Higginson & Chartier, 2015) and explanation of benefits statements are usually sent to the primary policyholder. However, in April 2019, the Government of Ontario amended OHIP+ and discontinued coverage for children and youth with private health insurance coverage. This poses renewed financial constraints on those adolescents who wish to keep their contraceptive needs confidential.

Adolescents and contraception in Canada

Children and youth account for a substantial proportion of the Canadian population, including 29% of rural populations in Ontario (Government of Canada, 2011). Adolescents in Ontario are typically Anglophone (83%) and living in a two-parent family (77%) (Government of Canada, 2011). Approximately 24% of Ontario adolescents are living in a low-income family (Government of Canada, 2011).

Barriers to contraception and sexual and reproductive health services play out in national and provincial/territorial statistics. Adolescents typically use OCs and male condoms, as they have more access and typically are more aware of these methods (Black, Yang, Wu Wen,

Guilbert & Fisher, 2009). Indeed, regardless of rural or urban residence or income level, there has been no demonstrated difference in adolescents using OCs and condoms (Black et al., 2009). Overall, barriers, individually and in combination, impact consistent and continuous contraception use by adolescents (Hulme et al., 2015).

There has been little in-depth research that specifically explores adolescents' experiences with contraceptives in rural areas. In addition, the research available on the general experiences of adolescents accessing contraception in Canada is dated and does not generally document the perspectives of adolescents themselves. This research project aims to address this gap.

Rationale

Currently, research on adolescent knowledge and use of contraception in rural Ontario is limited. Despite the efforts from the government and non-governmental organizations (NGOs) to increase contraceptive availability, access to a full range of methods is still lacking in rural areas and few efforts cater specifically to the needs of adolescents aged 13-19. The objective of this project was to understand better the dynamics shaping rural adolescents' access to contraception and young rural women's experiences with contraception. These findings can inform the efforts of a variety of provincial stakeholders working to improve sexual and reproductive health services in rural Ontario. Given the 2018 expansion of OHIP+, this research was timely in documenting the role OHIP+ played in reducing financial barriers to contraception. Our primary research questions were:

- 1) What are rural adolescents' knowledge of and experiences with contraception in Ontario?
- 2) What facilitators and barriers shape adolescents' knowledge of and access to contraception in rural Ontario?
- 3) How might contraceptive information and services be improved for adolescent women and girls in rural areas of the province?

Specific objectives

Gaining a greater understanding of the quality and availability of rural sexual health services will help to address the gaps in our knowledge regarding the circumstances shaping rural adolescents' access to and experiences with contraception and help make recommendations for service delivery.

Through a multi-methods qualitative approach, this study specifically aimed to:

- 1) Document adolescents' experiences accessing contraceptive services in rural Ontario
- 2) Explore dynamics shaping rural adolescents' knowledge of and access to contraception
- 3) Identify avenues for improving contraceptive information and services in rural areas of the province.

Thesis structure

This thesis takes the form of a "thesis by articles" and is divided into 5 chapters. Chapter 1 provides an introduction to the study with a review of literature related to adolescent health and

sexual and reproductive health in Canada and Ontario. Chapter 2 describes the methodology for the study including detailed information about each instrument used as well as the analytic approaches employed.

Chapters 3 and 4 are original research articles. The first article (Chapter 3) centres on the general findings of this study. It outlines the contraceptive knowledge and experiences of adolescents living in rural Ontario. The article combines the perspectives of adolescents and key informants and suggests avenues for improving access to sexual and reproductive health services. We have formatted this article for *Contraception*.

Chapter 4 consists of the second article and examines the contraceptive knowledge of adolescents and explores the information barriers that they experience. It emphasizes the perspectives of educator key informants and reflects on differences between public and Catholic school systems. This article also suggests avenues for improving education and information resources for adolescents. We formatted this article for the *Canadian Journal of Human Sexuality*. This journal is the official journal of the Sex Information and Education Council of Canada.

The fifth and final chapter begins with the integration of the results. I situate our findings in the context of rural and adolescent health before reflecting on my positionality and role in the research. I then discuss the significance and implications, future directions, and limitations of this study. Finally, this thesis ends with a statement of contributions and a conclusion. The complete reference list and Appendix A (the research ethics certificate) are at the end of the document.

Chapter 2: Methods

This chapter begins with a description of the three components used to conduct this multi-methods qualitative study: the online survey with adolescents living in rural Ontario, in-depth interviews with adolescents who had ever-used contraception, and interviews with key stakeholders. Next, I discuss the data analysis techniques used for triangulation of the results. Finally, I conclude by discussing the ethical considerations and conceptual framework for this project.

Component 1: Online survey

The first component of this project consisted of an online survey of adolescents aged 13-19 living in rural areas of Ontario. Through this survey we aimed to obtain a snapshot of adolescents' contraceptive knowledge and experiences. The survey also identified and recruited participants for the in-depth interview component of the project.

All self-identified adolescent girls age 13-19 (inclusive) living in rural Ontario (as defined by Statistics Canada) were eligible to participate in the survey; there were no inclusion or exclusion criteria related to gender identity, sexual history, sexual orientation, or contraceptive history. We employed a multi-modal strategy for recruiting participants that included social media postings, flyers, announcements on listservs, and ads through organizations and clinics in rural areas. Later in the recruitment process we also reached out to post-secondary schools, particularly the health and gender studies programs, for their help in disseminating information about this project. The survey had sections dedicated to participant demographics, sexual and reproductive health history, contraceptive knowledge, contraceptive use, and sources of

contraceptive information. On the last page of the survey we invited respondents who identified as women and who had ever-used contraception to participate in an in-depth interview. We entered all survey participants into a draw to receive a \$100 gift card as an incentive for participating.

Component 2: In-depth interviews with adolescents

For the second component of the project, we conducted in-depth interviews with adolescent women and girls living in rural areas of Ontario. We recruited participants through the online survey and through established partnerships with community organizations. All women/girls aged 13-19, who spoke English or French, had used or were currently using contraception, and lived in a rural area of Ontario were eligible to participate in the phone/Skype interview. We determined rurality using the Rurality Index Ontario (RIO) (Health Force Ontario, 2017) or through assessing the population density if the forward sortation area (FSA) had been grouped into a larger census metropolitan area, for example the greater Ottawa region.

After obtaining informed consent from each participant, we began the open-ended in-depth interview using an interview guide developed specifically for this study. Domains of inquiry included demographics, sexual and reproductive health history, sexual health education and sources of information, experiences with contraception, and perspectives on how information and services could be improved in rural Ontario. I conducted all interviews, which took less than 45 minutes on average to complete, and with the participant's permission, I audio-recorded all interviews. As a part of the data collection phase, I took notes during the interview and memoed shortly thereafter. We used thematic saturation as the end-point for data collection;

we first suspected thematic saturations after completing 17 interviews and completed four more interviews as confirmation. All participants received a \$25 gift certificate as a thank you for participating.

Component 3: Interviews with key stakeholders

For the third component of my project, we interviewed key stakeholders about their perspectives of adolescent sexual health in rural Ontario. We used publicly available information and early participant referral to identify participants for these interviews. I conducted all of the semi-structured, open-ended interviews over the phone/Skype; these interviews lasted approximately 45 minutes. In order to obtain a range of perspectives, we contacted a mixture of health care providers, NGO representatives, educators, and community members who work in rural areas and with adolescents and/or in the sexual and reproductive health field. We tailored the interview guide to each individual to best capture their perspectives; the domains of inquiry included demographics, professional experiences working in rural areas and with adolescents and/or in the SRH field, facilitators and barriers to adolescents' contraceptive knowledge and use in rural Ontario, and opinions about how information and services can be improved. We asked for permission to audio-record all interviews; one of the 11 participants declined to be recorded. I took notes during the interview and formally memoed immediately afterward.

Data analysis

We used ATLAS.ti to manage all memos and transcripts from the in-depth interviews with the adolescents and key informants. We used Survey Monkey to host the survey, which allowed for a smooth transfer of data into SPSS for analysis. We used descriptive statistics, such as frequencies and cross tabulations, to report the survey findings. For the interview components of the project, the analytic process was iterative, such that we began analysis we collected our data. We carried our content and thematic analyses using both *a priori* codes and categories, as well as inductive techniques. The purpose of using inductive techniques is to allow the research findings to emerge from the raw data, without restraint from imposed methodologies (Thomas, 2006). Through this, clear links between the research objectives and the findings, derived from the raw data, are established and transparent (Thomas, 2006).

I began the process by familiarizing myself with the data: I listened to the audio recording files as well as re-read memos and transcripts using active reading techniques. Through this, I was able to create initial codes based on the interactions' content, before I continued to search for larger themes within the data. In consultation with my supervisor, we developed a codebook using *a priori* and emergent codes (Hsieh & Shannon, 2005). The systematic coding and categorizing of the data allowed us to detect trends, patterns, and relationships (Hsieh & Shannon, 2005). I then identified and reviewed larger themes with my supervisor in order to define and name said themes. Our interpretation focused on identifying relationships among the themes and concepts to answer the research questions in light of the overall study aims. Through integration of the results, we looked for concordance and discordance between the different components as the final effort to triangulate the findings (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014).

Although we analyzed the survey, the results will not appear in the articles reported in this thesis due to the foci of these manuscripts. We have included these results in oral and poster presentations, and will continue to do so in our other dissemination efforts.

Conceptual framework

Using action research (AR), as the basis of this study, permitted us to engage with adolescents and gain insight into their perspectives on contraception, their experiences using contraception, their decision-making process surrounding contraception and their knowledge of contraception. Action research is a process of inquiry that is conducted by and for those taking the action (Sagor, 2000). Through AR, the researcher initiates research with the intent to improve knowledge of a particular situation, which is not generalizable (Atkins & Wallace, 2012). The research team leads the process of identifying the problem and drawing information from the participants, resulting in identifying gaps in understanding (Sagor, 2000). Conducting research with youth is important but complex; youth often have unique insights to offer. The challenge is in developing research strategies that are fair and respectful to the young subjects within the research setting (Aldridge, 2015). Whether a young person chooses to participate, or is allowed to participate, is dependent on many factors including age, confidentiality, benefits, and perceived risks (Aldridge, 2015). Establishing procedures from the outset and adopting a genuinely youth-centred approach, allows for meaningful engagement with youth participants about important issues or experiences (Aldridge, 2015).

Qualitative research methods provide a valuable way to understanding phenomena by drawing upon individual experiences and perceptions (Guest et al., 2013). Often, they are used to

answer questions from the standpoint of the participant (Hammarberg & Lacey, 2016). Our research group's experience in using qualitative methods is that participants often feel free to share their experiences and perspectives in a safe, neutral environment. For this study, using in-depth interviews gave adolescents the opportunity to engage in the research to their comfort level. For each participant, they were informed that they did not have to answer any question they were uncomfortable with and that audio recording could be stopped at any point. In using in-depth interviews with key informants we captured their perspectives to help create a complete snapshot, showing both sides of the experience: use of versus provision of contraception.

Ethical considerations

This study received approval from the Social Sciences and Humanities Research Ethics Board (REB) located at the University of Ottawa (Ethics file #04-18-02) for the key informant (KI) component. The letter of approval from the University of Ottawa's REB can be found in Appendix A. The adolescent component was approved as an amendment to a pre-existing file (File #H01-14-03). The amended certificate allowed us to recruit participants aged 13-19 years old. As adolescents as young as 13 can access health services and specifically, contraception, without parental knowledge or consent, it would have been inappropriate to require consent from a parent or guardian for participation.

Chapter 3: Article #1

We intend to submit this article, “Exploring adolescents’ contraceptive experiences in rural Ontario: A multi-methods qualitative study” to *Contraception*. We have formatted the article for the journal’s structural, reference, and style specifications.

Exploring adolescent girls' contraceptive experiences in rural Ontario: A multi-methods qualitative study

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Exploring adolescent girls' contraceptive experiences in rural Ontario:

A multi-methods qualitative study

Abstract

Objectives: Adolescents living in rural communities experience numerous barriers to accessing contraception information and services. We aimed to explore adolescent girls' knowledge of and experiences with contraception, barriers and facilitators to accessing services, and avenues for improving services in rural Ontario.

Study design: In 2018-2019, we conducted 21 in-depth interviews with adolescent girls living in rural Ontario who had ever-used contraception. We also interviewed 11 key informants who work with adolescents and/or in the sexual health sector in rural communities. Using ATLAS.ti to manage the data, we analyzed both sets of interviews for content and themes using inductive and deductive techniques.

