

**Exploring the knowledge, attitudes, and experiences of young mothers in Ottawa:**

**A qualitative study dedicated to “rapid repeat” pregnancy**

By: Elyse Fortier

Supervisor: Angel M. Foster, DPhil, MD, AM

School of Interdisciplinary Health Sciences

Faculty of Health Sciences

University of Ottawa

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## **Abstract**

“Rapid repeat pregnancy”, which is common among young mothers, is the onset of pregnancy within 24 months of a previous pregnancy outcome. Teenage motherhood is associated with many economic, social, and health challenges. These challenges often become more serious and more difficult to manage after a subsequent delivery. The circumstances surrounding rapid repeat pregnancy among young mothers living in Ottawa remain unclear. This study explores the experiences, knowledge, and attitudes of young mothers towards rapid repeat pregnancy and contraception through a multi-method study. The multi-method study includes in-depth interviews with young mothers living in Ottawa who have experienced rapid repeat pregnancy and in-depth interviews with services providers who work with them.

Results from the interviews indicate that young mothers often do not use post-partum contraception, actively and passively plan their pregnancies, experience violence, and have mental health and substance abuse issues. Many young mothers expressed that trying to access services, especially mental health support services, can be a long and difficult process. Key informants expressed the need for more sex-positive, youth-friendly sexual and reproductive health education. There is a need to identify and further develop youth-friendly services that young mothers feel comfortable accessing. Supporting efforts to increase adolescent mothers’ and service providers’ awareness of existing services appears warranted.

## **Résumé**

Une grossesse à répétition comprend une grossesse dans les 24 mois suivant une grossesse antérieure. Les grossesses à répétitions sont fréquentes chez les jeunes mères. Devenir parent tant qu’adolescent est souvent associé à de nombreux défis économiques et sociaux. Ces défis deviennent souvent plus sérieux et plus difficiles à gérer après la naissance d’un autre enfant. Les circonstances encadrant les grossesses à répétition chez les jeunes mères vivant à Ottawa restent peu claires. Cette étude explore les expériences, les connaissances et les attitudes des jeunes mères envers les grossesses à répétitions et envers différentes méthodes de contraception. Cette étude multi-méthodes comprend des entrevues avec des jeunes mères vivant à Ottawa qui ont connu une grossesse à répétition et des entrevues avec des fournisseurs de services qui travaillent avec des jeunes mères.

Les résultats des entrevues indiquent que les jeunes mères n'utilisent pas souvent de contraception suite à leur livraison, planifient activement et passivement leur grossesse, expérience différentes formes de violence et ont des problèmes de santé mentale et de toxicomanie. Plusieurs jeunes mères ont exprimé de la difficulté en essayant d’accéder des services de soutien. Particulièrement, elles éprouvent de la difficulté en accédant des services de soutien à la santé mentale. Les fournisseurs de services ont exprimé le besoin d'une éducation en santé sexuelle et reproductive plus favorable à la jeunesse. Il semble nécessaire d'identifier et de développer des services adaptés aux jeunes que les jeunes mères se sentent à l'aise d'accéder. De plus, il semble justifié de soutenir des efforts visant à sensibiliser les mères et les fournisseurs de services aux nombreux services de soutien disponible aux jeunes mères dans la communauté d’Ottawa.

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## **List of acronyms and abbreviations**

CAS	Children's Aid Society
EM	Emily Murphy Non-Profit Housing Corporation
IDI	In-depth interview
IPV	Intimate partner violence
IUD	Intra-uterine device
IUS	Intra-uterine system
LARC	Long-acting reversible contraception
LEAP	Learning, Earning and Parenting Program
MES	Canadian Maternity Experiences Survey
OHIP	Ontario Health Insurance Plan
OW	Ontario Works Program
PI	Principal investigator
PPO	Planned Parenthood Ottawa
RC	Reproduction coercion
REB	Research Ethics Board
SOGC	Society of Obstetricians and Gynaecologists of Canada
STI	Sexually transmitted infection

## **Chapter 1: Introduction**

### **1.1 Background**

#### **1.1.1 Teenage motherhood**

Teenage mothers are defined as women who have had their first child before the age of twenty (Wilson, Fowler & Koo, 2013). Teenage childbearing and parenting is associated with a range of negative physical, mental, and psychosocial outcomes (Harrison et al., 2016; Harrison et al., 2014; Beers & Hollo, 2009). Young mothers are at higher risk of having being unemployed or underemployed, living in poverty and in an unhealthy/unsafe environment, having a large family and an unstable household situation, and raising their child as a single parent (Sober et al., 2017; Kingston et al., 2012; Luong, 2008; Singh, Darroch & Frost, 2001). Further, research has demonstrated that teen mothers often lack a healthy support system, experience high levels of stress, and miss out on important educational opportunities (Al-Sahab et al., 2012; Kingston et al., 2012; Pinzon & Jones, 2012; Luong, 2008).

A confluence of social, economic, and educational dynamics shape the life course of many teen mothers. For example, teen mothers often leave school during their pregnancy, childbirth, and the early child rearing process. As a result, on-time completion of a high school diploma is compromised, as is future enrollment in post-secondary education. This impacts skill and credential acquisition which further limits employment opportunities (Al-Sahab et al., 2012; Luong, 2008; Letourneau, Stewart & Barnfather, 2004). These overarching socio