Results: Both adolescents and key informants report that access to contraception is limited in rural areas. Most adolescents spoke with their parent or guardian about their contraceptive decision-making. Lack of transportation options constituted a significant access barrier and influenced some adolescents' decision to disclose their contraceptive needs. Although issues of confidentiality were of concern to some of our participants, most reported having positive interactions with contraceptive service providers.

Conclusions: Our study suggests that adolescents experience difficulties in accessing contraception. Supporting policies to ensure a full range of contraceptive methods is available, accessible and affordable appears warranted.

Implications: Ensuring that a full range of contraceptive methods is available and accessible to adolescents in rural Ontario could meet a significant need. Addressing existing service delivery

and information barriers through promoting enabling policies and supporting educational programs appears warranted.

Keywords: contraception, adolescent, reproductive health, rural health, Canada

1. Introduction

Trends in contraceptive use are poorly documented in Ontario, Canada's largest and most populous province. The Ministry of Health and Long-term Care focuses on producing provincially representative estimates of oral contraceptive (OC) use. According to the Canadian Health Measures Survey conducted from 2007-2011, approximately 24% of women and girls aged 15-19 use OCs, a larger percentage than any other age group [1]. However, research suggests that male condoms are the most commonly used method and that about one-quarter of sexually active adolescents in Canada are not using any contraceptive methods despite not wanting to become pregnant [2,3].

Adolescent girls in Canada face a number of documented barriers to accessing information on sexual and reproductive health and contraception in particular. However, girls and young women living in rural areas may face additional hurdles. The shortage of providers in rural and remote areas, the lack of public transportation or affordable transportation to leave one's community, and the out-of-pocket costs associated with obtaining both prescription and over-the-counter contraceptive methods when there are no sexual health centers with subsidized supplies impact rural adolescents' access to and use of contraception and contribute to broader urban-rural disparities in health outcomes [4]. Further, adolescents, in general, place considerable importance on confidentiality and anonymity when inquiring about their sexual health [5-9]. Adolescents in rural areas may be reticent to seek or obtain services in small close-knit communities both out of a fear of judgment and concerns about privacy and confidentiality.

Contraceptive policies in Ontario also shape the accessibility of contraception. The Ontario Health Insurance Plan (OHIP) provides all residents of the province with both emergency and preventive services free of charge. Prescription drugs are not covered through the

program. However, on January 1, 2018 the provincial government introduced OHIP+, a program that offers neonates, children, and youth aged 24 and under free coverage of over 4,400 prescription drugs [10]. This policy change had significant implications for contraception, in that all adolescents and young adults would be able to obtain OCs, the hormone-releasing intrauterine device (IUD) and prescription forms of emergency contraception, such as ulipristal acetate, free of charge [10]. Other hormonal methods of contraception, the copper-T IUD, and over-the-counter emergency contraceptives (such as dedicated progestin-only pills) and condoms were not covered.

Although this policy represented an important step in expanding drug covered, in April 2019, OHIP+ the new Ontario government amended the program such that adolescents and youth who have access to drug coverage through private sector insurance plans (such as being enrolled as a dependent on a parental plan) were no longer eligible for OHIP+ [11]. Adolescents who do not feel comfortable using private sector insurance to cover their contraceptive method may be able to obtain subsidized or low-cost contraceptives through provincially funded sexual health programs [12-14], but these are limited in rural areas and the programs are getting phased out altogether [15].

This overarching policy context and the dearth of research that specifically explores adolescents' experiences with contraception information and services in rural areas motivated our study. Using a multi-methods approach we aimed to document adolescent girls' knowledge of and experiences with contraception, explore barriers and facilitators to accessing services, and identify avenues for improving services in rural Ontario.

2. Methods

From October 2018 to March 2019, we conducted semi-structured in-depth interviews with 21 adolescent girls who had ever-used contraception. We combined this component of the study with interviews with 11 key informants. All participants in both groups were given the option to participate by telephone or Skype; one adolescent chose to complete the interview in person.

2.1 Data collection: In-depth interviews with adolescents

We used a multimodal community-based strategy to recruit adolescents for an online survey dedicated to contraceptive knowledge and experiences; we then invited survey participants who had ever used contraception to participate in the in-depth interview. We recruited our survey participants, and therefore our interviewees, primarily through listservs and social media posts. However, with the help of community organizations, such as libraries and community clinics, we also posted physical flyers in areas frequented by adolescents. To be eligible for the study, adolescent girls had to be currently residing in a rural community of Ontario, be 13 to 19 years of age at the time of the interview, have had experience using contraception, and be sufficiently fluent in English or French to answer interview questions. NRB, a master's student in health sciences at the University of Ottawa who hails from a rural part of Ontario conducted all interviews, after receiving training from AMF, a medical anthropologist and medical doctor with expertise in global sexual and reproductive health research. Although we recruited participants in both French and English, all participants were Anglophone.

After obtaining informed consent, we used an interview guide developed specifically for this study to explore the adolescent's demographic information, educational background and reproductive health history. We then explored the participant's knowledge of, attitudes toward, and experiences with contraception. At the conclusion of each interview, we gave the participant the opportunity to reflect on how contraceptive information and services could be improved in rural parts of Ontario. In appreciation of their time, adolescents received a CAD25 gift card to Amazon. With permission, we audio-recorded all interviews and took extensive notes during and analytically memoed immediately following each interaction.

2.2 Data collection: Key informant interviews

We purposively recruited key informants based on publicly available contact information and early participant referral. In order to obtain a range of perspectives, we reached out to individuals who work with adolescents in rural parts of Ontario, including those affiliated with health centers, schools, and religious organizations. We tailored our interview guide to each participant and explored key informants' professional backgrounds, experiences working with adolescents on sexual health, and perceptions of the dynamics shaping contraception knowledge and use within this population. Each interview ended with a discussion on possible efforts to improve existing information and services. NRB conducted interviews in English over the telephone or Skype and audio-recorded all but one of the interviews, per the preference of the participant. NRB also took notes during and memoed in the wake of each interview.

2.3 Data analysis

The analytic process was meant to be iterative meaning it began during data collection [16]. In the first phase, we familiarized ourselves with the data using the audio-recordings, verbatim transcripts, notes, and memos. We then developed our codebook using both inductive and deductive techniques [17] and used ATLAS.ti to manage the data. We systematically coded our transcripts for content, which we then grouped into categories and themes, a process that allowed us to detect trends, patterns, and relationships [17]. Group meetings and discussions guided our interpretation. We first analyzed the interviews with adolescents and the interviews with key informants separately; in the final analytic phase, we looked for concordance and discordance of themes between the different components. This also served as a way of triangulating the results [18].

2.4 Ethical consideration

This study received approval from the Social Sciences and Humanities Research Ethics Board at the University of Ottawa. In the results section we organize our results around key themes. We use representative quotes to illustrate our findings. We have used pseudonyms for the adolescents who participated in the study and have masked or redacted all personally identifying information.

3. Results

3.1 Participant characteristics

The adolescents in our study ranged from 17 to 19 years of age at the time of the interview. All participants identified as Anglophone and a majority identified as Caucasian

(n=17). Of the other four participants, two identified as African-Canadian/Caucasian, one identified as Asian/Latin American, and one as Asian. The participants in our study covered several regions of Ontario including Central (n=9), Eastern (n=8), Northeastern (n=2), Northwestern (n=1), and Western (n=1). Nine of our participants identified as Catholic, five as Agnostic or Atheist, three as having no religiosity, two as Protestant, one as Presbyterian, and one as spiritual. Twenty of our participants were registered in school at the time of the interviews; three in secondary school and 17 in a postsecondary program. One participant was parenting a single child as a result of a teenage pregnancy; she was also registered in a postsecondary program. Another participant was pregnant at the time of the interview. Most of the participants in our study had tried a number of contraceptive methods including condoms (n=17), oral contraceptive pills (n=16), withdrawal (n=10), emergency contraception (n=5), the IUD (n=4), female condoms (n=1), Depo-Provera (n=1), the patch (n=1), spermicide (n=1), and the calendar method (n=1).

Our key informants included a range of professionals: educators, counsellors, outreach nurses, nurse practitioners, youth ministers, and physicians. Our key informants worked in several regions of Ontario including Southern, Southwestern, Northwestern and Eastern Ontario.

3.2 Adolescents lack access to a full range of contraceptive methods

According to both adolescents and key informants, OCs and condoms are the most widely available contraceptive methods in rural areas. In contrast, we heard that contraceptive patches and rings were less available. However, availability did not always translate into accessibility. Some adolescent participants (n=3) reported that access to certain methods, such as the IUD, required visiting neighbouring towns' clinics. One key informant, Meghan (nurse,

Southern Ontario), confirmed this when she reported that she has to refer clients from the Fort Erie area to physicians in Niagara Falls in order to obtain an IUD. Katie (age 18, Central Ontario) reported that she used a friend's prescription instead of seeing a doctor to try the vaginal ring. For accessing sexual and reproductive health care in general, some adolescents (n=8) said they would seek care from their family provider. Only a few adolescents (n=4) preferred or had access to walk-in clinics.

3.3 Many adolescents involved parents in their contraceptive decision-making

Most of the adolescents in our study (n=15) involved a parent or guardian in their decision-making surrounding contraception. Danielle (age 17, Northeastern Ontario) reported that the first thing she did was talk to her mom. Some adolescents chose to involve their guardian because they were unaware they were able to access contraception without parental consent. However, for some adolescents it appears difficult to begin a conversation about contraception with their guardian. As our key informant Claire (sexual health educator, Eastern Ontario) reported, some young people are uncomfortable talking to their guardians about contraception or are unsure on how to approach it. For a select few adolescents (n=3), hormonal contraception was considered early on to control irregular menses or as a management method for an existing medical condition that their guardians were heavily involved in. Aubrey (age 19, Northeastern Ontario) began using OCs at age 11 to manage irregular menses; Jennifer (age 18, central Ontario) began OCs at age 10 to manage endometriosis.

That adolescents had a variety of reasons for starting contraception is not surprising. However, our participants indicated that they were more likely to "hide" contraceptive use from their parent or guardian if the use was for pregnancy prevention. As Megan (age 18, Eastern

Ontario) explained: “So I went to the doctor and talked about [contraception] with him and for reasons I told him it was because [of] sex, I didn’t tell my mom that.”

3.4 Adolescents experience numerous barriers to accessing contraception

Distance to a provider was the most commonly cited barrier to contraceptive access by participants in our study. Without access to a car or the ability to drive, even relatively modest distances were barriers because of a lack of reliable public transportation. Jessica (age 19, Northwestern Ontario) explained, “[The clinic] was a 25 minute walk from my house [and] kind of like down the highway”. To visit the clinic, she used her volunteer position as an excuse in order to keep her appointment confidential. When asked about transportation as a barrier, Julia (age 19, Western Ontario) stated “I think that if you’re younger then it’d probably be a lot harder, just like having that conversation with your mom and then like trying to go like to the appointment ‘cause you couldn’t drive.” Some key informants reported that their clinics were able to dispense in cases where their clients were unable to access contraception due to a number of barriers. As Meghan (nurse, Southern Ontario) stated “we give out our contraception for free...because it is so rural out there, if [adolescents] cannot [get to a pharmacy], I will dispense for them.”

When asked about cost, adolescents in our study were generally fortunate enough to have the financial means to access contraception through private health insurance plans (n=9), government subsidies (n=3) and parent support with out-of-pocket expenses (n=4). Several adolescents (n=9) knew about OHIP+ and confirmed that their prescription was covered under OHIP+ after January 1st, 2018.

3.5 Participants' experiences with health care providers are generally positive and facilitate contraceptive use

Generally, adolescents in our study had good experiences with their health care providers during their consultations and follow-up appointments regarding contraception. As a result, most adolescents (n=14) highly recommended their provider for contraceptive services. Aubrey reported, "My OB/GYN was very helpful [and] going into an environment where everything was situated around female reproduction was comforting." Our key informants indicated that some clinics have programs to quick-start clients on contraception, either within the schools or a satellite location, in order to facilitate use. Allison (nurse practitioner, Southern Ontario) explained that nurses in their satellite location can start clients with three packs and upon a follow-up at the fourth month, can then provide a prescription for an additional 10 months. She continued with stating that for clients that have been on the pill with no complications for more than a year, they will provide prescriptions for up to 18 months. A few adolescents (n=3) felt as though their provider was judgmental of their decision surrounding contraception including the method chosen or the decision to not use hormonal methods. As Hannah (age 19, Eastern Ontario) explained, "At times [during her pregnancy] I wasn't receiving maybe as optimal care as maybe someone who was older or more ready...to have a child." Several participants also reported that they were concerned about confidentiality. Jessica recalled, "I was 17 at the time so all the questions were like 'Will my parents find out?'" Others expressed concerns about confidentiality when seeking services in the pharmacy or when seeing the school nurse.

4. Discussion

Our study documents a number of obstacles that some youth living in rural communities face when trying to access contraception. Consistent with the literature [19], our findings suggest that the availability and accessibility to a full range of contraceptive methods continues to be a barrier in rural areas of Ontario. Indeed, adolescents reported that the methods offered were often limited to OCs and condoms because of their ubiquitous availability. Adolescents will only use contraception if they are able to access information about a range of methods and receive comprehensive care [20-21]. Our findings are consistent with others that call for ensuring that a full range of contraceptive methods is available and offered.

In contrast with previous research [5], our findings indicate that adolescents in rural Ontario are speaking with their parent or guardian about contraception and involving a parent in their decision-making. In particular, adolescent girls disclosed their contraceptive needs to their mothers, a dynamic reported elsewhere [22]. However, some adolescents were reticent to speak with a parent if their use of contraception was motivated by a desire to prevent pregnancy. Incorporating skill-building exercises in sexual education class to help adolescents navigate these conversations could be valuable and would meet an expressed need.

Geography and costs have implications for adolescent access to contraception. Our participants repeatedly identified distance to clinics as a major barrier to contraceptive services. Several of our participants indicated that the need for transportation influenced their decision to disclose their contraceptive need to someone else in their lives. Although geography will always challenge those living in rural areas, ensuring that a full range of methods is available through school nurses could alleviate this challenge.

Although research conducted prior to 2018 indicates that costs is a significant barrier for youth [23], direct costs of contraception were not reported by our participants as a major barrier. Indeed, our participants indicated that both disclosure to parents (and the subsequent use of parent insurance coverage) and the newly implemented OHIP+ program made contraception affordable. This suggests that the April 2019 changes to the OHIP+ program could again results in cost-related barriers.

Finally, we were heartened to learn that adolescents' experiences with health care providers were generally positive. Research shows that patient-provider interaction dynamics shape the experience during a sexual health visit [24-25]; our results are consistent with this finding. Continuing to support efforts to ensure that services and providers are adolescent-friendly appears warranted.

4.1 Limitations

As with all qualitative research, this study is not meant to be representative or generalizable. We are confident that the themes we identified are meaningful, but we are unable to assert that these reflect broader trends. The positionalities of NRB likely influenced the interviews with the adolescents. Adolescents might have perceived a power imbalance between themselves and the interviewer, which in turn may have affected how adolescents answered our interview questions. Through memoing and debriefing, NRB was able to reflect on her personal reactions to the information shared and understand her subjective influence over the interview process.

4.2 Conclusions

Our study suggests that adolescents experience difficulties in accessing contraception in rural areas of Ontario for complex reasons. Supporting policies to ensure a full range of contraceptive methods is available, accessible, and affordable appears warranted.

References

- [1] Government of Canada. Oral contraceptive use among women aged 15 to 49: Results from the Canadian Health Measures Survey, <https://www.statcan.gc.ca/pub/82-003-x/2015010/article/14222-eng.html>; 2015 [accessed 15 July 2019].
- [2] Black A, Yang Q, Wu Wen S, Lalonde AB, Guilbert E, Fisher W. Contraceptive use among Canadian women of reproductive age: results of a national survey. *J Obstet Gynaecol Can* 2009; 31(7):627-40. [https://doi.org/10.1016/S1701-2163\(16\)34242-6](https://doi.org/10.1016/S1701-2163(16)34242-6)
- [3] Ott MA, Sucato GS, Committee on Adolescence. Contraception for Adolescents. *Pediatrics* 2014; 134(4):e1257-81. DOI: 10.1542/peds.2014-2300
- [4] DesMeules M, Pong R, Lagace C...Koren I. How healthy are rural Canadians? An assessment of their health status and health determinants, https://secure.cihi.ca/free_products/rural_canadians_2006_report_e.pdf; 2006 [accessed 15 July 2019].
- [5] Ezer P, Leipert B, Evans M, Regan S. Heterosexual female adolescents' decision-making about sexual intercourse and pregnancy in rural Ontario, Canada, <https://www.rrh.org.au/journal/article/3664>; 2016 [accessed 10 July 2019].
- [6] Kennedy EP, MacPhee C. Access to confidential sexual health services. *The Canadian Nurse* 2006; 102(7): 29–31. Retrieved from ProQuest Database.
- [7] DiCenso A, Borthwick VW, Busca CA, Creatura C, Holmes JA, Kalagian WF, Partington BM. Completing the Picture: Adolescents Talk About What's Missing in Sexual Health Services. *Canadian Journal of Public Health / Revue Canadienne de Sante'e Publique* 2001; 92(1):35–8. <https://doi.org/10.1007/BF03404840>

- [8] George C, Weaver R, Higginson A, Chartier L. IMPROVING SEXUAL HEALTH RESOURCES FOR YOUTH: THE USE OF SEX-POSITIVE PUBLIC HEALTH WEBSITES. *International Journal of Child, Youth and Family Studies* 2015; 6:150–64.
<https://doi.org/10.18357/ijcyfs.61201513494>
- [9] Frappier JY, Kaufman M, Baltzer F, et al. Sex and sexual health: A survey of Canadian youth and mothers. *Paediatr Child Health*. 2008;13(1):25–30. doi:10.1093/pch/13.1.25
- [10] Government of Ontario. Learn about OHIP+, <https://www.ontario.ca/page/learn-about-ohip-plus>; 2017 [accessed 9 April 2019].
- [11] Ministry of Health and Long-Term Care. Amendment to Ontario Regulation 201/96 made under the *Ontario Drug Benefit Act* to make changes to Ontario Drug Benefit Program coverage for children and youth aged 24 years and under (OHIP+), http://www.health.gov.on.ca/en/pro/programs/drugs/opdp_eo/notices/exec_office_20190227.pdf; 2019 [accessed 9 April 2019].
- [12] Niagara Region. Birth Control, https://www.niagararegion.ca/living/health_wellness/sexualhealth/birth-control.aspx; 2019 [accessed 10 July 2019]
- [13] Porcupine Health Unit. Birth Control Options and Cost, <http://www.porcupinehu.on.ca/en/your-health/sexual-health/prices/>; 2019 [accessed 10 July 2019]
- [14] Ottawa Public Health. Sexual Health Clinic, <http://www.ottawapublichealth.ca/en/public-health-topics/sexual-health-clinic.aspx>; 2019 [accessed 10 July 2019]
- [15] Hulme J, Dunn S, Guilbert E, Soon J, Norman W. Barriers and Facilitators to Family Planning Access in Canada. *Healthc Policy* 2015; 10(3):48–63.

- [16] Guest G, Namey EM, Mitchell ML. Qualitative Research: Defining and Designing. In: *Collecting qualitative data: A field manual for applied research*, London: SAGE Publications; 2013, p. 1-36.
- [17] Hsieh HF, Shannon SE. Three Approaches to Qualitative Content Analysis. *Qualitative Health Research* 2005; 15(9): 1277–88. <https://doi.org/10.1177/1049732305276687>
- [18] Carter N, Bryant-Lukosius D, DiCenso A, Blythe J, Neville AJ. The use of triangulation in qualitative research. *ONF* 2014; 41(5): 545–7. <https://doi.org/10.1188/14.ONF.545-547>
- [19] Canadian Contraception Consensus Chapter 1 Contraception in Canada. *Journal of Obstetrics and Gynaecology Canada*. 2015;37(10): S5-12. doi:10.1016/s1701-2163(16)39370-7.
- [20] Di Meglio G, Crowther C, Simms J. Contraceptive care for Canadian youth. *Pediatr Child Health* 2018; 23(4):271-7. <https://www.cps.ca/en/documents/position/contraceptive-care>
- [21] Pazol K, Zapata LB, Tregear SJ, Mautone-Smith N, & Gavin LE. Impact of Contraceptive Education on Contraceptive Knowledge and Decision Making: A Systematic Review. *American journal of preventive medicine* 2015;49(2 Suppl 1): S46–S56. doi:10.1016/j.amepre.2015.03.031
- [22] Flores D, Barroso J. 21st Century Parent-Child Sex Communication in the United States: A Process Review. *The Journal of Sex Research* 2017; 54(4-5):532-48. DOI: 10.1080/00224499.2016.1267693
- [23] Hauck B, Costescu D. Barriers and Misperceptions Limiting Widespread Use of Intrauterine Contraception Among Canadian Women. *Journal of Obstetrics and Gynaecology Canada* 2015; 37(7):606–16. [https://doi.org/10.1016/S1701-2163\(15\)30198-5](https://doi.org/10.1016/S1701-2163(15)30198-5)
- [24] Hoopes AJ, Benson SK, Howard HB, Morrison DM, Ko LK, Shafii T. Adolescent Perspectives on Patient-Provider Sexual Health Communication: A Qualitative Study. *Journal of primary care & community health* 2017; 8(4):332–7. doi:10.1177/2150131917730210

[25] Coughlin, K. W. (2018). Medical decision-making in paediatrics: Infancy to adolescence. *Paediatr Child Health* 2018; 23(2):138-46. <https://www.cps.ca/en/documents/position/medical-decision-making-in-paediatrics-infancy-to-adolescence>

Chapter 4: Article #2

We intend to submit this article, ““The grade nine teacher skipped it”: A qualitative exploration of sexual health education in rural Ontario” to the *Canadian Journal of Human Sexuality*. We have formatted the article for the journal’s structural, reference, and style specifications.

**“The grade nine health teacher skipped it”:
A qualitative exploration of sexual health education in rural Ontario**

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Abstract

Sexual and reproductive health (SRH) education can provide effective promotion of healthy sexual behaviours and teach youth to make informed decisions. However, Ontarian adolescents living in rural communities experience inconsistent sexual health education and are receiving varying levels of service. Through this study, we explored adolescents' knowledge of contraception and gained insight into their experiences with the Ontario sexual health curriculum. We conducted 21 semi-structured in-depth interviews with adolescents living in rural Ontario. In addition, we interviewed 11 key informants who work with adolescents and/or in sexual health in rural parts of the province. We audio-recorded and transcribed interviews and analyzed them using inductive and deductive techniques. We used ATLAS.ti software to manage the data. Both adolescents and key informants report that the curriculum is inconsistently taught, with considerable variation from school to school. Reported reasons include the degree of religious influence over the curriculum, educators' discomfort with the topic, and limited time. Adolescents reported a wide range of experiences with their sexual health education; some found the offerings informative but others were confused or found the information inadequate. Supporting and enforcing policies to ensure consistent and medically accurate school-based SRH programs appears warranted. Ensuring that the mandated curriculum is being delivered as described by the Ministry of Education and eliminating the top-down approach to disseminating curricular updates could address the information barriers that are experienced by both educators and their students.

Introduction

Sexual and reproductive health (SRH) education can promote healthy behaviours and help reduce the risk of unintended pregnancy and sexually transmitted infection (STI) acquisition among adolescents. (Phillips & Martinez, 2010). Sexual health programs also provide an opportunity to teach body positivity and safe relationships to youth as they begin to advance through different stages of intimacy (SIECCAN, 2015). According to Health Canada, “Sexual health education should be available to all Canadians as a important component of health promotion and services.” (Public Health Agency of Canada, 2008) Studies have shown that a well-designed sexual health education program has the potential to have a major positive impact on the sexual health of youth. (McCall et al., 2004) Offering educational programs through accessible venues can ensure that Ontarian youth are receiving this information. For many adolescents, school-based sexual health education program are a primary source of SRH information (McKay & Bissell, 2010).

However, research suggests that school-based sexual health education in Ontario is variable (SIECCAN, 2015; Ezer et al., 2016). In Ontario, non-religious and Catholic schools are publicly funded and are required to follow the ministry set curriculum. Although the Ontario government mandates the inclusion of sexual health education in schools, rural areas often struggle to meet these requirements. The overarching shortage of educators combined with a lack of area SRH providers and SRH community organizations impact both the sexual health offerings and the comprehensiveness of those programs (Ezer et al., 2016; DiCenzo et al., 2001).

Recent policy changes in the province have also impacted sexual health education in Ontario. In 2015, the Ontario Liberal Party introduced a new curriculum entitled “Reproductive

Health” in an attempt to modernize the Ontario sexual health curriculum for the first time since 1998 (Grondin, 2016). The new mandated curriculum immediately became a controversial topic throughout the province. In 2018, the Progressive Conservatives of Ontario put the 2015 curriculum on hold and announced a plan to repeal it based on consultations with the public (ON PC, 2018). Confusion ensued and educators were unclear on which curriculum to follow and what to teach.

This overarching context set the stage for our study. In 2018-2019 we conducted a multi-methods qualitative study to explore rural adolescents’ knowledge of and experiences with contraception in Ontario. In this article we focus specifically on adolescents’ and key stakeholders’ perspectives on school-based sexual health education.

Methods

From October 2018 to March 2019, we conducted semi-structured in-depth interviews with 11 key informants with experience in sexual and reproductive health and/or with adolescents in a rural setting and 21 rural adolescent girls who had ever used contraception. Using publicly available contact information and personal networks, we recruited key informants who work with adolescents in rural parts of Ontario. This group of informants included educators, counsellors, outreach nurses, nurse practitioners, a youth minister, and physicians. With respect to the adolescents, self-identified girls were eligible if they were currently residing in a rural community of Ontario, were 13 to 19 years of age at the time of the interview, had experience using any form of contraception, and were sufficiently fluent in English or French to

answer interview questions. All participants in both groups were given the option to engage in telephone or Skype interviews. The majority of the participants participated over the phone; one key informant opted for a Skype interview and one another adolescent opted for an in-person interview citing confidentiality was a concern.

2.1 Data collection

We purposely recruited key informants based on publicly available contact information and early participant referral. In order to obtain a range of perspectives, we invited individuals from a range of youth-serving organizations. NRB, an Anglophone MSc student in Interdisciplinary Health Sciences at the University of Ottawa, conducted all interviews. She received training from AMF, a sexual and reproductive health researcher with expertise in qualitative research methods.

We used an interview guide developed specifically for this study and tailored it for our participants. The major domains of inquiry focused on the key informant's demographic profile and professional background, experiences working with adolescents on sexual health, perspectives on the facilitators and barriers to contraceptive information and services in rural area, and ideas on possible efforts for improving existing information and services.

We recruited adolescents through a number of different avenues, including listserv, social media, and community flyers. NRB conducted all interviews in English, per participant preference. We used an interview guide specifically developed for this study. We organized the guide around domains of inquiry that focused on participant demographic, knowledge of,

attitudes toward, and experiences with contraception, and avenues for improving information and services in rural Ontario. As a token of our appreciation we offered all adolescent participants a CAD25 gift card for Amazon.

2.2 Data analysis

With permission, we audio-recorded all but one of the interviews. NRB took notes during all interactions and wrote analytic memos immediate after each interview, a process that allowed her to reflect on the researcher-participant dynamics and identify early themes. We used ATLAS.ti to manage our data, which included transcripts, notes, and memos. The analytic process was meant to be iterative (Guest et al., 2013) and occurred simultaneously with data collection. In the first phase, we familiarized ourselves with the data. We then generated an initial codebook based on the literature and interview questions and added new codes as the emerged. After coding our transcripts for content we grouped findings into categories and then identified themes and relationship between ideas (Hsieh & Shannon, 2005). We initially analyzed the key informant interviews and the in-depth interviews with adolescents individually. In the final analytic phase we combined the findings and paid close attention to concordance and discordance. This process also served as a method of triangulation (Carter, Bryant-Lukosius, DiCenso, Blythe, & Neville, 2014). Study team meetings and discussions allowed us to reach agreement on the interpretation of our findings.

In this article we focus on the findings related to sexual health education. We have masked or redacted all identifying information about individuals or institutions (such as schools

and clinics). We have assigned pseudonyms to the adolescents who participated in the study. We organize our results around domains of inquiry and use illustrative quotes to support our interpretation.

2.3 Ethical consideration

We received approval to conduct this study from the Social Sciences and Humanities Research Ethics Board at the University of Ottawa.

3. Results:

3.1 Participant characteristics

The key informants in our study all had direct involvement with adolescents in rural Ontario. At the time of the interview, our participants worked in a range of settings including clinics, non-governmental organizations providing reproductive health outreach and pregnancy counselling, community health centers, youth-focused organizations and rural secondary schools. Clinical participants (including physicians, nurse practitioners, and school nurses) had between 2 and 24 years of professional experience.

The adolescents in our study ranged from 17 to 19 years of age at the time of the interview. All participants identified as Anglophone and a majority identified as Caucasian (n=17). Most of our participants hailed from Central (n=9) or Eastern (n=8), Ontario and nearly half of our participants identified as Catholic (n=9). With respect to secondary school education,

13 of our participants went to a public school and 8 had attended a Catholic school (one participant had attended both institutional types). Most of the participants in our study had tried a number of contraceptive methods including condoms (n=17), oral contraceptive pills (n=16), withdrawal (n=10), emergency contraception (n=5), the intra-uterine device (n=4), female condoms (n=1), Depo Provera (n=1), the contraceptive patch (n=1), spermicides (n=1), and calendar method (n=1).

3.2 Adolescents' sexual health and contraceptive knowledge

The majority of the participants had limited knowledge of the full range of methods. Almost all participants were aware of oral contraceptive pills and male condoms but a relatively few participants were knowledgeable of other ongoing hormonal methods. Almost all of our participants had heard of progestin-only emergency contraceptive pills (and typically mentioned Plan B® by name). In contrast, none of our participants had heard of ulipristal acetate (brand name ella®) or that a Copper-T IUD could be used post-coitally to prevent pregnancy. In discussing other sexual health topics, some participants (n=7) had a basic understanding of STI transmission and symptoms. Finally, several participants (n=5) mentioned that they did not have an understanding of what a menstrual cycle was at the time of menarche. This was disconcerting to these participants, one of whom noted, “At the age you usually get [your period] you are not really taught about what a period is.”

3.3 Sexual and reproductive health information in the classroom

Both key informants and adolescents described the major themes covered in SRH education in secondary school (Fig. 1). Notably, both key informants and adolescents mentioned that the content of in-classroom education different between public and Catholic schools; public schools generally included more comprehensive information. However, key informants also reported a more exhaustive list of content than adolescents.

[Figure 1 about here]

We asked to describe the emphasis of their secondary school sexual health education. As Emily, age 18, who attended a public school explained, “Okay. So definitely they taught us, you know, classic condom on a banana. They told us about the pill, the patch as well as the ring...They also went on to explain about STIs and why it's important to prevent them...As well as what to do or not to do during your pregnancy...” In contrast, Erica, age 18, who attended Catholic school noted “I went to Catholic school...they didn’t talk about contraception that much except that abstinence is the only method that works.”

Although Ontario mandates that the sexual health curriculum be taught in grade nine, several adolescents reported that they received the information later in their education. For these students, the information often came too late. As Jennifer, age 19, who attended public school explained, “Obviously the education wasn’t all there, I mean one of the girls was in parenting class, like we had a parenting class, and she got pregnant three months into parenting class.”

3.4 Delivery of school-based sexual health education

Adolescents repeatedly reported that the delivery of sexual health education was inconsistent. As Danielle, age 17, recalled, “The grade nine health teacher skipped it because it was a male teaching an all-female class and he basically looked up and said ‘you guys know how this works.’” Most students reported that the sexual health education they received in school was extremely short, ranging from a single class to a week of content information. As Brittany, age 18, explained, “I wasn’t there that week unfortunately. So I wouldn’t know [what they covered in class]. I just remember they tried putting condoms on a wooden dildo.”

Some students reported that their schools offered additional SRH information outside of the mandated curriculum. Most commonly students identified grade 12 biology as well as a grade 11 family studies course as the venue for additional information. For both of these courses, the material generally covered the reproductive system with some discussion of contraception and STIs depending, on the educator delivering the content. As Mary, age 18, explained, “[they] were an exception, like [she] was an exception because [the teacher] was [a] really hard-core feminist.”

Our clinical and educator key informants reported that the changes at the provincial level had resulted in confusion about both content and roles in teaching the sexual health curriculum. Further, several of our key informants were public health nurses and school outreach and sexual health education fell in their scope of practice. They described contributing to sexual health information and services for secondary school students; we outline their reported activities in Fig. 2.

[Figure 2 about here]

3.5 Motivations behind offering school-based sexual health education

Key informants ascribed many of the differences in school-based sexual health education to differences in motivation. These motivational differences occurred both between school boards and also between individual schools. Many of our educator and clinical key informants noted that in public schools, the teaching and clinical staff took a hands-on approach to SRH education using demonstrative and interactive teaching that provided students with practical advice and skill building opportunities. This was especially true for public schools with an outreach educator, commonly a public health nurse. Key informants reported that public school staff were generally supportive of these outreach programs which often offered information about and/or access to male condoms, progestin-only emergency contraception, and pregnancy and contraception options counselling. As Meghan, a nurse, explained, “[The public school administration] was usually [willing to] reach out if somebody [was] in need of birth control, Plan B, [a] pregnancy test, even if it [was] off clinic days, they [were] really helpful and supporting for clients there.” However, several adolescents reported that their public school experiences did not align with these reports explaining that school staff and administrators actively limited information and did not provide further school-based resources.

Several of our key informants (n= 6) had experience educating students within the Catholic system. They reported that it was challenging to provide comprehensive sexual health information, particularly about topical areas deemed “inappropriate”, such as abortion and

emergency contraception. Meghan, a nurse, explained, “They [were] frowned upon doing [full options] counselling there...As a nurse, I don’t really think that’s ethical.” Key informants reported that educators in Catholic schools were struggling to balance the need to meet the provincial mandate and adhere to religious values and teaching related to SRH issues. This tension was based on a different motivation regarding the purpose of sexual health education than that in public schools. Daniel, a principal from a rural Christian private school, explained, “[They] strive to maintain a religious community irrespective of public systems.”

4. Discussion

4.1 General implications

Our findings indicate there are significant inconsistencies in the quality and depth of SRH education in rural schools in Ontario. Variability in the content covered by educators is, in part, rooted in confusion over which curriculum to use. The 1998 curriculum is unquestionably outdated. Studies since the implementation of the 1998 curriculum demonstrate significant gaps in adolescents’ understanding of sexual and reproductive health, particularly in the understanding of STIs (Larkin et al., 2017; Kumar et al., 2013). The 1998 curriculum also does not include information on advances in sexual and reproductive health, including the introduction of emergency contraception and medication abortion drugs in Canada. Further, topics like online safety, sexual orientation and gender identity, consent, and healthy relationships are at the forefront of today’s sexual health conversations, but are not included in the older curriculum. The 2015 curriculum addressed these gaps but was subsequently prevented from being implemented. After further consultation with the public, a sexual health curriculum, deemed ‘age-appropriate’ by the education Minister (Ministry of Education, 2019), was finalized for

implementation fall of 2019. This is an important step in improving school-based sexual health education and meeting the practical and current needs of adolescents.

But even when the new curriculum is unveiled, consistent implementation will depend on trained educators. Of course, using professional judgment is critical for educators in order to make instructional decisions to meet students' learning needs (Scales et al., 2018). However, our results suggest that some educators are uncomfortable teaching sexual health education and others are not teaching information they deem inappropriate. Using the opportunity of the new curriculum to engage in values clarification exercises with educators and school boards appears warranted.

Finally, top-down approach to disseminating curricular updates and new modules appears to be a barrier to teaching on sexual health. An important aspect of effective teaching is training that fosters facilitator competence and confidence (McCall, 2004; McKay, 1999). The employment of diverse teaching strategies appears instrumental to building this competence and is supported by adult learning theory (Lawson, 2006; Storey et al., 2015). Person-to-person information sharing, role-playing, and seeing practice ideas in action help develop a concrete sense of knowing how, in addition to building on a more basic knowledge of 'what' (Storey et al., 2015). With the release of the new curriculum there is an opportunity to foster the sharing of best practices that resonate with adolescents.

4.2 Limitations

This study aimed to gain a better understanding of adolescents' knowledge of and experiences with contraception. While the experience with the sexual health curriculum was not the sole focus of this project, participants provided valuable insight into different circumstances surrounding the teaching of SRH within rural Ontario. However, we did not recruit participants specifically to reflect on this issue. Further, we did not design our study instruments to focus on school-based sexual health education. These conversations emerged organically in our early interviews at which point we were more deliberate about probing on related topics. This necessarily means we did not explore these issues as fully with our early participants. Finally, although we are confident that the themes we identified are meaningful and likely transferable to other rural areas, we used a multi-methods qualitative approach and thus the findings are not representative or generalizable.

4.3 Future Research

Given the continual changes in the Ontario government's sexual health curriculum mandate, additional research on school-based implementation would be of value. Research on the new sexual health curriculum could provide vital insight into how educators and students respond to the content.

4.4 Conclusion

Sexual health education is a frontline tool for health promotion and risk prevention for Ontario youth. However, the inconsistencies in content and comprehensiveness diminish the potential impact. Supporting and enforcing policies to ensure consistent and medically accurate school-based SRH programs appears warranted. Ensuring that the mandated curriculum is being delivered as described by the Ministry of Education and eliminating the top-down approach to disseminating curricular updates could address the information barriers that are experienced by both educators and their students.

References

- Barr, E.M., Goldfarb, E.S., Russell, S., Seabert, D., Wallen, M. & Wilson, K. L. (2014). Improving sexuality education: the development of teacher-preparation standards. *J Sch Health* 84(6): 396-415. Doi: 10.1111/josh.12156.
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41(5), 545–547. <https://doi.org/10.1188/14.ONF.545-547>
- DiCenso, A., Borthwick, V. W., Busca, C. A., Creatura, C., Holmes, J. A., Kalagian, W. F., & Partington, B. M. (2001). Completing the Picture: Adolescents Talk About What’s Missing in Sexual Health Services. *Canadian Journal of Public Health / Revue Canadienne de Sante’e Publique*, 92(1), 35–38.
- Ezer, P., Leipert, B., Evans, M., & Regan, S. (2016). Heterosexuals female adolescents’ decision-making about sexual intercourse and pregnancy in rural Ontario, Canada. *Rural and Remote Health* 16: 3664. Available from: www.rrh.org.au/journal/article/3664
- Farmer, E., Fleming, N., Black, A., & Dumont, T. (2018). Where Are We in Terms of Sexual Health Education: An Ontario Perspective. *J Obstet Gynaecol Can.* 1-3. <https://doi.org/10.1016/j.jogc.2018.11.001>
- Grondin, H. 2016. *A Century Long Debate over Sexual Education in Ontario*. Active History. Available from: <http://activehistory.ca/2016/02/a-century-long-debate-over-sexual-education-in-ontario/>
- Guest, G., Namey, E. M., & Mitchel, M.L. (2013). Qualitative Research: Defining and Designing in (1st ed.) *Collecting qualitative data: A field manual for applied research*. (1-36). Thousand Oaks: SAGE Publications.
- Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>
- Kumar, M. M., Rodrick, L., Langford, C., Seabrook, J., Speechley, K. N., & Lynch, T. (2013). Sexual knowledge of Canadian adolescents after completion of high school sexual education requirements. *Paediatric Child Health*, 18(2), 74–80.
- Larkin, J., Flicker, S., Flynn, S., Layne, C., Schwartz, A., Travers, R., Pole, J., & Guta, A. (2017). The Ontario Sexual Health Education Update: Perspectives from the Toronto Teen Survey (TTS) Youth. *Canadian J of Education*. 40:2.
- Lawson, K. (2006). *The trainer’s handbook* (2nd ed.). San Francisco, CA: Pfeiffer.
- McCall, D., McKay, A. & Society of Obstetricians and Gynaecologists of Canada. (2004). SOGC policy statement: school-based and school-linked sexual health education and promotion in Canada. Ottawa: *SOGC*. 26(4): 596–600.

- McKay, A & Barrett, M. (1999). Pre-service sexual health education training of elementary, secondary, and physical health education teachers in Canadian faculties of education. *Canadian Journal of Human Sexuality*. 8. 91-101.
- McKay A, & Bissell M. (2010). *Sexual health education in the schools: questions & answers, third edition*. Toronto: Sex Information and Education Council of Canada.
- Ministry of Education. 2019. Curriculum: Teachers. Available at: <http://www.edu.gov.on.ca/eng/teachers/curriculum.html>
- Morgan, R. (1992). Educational Reform: Top-Down or Bottom-Up? *Educational Technology*, 32(11), 47-51. <http://www.jstor.org/stable/44425492>
- Ontario Progressive Conservatives. (2018). *ON Education Doug Ford Will Respect Parents and Get Back to Basics*. Available from: https://www.ontariopc.ca/on_education_doug_ford_will_respect_parents_and_get_back_to_basics
- Phillips, K. & Martinez, A. (2010). Sexual and Reproductive Health Education: Contrasting Teachers', Health Partners' and Former Students' Perspectives. *Can J Public Health*. 101(5): 374-79.
- Public Health Agency of Canada. (2008). Canadian guidelines for sexual health education. Ottawa: *Public Health Agency of Canada*; 13(3). Available from: <http://sieccan.org/pdf/guidelines-eng.pdf>
- Scales, R. Q., Wolsey, T. D., Lenski, S., Smetana, L., Yodeer, K. K., Dobler, E., Grisham, D. L., & Young, J. R. (2018). Are We Preparing or Training Teachers? Developing Professional Judgment in and Beyond Teacher Preparations Programs. *J. of Teacher Ed*. 69(1): 7-21. <https://doi.org/10.1177%2F0022487117702584>
- SIECCAN. (2015). Sexual health education in the Schools, Questions & Answers Updated 2015 Edition. Available from: <http://sieccan.org/wp/wp-content/uploads/2015/08/SIECCAN-QA-Sexual-health-education-in-the-schools-2015-Ontario.pdf>
- Storey, K., Montemurro, G., Schwartz, M., Farmer, A., & Veugelers, P. J. (2015). Preparing School Health Facilitators: Building Competence and Confidence for a New Role. *PHEnex Journal*. 7(2). <http://www.appleschools.ca/files/PreparingSchoolHealthFacilitators-BuildingCompetence&ConfidenceNewRole.pdf>

Major sexual and reproductive health topics covered in school based sexual health education program		
	Educational site	
<i>KI Perspective</i>	Public school	Catholic school
Reproductive anatomy Pregnancy Contraception STIs Relationships	Basic science of reproductive anatomy Consequence of sexual activity How to use a condom How to access emergency contraception/contraception Options counselling, including abortion Online safety Basis of healthy relationships	Basic science of reproductive anatomy Consequence of sexual activity How to be abstinent Limited discussion on contraception Limited access to contraception No discussion of emergency contraception or abortion Restricted options counselling Healthy relationships Religious perspectives on family planning
<i>Adolescent Perspective</i>	Public school	Catholic school
Reproductive anatomy Pregnancy Contraception STIs Relationships	Reproductive anatomy Demonstrative instruction (condoms) Full range of contraceptive methods Sexual intercourse Consequences of sexual activity (Pregnancy, STIs)	Reproductive anatomy Limited discussion on contraceptive methods No demonstrative instruction Focus on abstinence STI symptoms

Figure 1. Adolescents’ and educators’ perspectives on the content of sexual health education

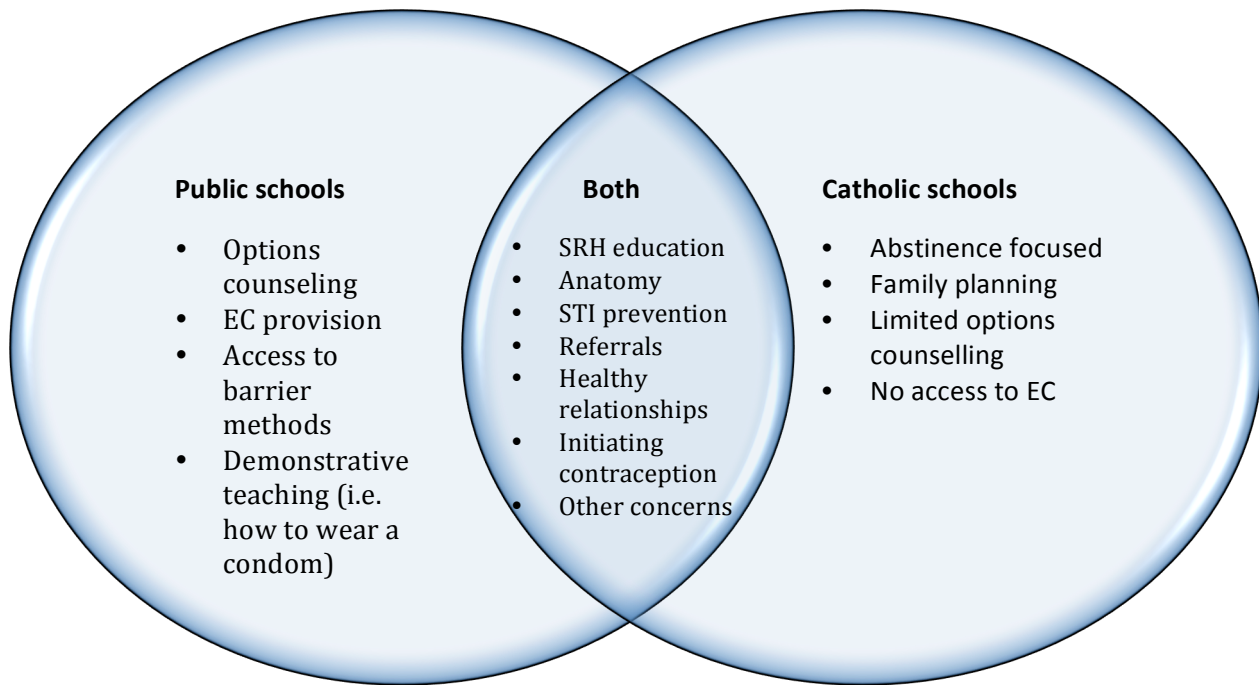


Figure 2. Scope of practice of school nurses

Chapter 5: Discussion of the findings

Integration of results

Through this project we aimed to conduct an in-depth, rigorous investigation of the contraceptive knowledge and experiences of adolescents living in rural Ontario. By analyzing adolescents' knowledge of, access to, and use of contraception and then analyzing the experiences of health care providers and other role models, a clear story emerged about contraceptive services in rural parts of the province. Adolescents' reported experiences suggest that the need for accessible information and readily available contraceptive methods is considerable. The results of our three-part study highlighted three main findings: 1) Lack of knowledge is rooted in the inconsistent delivery of the sexual health information; 2) Accessing resources and services from health centres in rural Ontario is challenging; and 3) Sociocultural influences have an impact on sexual health decision-making.

Contraceptive knowledge and accessible information

Our findings suggest that there is a lack of knowledge surrounding sexual health, including various methods of contraception. Adolescents identified using peers, school, and the Internet as their main sources for information. As a result, adolescents may find it difficult to decide what sources provide understandable, useful, and medically accurate information (Ettel, Nathanson, Ettel, Wilson & Meola, 2012).

In Canada, youth are the most connected generation to the Internet. The majority of adolescents aged 15-24, who have access to and are able to use the Internet, are connected on a

daily basis from a compatible device (Statistics Canada, 2018). Youth engage in Internet use for a variety of activities including information searching, social media, and recreational activities, such as online gaming (Park & Kwon, 2018). A review of the literature suggests that sexual health is among the most common topics that adolescents are interested in when conducting health-related Internet searches (Park & Kwon, 2018). While the Internet can provide a gateway to sources of information about effective preventive services and health care, it also opens a portal to illegitimate information that could pose danger (Ettel et al., 2012). In fact, some adolescents who participated in our study had difficulty identifying what information is credible. Of course, identifying a source on the Internet also does not guarantee that adolescents will practice healthy behaviours, especially surrounding sexual and reproductive health (Ettel et al., 2012).

Using personal sources such as family, friends, and health care providers for general health information is strongly featured in the lives of adolescents. A review of the literature indicates that parents act as key informants for general health information for adolescents (Gray, Klein, Noyce, Sesselberg & Cantrill, 2005). For example, young women are more likely to consult their mothers than another guardian for health information (Gray et al., 2005; Flores & Barroso, 2017). In our study, many adolescents (n=15) felt comfortable discussing sexual health with their mothers.

The literature also suggests that adolescents often gravitate towards peers for discussing similar health experiences (Gray et al., 2005). While discussing health with close peers can provide a positive opportunity to gain valuable health information, there is also the potential for biased and inaccurate information. In fact, studies have demonstrated that adolescents are aware

of the potential for misinformation and attempt to sift through what they receive (Gray et al., 2005). For some adolescents, health care providers are cited as information sources for sexual health. However, they present further barriers if they don't provide comprehensive sexual health services such as offering information on all available contraceptive methods (Hauck & Costescu, 2015). In this case, it's impossible for adolescents to request further information on contraceptive methods that they are unaware of but may be more suitable for them (Hauck & Costescu, 2015).

Health classes provide adolescents with an opportunity to access sexual health information. For younger adolescents, these classes introduce topics such as gender identity, relationships, and intimacy. For older adolescents in secondary school, courses can teach more detailed information on safe(r) sexual practices, consent and personal limits, and sexually transmitted infections. However, this is not the case in many schools across the province. As discussed in Chapter 4, adolescents received inconsistent and sometimes misleading information on sexual health. In some circumstances, the lack of trained educators or an educator who is uncomfortable with the subject matter, is contributing to poor sexual health education (Storey, Montemurro, Schwartz, Farmer & Veugeliers, 2015). In rural areas, these factors are compounded by the lack of external resources to call upon for providing sexual health information (SIECCAN, 2015; Ezer et al., 2016). As such, health class can be a missed opportunity for some adolescents to receive important information on safe sexual behaviours. In our study, many adolescents expressed a desire for improved sexual and reproductive health education.

The key informants who participated in our study explained how lack of knowledge surrounding contraception often leads to misconceptions about different methods. They also

explained that many educators are uncomfortable teaching sexual health and therefore call upon external sources, like community outreach nurses and sexual health counsellors, to teach that module. Some of our key informants expressed the need for more sex-positive sexual and reproductive health education, especially within Catholic settings. They emphasized that proper training for educators is imperative to providing necessary sexual health information to adolescents in a productive, youth-friendly manner.

Physical barriers to accessibility and availability

For some adolescents, their first barrier to accessing contraception stems from their confusion in knowing where to seek out a method. The literature demonstrates that the majority of adolescents do not understand the process required to obtain contraception through a health care provider (Sokkary et al., 2013). Further, many adolescents are surprised to learn that a full health history and physical check up are required when accessing contraception through their HCP (Planned Parenthood, 2019). Most adolescents believe that there is a minimum age at which they are able to access contraception (Planned Parenthood, 2019). As a result, some adolescents resort to using barrier contraceptive method, such as condoms, that can be purchased more conveniently than seeking out prescription methods. However, financial constraints are considerable for adolescents, especially those who have little to no income (Hulme et al., 2015). The associated cost of barrier methods or prescribed methods may be prohibitive for those who are unable to ask for support from a guardian. While OHIP+ may alleviate the cost for some prescribed methods, it has no benefit for adolescents using barrier methods or over-the counter

emergency contraception. And with the recent policy reports, those adolescents with access to private health insurance plans are no longer eligible.

In rural settings, additional barriers compound these overarching difficulties. As discussed in Chapter 3, the geographic distribution of providers, transportation costs, and health care provider experiences were some of the barriers experienced by adolescents. In some areas, the dearth of health care providers leaves adolescents without access to local services (Leipert, Wagner Delaney, Forbes, & Forchuk, 2011). This results in adolescents not seeking out services or having to resort to accessing services in a neighbouring area. However, travel and transportation in and of itself may be prohibitive. In many rural areas, public transportation is nonexistent or difficult to access (Transport Canada, 2006). This results in adolescents having to rely on a peer or guardian for transportation, if walking is not an option (Kenney & MacPhee, 2006; Ezer et al., 2016).

In some areas of Ontario, general health care providers are the only option for accessing sexual health services. While able to test, treat and diagnose clients for a variety of health conditions, their knowledge and comfort in providing sexual health counselling may be limited (Clark, Brey, Banter & Khubchandani, 2012). As such, many providers resort to offering OCs as their main option, which may not be suitable for all adolescents.

Our key informants identified time constraints, lack of resources, and geographic accessibility as barriers to providing contraception to adolescents. Instability in or a lack of administrative assistance can create time constraints for HCPs in rural settings (Hunsberger, Baumann, Blythe & Crea, 2009). Time lost to paperwork that would otherwise be handled by other staff at larger clinics, reduces dedicated time for client appointments. For some health care

providers, a lack of supply may be an important determinant in providing contraception to adolescents (Dunn, Anderson & Bierman, 2009). For methods that are not as commonly requested, such as the IUD, HCPs may refer their client to another professional. However, this can result in adolescents being unable to further access services or their preferred method due to the location of the referred provider.

Supported decision-making and personal priorities

For adolescents, their prioritized personal needs can be influenced by their individual values, family expectations, friends' influences, and community influences. The process of prioritizing begins with assessing these different influences and determining which influence(s) affect(s) their decision-making the most (Ezer et al., 2016). In rural settings, some communities are extremely tight knit, sharing similar core values and having mutual expectations as a whole. In some areas, there are few differences between family and community expectations of adolescents. Especially in a rural context, these influences become embedded within the sexual decision-making process of adolescents (Ezer et al., 2016).

Contrary to the literature, our findings showed that many adolescents (n=15) consulted a guardian, primarily a mother, during the decision-making process surrounding contraception. Close bonds, health care experiences, and the need for approval from a guardian were among some of the reasons adolescents sought the help of a parent. A significant proportion of adolescents (n=11) divulged reasons for using contraception including treating acne, regulating their periods, and mitigating cramps. However, it seems as though adolescents (n= 6) who are

seeking contraception to prevent unintended pregnancy often keep this reason private. Through consultations with their guardians, some adolescents (n=3) determine their choice of method prior to speaking with a HCP. This demonstrates the influence that relationships and dynamics within the family have over the decision-making process.

Suggestions for improving access to sexual health information

Our findings suggest that rural Ontarian adolescents' overall knowledge of contraception is low. Misinformation and lack of knowledge indicates an increased need for education in schools, in provider offices, and through electronic sites (Sokkary et al., 2013). Within school systems, the implementation of the new sexual health curriculum proposes to address a major gap in the sexual health knowledge of Ontario students. However, to ensure proper delivery, training for educators is imperative. Training should include workshops focused on teaching strategies and navigating common questions that may arise within the classroom setting. As many rural physicians and nurse practitioners take on a general role of caregiver to the community, some may be uncomfortable providing specific sexual and reproductive health sessions. Incentive programs should be considered to entice physicians and other health service providers who have more distant training, in regards to contraceptive methods, to participate and update their knowledge for counselling their clients.

To address adolescents' concerns with contraception, sexual health websites as well as other educational platforms should be used as a main source of increasing youth's knowledge on a variety of methods (Hauck & Costescu, 2015). Education surrounding contraception should

also have a focus on the importance of dual protection in preventing risk of sexually transmitted infections. Future public health initiatives should focus on raising awareness of all options for contraception, emphasizing there is no STI protection in using only hormonal methods, and increasing the access to a variety of methods to maximize adherence (Black et al., 2009). In many cases, adolescents have been found to be self-learners. Information about contraceptive methods that is easily available through the Internet and health resource centers will help to better target adolescents (Hauck & Costescu, 2015).

Adolescents in our study suggested several ways for improving access to sexual health information. Some suggested the use of brochures, advertisements, and posters to promote key sexual health messaging and locations for sexual health services. As well, many discussed wanting a more enriched sexual health education. While the update to the curriculum does not benefit the adolescents who participated, it will be interesting to see what future research finds in regards to the outcome of the curriculum update.

Suggestions for improving contraceptive services

Our study documents a number of obstacles that adolescents face when trying to access contraception. For instance, many of the adolescents who participated in our study would not have been able to access services without the support of a family member. As well, contraceptive counselling was limited to methods that were immediately available in that area; for some, this meant that OCs were the only option discussed. During our study all of the adolescents who participated were able to access OHIP+. This alleviated some of the financial constraints that

may have arisen. However, the OHIP+ program does not cover all prescription contraceptive methods. For instance, the hormonal patch, the CVR and the IUD are all methods that are not covered under this formulary. Fortunately for the few adolescents using these options, they were able to access coverage for these methods through private health insurance and other government plans including the Ontario Disability Support Program (ODSP).

OHIP+ is a program for youth 24 years and under dedicated to providing drug coverage, under the Ontario Drug Benefit (ODB) program, for over 4,000 prescribed medications. In April of 2019, OHIP+ was scaled back to focus its benefits on children and youth without access to private drug plans. As such, children and youth with a private plan have their prescription medications covered through those plans as they did prior to the introduction of OHIP+. For families that have significant monthly out-of-pocket prescription drug costs in comparison to their income, they can apply as a household for financial support through the Trillium Drug Program (TDP), which provides similar coverage as the ODB and OHIP+. However, for adolescents who would like to keep their contraceptive needs confidential, accessing both private plans and the TDP may not be an option without parental involvement. For those who are eligible for OHIP+ but want to use non-covered methods, they or their families are responsible for the out-of-pocket and sometimes substantial costs associated with those methods. Our findings align with those in the sexual and reproductive health community who have called for full coverage of all contraceptive methods.

The Ministry of Health and Long-term Care developed a framework for improving healthcare in rural, remote, and Northern areas of Ontario. The vision of this framework is to build a health care system that provides appropriate access and achieves equitable outcomes for

rural, remote, and northern Ontarians (MOHLTC, 2017). Integrating providers, services, and technology are some of the guiding principles for improved rural health care (MOHLTC, 2017). Using the guiding principles of this framework, *Echo: Improving Women's Health in Ontario* highlighted key ways to better address the needs of rural and Northern women (2011). Unfortunately, this was the only known program dedicated to improving women's health in the province and has been defunct for about 7 years with no prospect of reintroduction.

For women and youth, sexual and reproductive health is an important component of comprehensive health care (Di Meglio, Crowther & Simms, 2018). As such, HCPs must facilitate access to contraception and reinforce safer sexual practices for all youth. Counselling surrounding sexual activity, contraception, and the prevention of sexually transmitted infections should start early and continue throughout adolescence into adulthood (Di Meglio et al., 2018). In addition to effective health counselling, accessible, affordable contraception is imperative to well-rounded sexual health care. In several regions of Ontario, public health units are providing access to barrier-free sexual and reproductive health care. Through funding, many clinics are able to offer a variety of low-cost contraceptive methods for anyone with a prescription (Niagara Region, 2019; Porcupine Health Unit, 2019; Public Health Ottawa, 2019). For instance, in the Niagara region, a full range of contraceptive methods, including Depo-Provera and the IUD, are available at a reduced cost (Niagara Region, 2019). To continue to improve accessibility and availability in rural areas of Ontario, these initiatives should be replicated.

In our study, adolescents expressed interest in having more access to school nurses. There is a recognized relationship between school nurse availability and overall student wellness (Council on School Health, 2008). The role of a school nurse encompasses both health and

education. School nurses perform an integral role within school health programs by addressing major health concerns of adolescents, including sexual health (Council on School Health, 2008). Their position provides an opportunity for partnerships between schools and community physicians and organizations (Council on School Health, 2008).

Key informants demonstrated interest in nurses having prescribing authority for contraception. Currently in Ontario, physicians and/or nurse practitioners can issue medical directives authorizing nurses to administer and/or supply treatment, medicines, and controlled drugs (College of Nurses Ontario, 2018). Several key informants' public health units employ standing orders within their sexual health centres for providing contraception. The intention for standing orders is to improve clients' timely access to medications (College of Nurses Ontario, 2018). However, in cases where a client has a risk factor for using contraception, for example a family history of blood clots, a nurse must refer the client to another health care provider, such as a nurse practitioner, for further evaluation of their eligibility to use contraception. In 2017, the Ministry of Health and Long-term Care notified the College of Nurses (CNO) in Ontario to begin to work toward authorizing registered nurses to prescribe medications. While approved at the ministry level, registered nurses will not have prescribing authority until the college creates new regulations under the Nursing Act, which they are currently working toward. Once enacted, registered nurses with prescribing authority will become an integral component to providing care in rural Ontario.

Significance and implications

To date, there is limited peer-reviewed research focused on rural adolescents' sexual and reproductive health experiences in Ontario. Further, this was the first study that we are aware of with rural adolescents that took place after the initial introduction of OHIP+ in January 2018; it also considers how the effects of the April 1st, 2019 adjustments to OHIP+ may affect adolescents. In completing a rigorous multi-methods study, we undertook an in-depth exploration of current contraceptive availability and accessibility from the viewpoint of both adolescents and key informants. This sheds light on the experiences of adolescents living in rural Ontario. It also creates a snapshot of adolescent knowledge and understanding of contraception as well as sexual and reproductive health services. As a result, we were able to identify barriers to access and availability and explore ways services could be improved in rural Ontario. We believe that this research has contributed to filling a gap in the literature that advocates can use to improve provincial policies and service delivery.

The dissemination of our research findings is necessary in order to promote the implementation of our recommendations. We plan on disseminating our findings through several avenues. In addition to the two manuscripts included in this thesis, we intend to write a third article that focuses specifically on adolescents' knowledge of and experiences with emergency contraception. By publishing these articles we intend to promote knowledge and awareness of the contraceptive experiences of adolescents living in rural Ontario among researchers and academic clinicians. Secondly, we intend to share our findings in the form of a short report written for stakeholders and other providers and organizations in hopes that information from our study can be used to implement change at the local level. Further, all participants who are interested in our study's findings, as indicated in the survey, will also receive a copy of this

report. Finally, we will disseminate the findings of this study at academic conferences in Canada and the US to reach decision-makers and researchers involved in health services.

Strengths and limitations

Given the nature of this project, there were several limitations encountered. First, we used specific definitions of rural to determine eligibility for participation using FSA. These definitions have their limits. We also did not fully differentiate between degrees of rurality. As well, recruitment posed a significant challenge. We utilized social media and listservs as our main recruitment tactics. However, we understand that we likely did not reach all rural communities across the province. For more northern, remote communities, difficulties in identifying social media as well as limited communication channels, for example intermittent Internet connectivity, posed an issue for recruitment. In addition, some community organizations, like school boards and youth groups, were reticent to help with recruitment. The most common reason for their lack of support was their belief that the topic was inappropriate given the age group. For some clinics, not having a parental consent form for participation deterred them from aiding in the recruitment phase even with submission of ethics certificates as well as an application to their internal REBs.

We also experienced significant participant attrition. In previous online surveys conducted by Dr. Foster and her research group, approximately half of those who expressed interest in participating in an interview ultimately scheduled and completed one (LaRoche, Gross, Sheehy & Foster, 2018). However, in this study only one third of those who expressed interest ultimately completed the interview.

I conducted all in-depth interviews with adolescents and key informants, which is both a strength and a limitation. Being the sole interviewer allowed for consistency in conversations and interactions. However, my positionality as a researcher undoubtedly affected my interactions with the adolescent participants. Through formal memoing and study team discussions we believe that we were able to understand the impact of this and appropriately address these influences in order to support the trustworthiness and credibility of the study. Further, by rehearsing the interview guide my interactions appeared more authentic than simply reading off the interview guide.

Finally, qualitative methods provide an excellent mechanism to address gaps in current research. However, these methods are not intended to yield representative and generalizable results. Given this research was designed for graduate thesis, it was not feasible to conduct a large-scale study to include rural communities across Canada. For future studies, this limitation could be addressed by expanding to a national scale.

Positionality and reflexivity

Positionality refers to the understanding of one's facets of self that can have an important effect on the tenor and outcome of the research (Bourke, 2014; McGarry, 2016). These facets can include demographics, beliefs, interests, and situated knowledge. Awareness of positionality has shown to benefit the research and analytic processes by enabling researchers to consider and critically analyze the terms of their inclusion within the collaboration (McGarry, 2016). In youth research, it is important to have a thorough understanding of positionality to understand the

relationality and co-dependence of the interaction (McGarry, 2016). Reflexivity entails active self-awareness and introspection on subjectivity throughout the research process (Palaganas et al., 2017). Reflexivity is a continuous process of reflection on the researcher's values and how they may affect research practice (Palaganas et al., 2017).

As a qualitative researcher, I made an effort to be aware of positionalities and how they could influence my perception and interpretation of the data. As a born and raised Ontarian, I felt I was well suited to undertake research in the province because of my understanding of many of the cultural norms. My lived experience of growing up in a small town provided an understanding for some of the hardships associated with accessing primary health care and other health services in rural settings; as a young Caucasian woman, I identified with many of the adolescent participants in this study. Having been raised in a Catholic household, I felt I was able to mitigate some of the religious sensitivities that occurred due to discomfort in the research topic. Entering into this project with these attributes, I felt that I was flexible and able to empathize, as closely as possible, with the experiences of the adolescents who had sought out contraceptive services.

However, as the researcher there were some inherent differences. While many of my attributes fit the position well, there were times where my racial/ethnic, nativity, and religious background and experiences differed from those of my participants; as well, in times where I shared demographic characteristics, I found that there was some ambiguity in my understanding.

Throughout my interactions with adolescents, I still found that I was personally affected by their experiences. As the interviews progressed, I prompted for more and more information on their experiences specifically with accessing health services and their experiences with the provincial curriculum. I found that I was often comparing my own experience as an adolescent to

theirs; finding many similarities on top of a few very substantial differences. Often, I found comfort in hearing the small successes the system had achieved since my years as an adolescent, but was also concerned by some of the experiences that the more outgoing participants shared.

Having the opportunity to speak to a variety of key informants was a fantastic experience. Gathering perspectives from a variety of professionals helped me to understand better the different influences and constraints each sector experiences in providing accessible and available contraception and sexual health information. Going in, I expected that religious organizations would not embrace the idea of teaching about sexual health and contraception, but I was pleasantly surprised that this was not the case when I spoke with a youth minister. It was humbling to hear that many individuals involved in both healthcare and youth organizations are taking strides to advocate for better sexual health resources. I was fortunate enough to have several educators shine a light on some of the more alarming barriers in rural access. These perspectives made it possible to suggest avenues for change in the accessibility and availability of contraceptive resources.

Through this study I came to the realization that I am motivated to continue to work in improving adolescents' sexual and reproductive health in Ontario. Though I am still hoping to pursue clinical education, I would ideally like to pursue a career that can incorporate both research and practice. In the future, I aspire to lead a sexual health clinic focusing on youth initiatives and to continue expanding my reproductive and sexual health knowledge.

Statement of contribution

I completed this study in partial fulfilment of the requirements for the Master of Science in Interdisciplinary Health Sciences program at the University of Ottawa. In my role, I conceptualized the study, designed the study instruments, collected and analyzed the qualitative data, and led the writing of two research manuscripts.

My supervisor, Dr. Angel M. Foster, supported and worked with me to design a feasible project. She guided me throughout the entire research process beginning with her help in writing the research proposal and application to the REB for ethics approval and in her feedback on the study instruments and tools. She oversaw the project in its entirety; overseeing the data collection, approving codebooks, and discussing interpretations of findings as presented in the manuscripts.

In preparation for this project, I received training during my first year in the program. Dr. Foster provided an intensive two-day workshop on qualitative research methods in which our research group developed skills in qualitative methods as well as in using analytic software, ATLAS.ti, which prepared me for data analysis and management. During my second semester, I completed a directed study supervised by Dr. Foster in which I received further training on how to conduct and transcribe in-depth interviews. Through this directed study, I had the opportunity to conduct interviews for a study focusing on women's experiences using long acting reversible contraception. Finally, as a part of Dr. Foster's research group, we had weekly meetings where I received support from my supervisor and colleagues. These meetings provided me with knowledge surrounding a variety sexual and reproductive health topics.

Conclusion

Despite the decline in pregnancy among teenage women in Canada, parts of Ontario are holding steady. A report from Northern Ontario demonstrated that the number of pregnant adolescents were more than double the provincial average in some service areas (Dag-Labine et al., 2014). Individual factors, such as familial relationships and accessibility to health services, as well as societal factors, including socio-economic status and culture, all play a role in the increasing or decreasing vulnerability of adolescents to pregnancy (Dag-Labine et al., 2014). As a result, these variables have both direct and indirect impact on an adolescent's sexual knowledge and behaviours around sexual intercourse, pregnancy and contraception (Dag-Labine et al., 2014). Understanding how these dynamics shape adolescents' knowledge of and experiences with contraception is crucial to improving and/or expanding available services in rural Ontario.

This study explored adolescents' experiences with and knowledge of contraception and related services as well as their suggestions for improved access and availability of contraceptive services and information. This study served as an in-depth investigation of the circumstances shaping rural adolescents' access to and experiences with contraception in rural Ontario and revealed a number of key findings. Namely, our findings suggest that adolescents often experience difficulties accessing reliable contraceptive information and services. On a personal level, many factors, such as personal priorities, familial beliefs, and knowledge, influence an adolescent's decision-making surrounding contraception. As well, several external factors including geographic access, a lack of service providers and cost have implications for adolescents seeking access contraception. While OHIP+ alleviated some of product cost in 2018,

it is expected that the 2019 amended policy will pose additional financial barriers; especially for those who are keeping their contraception needs confidential. There is and will continue to be a need for increased financial support for adolescents seeking contraception, not only in product cost but also with associated travel costs. Finally, misinformation and a lack of knowledge surrounding contraception indicate a significant need to provide more comprehensive sexual and reproductive health education to youth across rural Ontario.

There are some public health units (PHUs) that strive to offer high quality, accessible services in rural areas. Working within the school setting and offering travelling services between several communities are some of the ways that these PHUs provide accessible sexual health services and contraception. Unfortunately, it is difficult to establish similar services in other areas, which is in part due to the limited staff and resources available in most rural parts of the province. It is essential that similar organizations increase their presence within communities and work with other services that are frequented by adolescents, such as schools and family physicians, to promote their sexual health services.

On an individual level, the availability of youth-friendly sexual health services is important to aid adolescents in increasing their sexual health knowledge and practicing behaviours that may prevent unwanted outcomes such as unintended pregnancy. On a community level, the successful provision of sexual health services and sex-positive information may alter the discourse surrounding contraception and consequently reduce the stigma linked to adolescent use of contraception.

References

- Aldridge, J. (2015). Participatory research with children and young people. In *Participatory research: Working with vulnerable groups in research and practice* (pp. 31-64). Bristol, UK; Chicago, IL, USA: Bristol University Press. doi:10.2307/j.ctt1t8933q.7
- Ando, H., Cousins, R., & Young, C. (2014). Achieving Saturation in Thematic Analysis: Development and Refinement of a Codebook. *Comprehensive Psychology*, 3. <https://doi.org/10.2466/03.CP.3.4>
- Arthur, J. (2014). Doctors do not have the right to discriminate and deny basic health care. Retrieved January 5, 2018, from <http://rabble.ca/columnists/2014/08/doctors-do-not-have-right-to-discriminate-and-deny-basic-health-care>
- Atkins, L., & Wallace, S. (2012). *Qualitative research in education*. Retrieved from <https://ebookcentral.proquest.com>
- Black, A., Yang, Q., Wu Wen, S., Lalonde, A. B., Guilbert, E., & Fisher, W. (2009). Contraceptive use among Canadian women of reproductive age: results of a national survey. *J Obstet Gynaecol Can*, 31(7), 627-640. [https://doi.org/10.1016/S1701-2163\(16\)34242-6](https://doi.org/10.1016/S1701-2163(16)34242-6)
- Bourke, B. (2014). Positionality: Reflecting on the Research Process. *The Qualitative Report*, 19(33), 1-9. <https://nsuworks.nova.edu/tqr/vol19/iss33/3>
- Brown, A. (n.d.). Issues Affecting Access to Health Services in Northern, Rural and Remote Regions of Canada. Retrieved from: <https://www.unbc.ca/sites/default/files/sections/northern-studies/issuesaffectingaccesstohealthservicesinnorthern.pdf>
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41(5), 545-547. <https://doi.org/10.1188/14.ONF.545-547>
- Clark, J. K., Brey, R. A., Banter, A. E., & Khubchandani, J. (2012). The Delivery of Sexuality-related Patient Education to Adolescent Patients: A Preliminary Study of Family Practice Resident Physicians. *Journal of family medicine and primary care*, 1(1), 34-38. doi:10.4103/2249-4863.94449

College of Nurses Ontario (2018). Is it a medical directive or prescribing? Retrieved from: <http://www.cno.org/en/learn-about-standards-guidelines/magazines-newsletters/the-standard/august-2018/medical-directive/>

Council on School Health (2008). Role of the School Nurse in Providing School Health Services. *Pediatrics* 121(5) :1052-1056. DOI : 10.1542/peds.2008-0382.

Crocker, B., Pit, S. W., Hansen, V., John-Leader, F., & Wright, M. L. (2019). A positive approach to adolescent sexual health promotion: a qualitative evaluation of key stakeholder perceptions of the Australian Positive Adolescent Sexual Health (PASH) Conference. *BMC public health*, 19(1), 681. DOI:10.1186/s12889-019-6993-9

Dag-Labine, L., Leggett, L., Caron-Bruneau, M-F., Bedard, M., Theriault, S., Schelling, G., ... & Bayley, T. (2014). Porcupine Health Unit Report on Teen Pregnancy. Retrieved from: <http://www.porcupinehu.on.ca/en/your-community/reports/teen-pregnancy.pdf>

DesMeules, M., Pong, R., Legace, C., Heng, D., Manuel, D., Pitbaldo, R...& Koren, I. (2006). How healthy are rural Canadians? An assessment of their health status and health determinants. Ottawa, Canada: *Canadian Institute for Health Information*. https://secure.cihi.ca/free_products/rural_canadians_2006_report_e.pdf

DiCenso, A., Borthwick, V. W., Busca, C. A., Creatura, C., Holmes, J. A., Kalagian, W. F., & Partington, B. M. (2001). Completing the Picture: Adolescents Talk About What's Missing in Sexual Health Services. *Canadian Journal of Public Health / Revue Canadienne de Sante'e Publique*, 92(1), 35–38. DOI: 10.17269/cjph.92.11

Di Meglio, G., Crowther, C., & Simms, J. (2018). Contraceptive care for Canadian youth. *Pediatr Child Health*. 23(4):271-277. <https://www.cps.ca/en/documents/position/contraceptive-care>

Dunn, S., Anderson, G. M. & Bierman, A. for the POWER Study. (2009). Temporal and regional trends in IUD insertions : a population-based study in Ontario, Canada. *Contraception* 80 :469-473. doi:10.1016/j.contraception.2009.04.004

ECHO: Improving Women's Health in Ontario (2011). Ontario's Rural and Northern Health Care Framework Reflecting Women's Needs. Retrieved from:
<http://www.ontla.on.ca/library/repository/mon/25008/311664.pdf>

Ettel, G., 3rd, Nathanson, I., Ettel, D., Wilson, C., & Meola, P. (2012). How do adolescents access health information? And do they ask their physicians?. *The Permanente journal*, 16(1), 35–38. doi:10.7812/tpp/11-125

Ezer, P., Leipert, B., Evans, M., & Regan, S. (2016). Heterosexual female adolescents' decision-making about sexual intercourse and pregnancy in rural Ontario, Canada, 16, 1–12.
<https://doi.org/http://www.rrhorg.au>

Flores D. & Barroso, J. (2017). 21st Century Parent-Child Sex Communication in the United States: A Process Review. *The Journal of Sex Research*, 54:4-5,532-548. DOI: 10.1080/00224499.2016.1267693

Frappier, J.-Y., Kaufman, M., Baltzer, F., Elliott, A., Lane, M., Pinzon, J., & McDuff, P. (2008). Sex and sexual health: A survey of Canadian youth and mothers. *Paediatrics & Child Health*, 13(1), 25–30.

George, C., Weaver, R., Higginson, A., & Chartier, L. (2015). IMPROVING SEXUAL HEALTH RESOURCES FOR YOUTH: THE USE OF SEX-POSITIVE PUBLIC HEALTH WEBSITES. *International Journal of Child, Youth and Family Studies*, 6, 150–164. <https://doi.org/10.18357/ijcyfs.61201513494>

Globe and Mail (2014). Ontario MDs should not refuse contraception out of religious belief. Retrieved from <https://www.theglobeandmail.com/globe-debate/editorials/ontario-mds-should-not-refuse-contraception-out-of-religious-belief/article22105161/>

Government of Canada. (2008). Pregnancy outcomes by age group (Total pregnancies). Retrieved from <https://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/hlth65a-eng.htm>

Government of Canada, S. C. (2011). Population, urban and rural, by province and territory (Ontario). Retrieved from <https://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo62g-eng.htm>

- Government of Canada, S. C. (2015). Oral contraceptive use among women aged 15 to 49: Results from the Canadian Health Measures Survey. Retrieved from: <https://www.statcan.gc.ca/pub/82-003-x/2015010/article/14222-eng.htm>
- Government of Ontario (2019). Check medication coverage. Retrieved from: <http://www.cno.org/en/learn-about-standards-guidelines/magazines-newsletters/the-standard/august-2018/medical-directive/>
- Gray, N., Klein, J.D., Noyce, P.R., Sesselberg, T.S. & Cantrill, J.A. (2005). Health information-seeking behaviour in adolescence : the place of the internet. *Social Science and Medicine* 60: 1467-1478. doi:10.1016/j.socscimed.2004.08.010
- Grondin, H. 2016. A Century Long Debate over Sexual Education in Ontario. *Active History*. Retrieved from: <http://activehistory.ca/2016/02/a-century-long-debate-over-sexual-education-in-ontario/>
- Qualitative research: defining and designing. (2013). In Guest, G., Namey, E., & Mitchell, M. Collecting qualitative data (pp. 1-40). 55 City Road, London: SAGE Publications, Ltd doi: 10.4135/9781506374680
- Hammarberg, K., Kirkman, M. & De Lacey, S. (2016) Qualitative research methods: when to use them and how to judge them, *Human Reproduction*, 31(3): 498–501, <https://doi.org/10.1093/humrep/dev334>
- Haruna, H., Hu, X., Chu, S., Mellecker, R. R., Gabriel, G., & Ndekao, P. S. (2018). Improving Sexual Health Education Programs for Adolescent Students through Game-Based Learning and Gamification. *Int J of environ research and public health*, 15(9): 2027. DOI:10.3390/ijerph15092027
- Hauck, B., & Costescu, D. (2015). Barriers and Misperceptions Limiting Widespread Use of Intrauterine Contraception Among Canadian Women. *Journal of Obstetrics and Gynaecology Canada: JOGC = Journal d'obstetrique et Gynecologie Du Canada: JOGC*, 37(7), 606–616. [https://doi.org/10.1016/S1701-2163\(15\)30198-5](https://doi.org/10.1016/S1701-2163(15)30198-5)
- Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, 15(9), 1277–1288. <https://doi.org/10.1177/1049732305276687>

Hulme, J., Dunn, S., Guilbert, E., Soon, J., & Norman, W. (2015). Barriers and Facilitators to Family Planning Access in Canada. *Healthcare Policy*, 10(3), 48–63.

Hunsberger, M., Baumann, A., Blythe, J., & Crea, M. (2009). Sustaining the Rural Workforce: Nursing Perspectives on Worklife Challenges. *The Journal of Rural Health*, 25(1), 17-25. DOI:

Kennedy, E. P., & MacPhee, C. (2006). Access to confidential sexual health services. *The Canadian Nurse*, 102(7), 29–31.

Kirkey, S. (2015). Doctors who refuse to provide services on moral grounds could face discipline under new Ontario policy. Retrieved January 5, 2018, from <http://nationalpost.com/news/canada/doctors-who-refuse-to-provide-services-on-moral-grounds-could-face-discipline-under-new-ontario-policy>

Leipert, B., Wagner Delaney, J., Forbes, D., & Forchuk, C. (2011). Canadian Rural women's experiences with rural primary healthcare nurse practitioners, 11(1), 37–51.

McCall, D., McKay, A. & Society of Obstetricians and Gynaecologists of Canada. (2004). SOGC policy statement: school-based and school-linked sexual health education and promotion in Canada. Ottawa: SOGC. 26(4): 596–600. [https://doi.org/10.1016/S1701-2163\(16\)30380-2](https://doi.org/10.1016/S1701-2163(16)30380-2)

McKay A, & Bissell M. (2010). Sexual health education in the schools: questions & answers, third edition. Retrieved from : http://sieccan.org/wp-content/uploads/2018/05/SIECCAN_Q-A-Sexual-health-education-in-the-schools.pdf

McGarry, O. (2016). Repositioning the research encounter: exploring power dynamics and positionality in youth research. *International Journal of Social Research Methodology*. 19(3):339-354. <https://doi.org/10.1080/13645579.2015.1011821>

Ministry of Education. (2019). Curriculum: Teachers. Retrieved from: <http://www.edu.gov.on.ca/eng/curriculum/secondary/health9to12.pdf>

Ministry of Health and Long-Term Care (2017). Rural and Northern Health Care Framework/Plan: Stage 1 Report. Retrieved from: http://www.health.gov.on.ca/en/public/programs/ruralnorthern/docs/report_rural_northern_EN.pdf

- Niagara Region. (2019). Birth Control. Retrieved from:
https://www.niagararegion.ca/living/health_wellness/sexualhealth/birth-control.aspx
- Ontario Progressive Conservatives. (2018). ON Education Doug Ford Will Respect Parents and Get Back to Basics. Retrieved from:
https://www.ontariopc.ca/on_education_doug_ford_will_respect_parents_and_get_back_to_basics
- Ottawa Public Health. (2019). Sexual Health Clinic. Retrieved from:
<http://www.ottawapublichealth.ca/en/public-health-topics/sexual-health-clinic.aspx>
- Palaganas, E. C., Sanchez, M. C., Molintas, M. P., & Caricativo, R. D. (2017). Reflexivity in Qualitative Research: A Journey of Learning. *The Qualitative Report*, 22(2), 426-438.
<https://nsuworks.nova.edu/tqr/vol22/iss2/5>
- Park, E., & Kwon, M. (2018). Health-Related Internet Use by Children and Adolescents: Systematic Review. *Journal of medical Internet research*, 20(4), e120.
doi:10.2196/jmir.7731
- Phillips, K. & Martinez, A. (2010). Sexual and Reproductive Health Education: Contrasting Teachers', Health Partners' and Former Students' Perspectives. *Can J Public Health*. 101(5): 374-79. <https://doi.org/10.1007/BF03404856>
- Planned Parenthood (2019). Accessing Birth Control on Your Own Terms. Retrieved March 01, 2019, from <http://teenhealthsource.com/birthcontrol/birth-control/>
- Porcupine Health Unit. (2019). Birth Control Options and Cost. Retrieved from:
<http://www.porcupinehu.on.ca/en/your-health/sexual-health/prices/>
- Public Health Canada. (2017). Report on Sexually Transmitted Infections in Canada: 2013-2014. Retrieved January 10, 2018, from <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/report-sexually-transmitted-infections-canada-2013-14.html#a33>

- Sagor, R. (2000). *Guiding School Improvement with Action Research*. Association for Supervision and Curriculum Development.
- SIECCAN. (2015). Sexual health education in the Schools, Questions & Answers Updated 2015 Edition. Retrieved from: <http://sieccan.org/wp/wp-content/uploads/2015/08/SIECCAN-QA-Sexual-health-education-in-the-schools-2015-Ontario.pdf>
- Sokkary, N., Mansouri, R., Yoost, J., Focseneanu, M., Dumont, T., Nathwani, M., ..., Dietrich, J.E. (2013). A multicenter survey of contraceptive knowledge among adolescents in North America. *Journal of Pediatric and Adolescent Gynecology*. 26: 274-276. DOI: 10.1016/j.jpog.2013.04.010
- Statistics Canada (2018). A portrait of Canadian youth. Retrieved from: <https://www150.statcan.gc.ca/n1/pub/11-631-x/11-631-x2018001-eng.htm>
- Storey, K., Montemurro, G., Schwartz, M., Farmer, A., & Veugelers, P. J. (2015). Preparing School Health Facilitators: Building Competence and Confidence for a New Role. *PHEnex Journal*. 7(2). <http://www.appleschools.ca/files/PreparingSchoolHealthFacilitators-BuildingCompetence&ConfidenceNewRole.pdf>
- Thomas, D. R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*. 27(2): 237-246. DOI: 10.1177/109821400283748
- Transport Canada. (2006). Sustainable Transportation in Small and Rural Communities. Retrieved from: http://publications.gc.ca/collections/collection_2012/tc/T41-1-61-eng.pdf
- Wadman, R., Thul, D., Elliott, A.S., Pritchard Kennedy, A., Mitchell, I. & Pinzon, J.L. (2014). Adolescent confidentiality: Understanding and practices of health care providers, *Paediatrics & Child Health*, 19(2): e11-e14. <https://doi.org/10.1093/pch/19.2.e011>

Appendix A: REB approval for key informant interviews

File Number: 04-18-02

Date (mm/dd/yyyy): 05/04/2018



Université d'Ottawa **University of Ottawa**
Bureau d'éthique et d'intégrité de la recherche Office of Research Ethics and Integrity

Ethics Approval Notice

Social Sciences and Humanities REB

Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Angel	Foster	Health Sciences / Others	Supervisor
Nicola	Brogan	Health Sciences / Others	Student Researcher

File Number: 04-18-02

Type of Project: Master's Thesis

Title: Exploring the contraceptive experiences of adolescents living in rural Ontario

Approval Date (mm/dd/yyyy)	Expiry Date (mm/dd/yyyy)	Approval Type
05/04/2018	05/03/2019	Approval

Special Conditions / Comments:
N/A

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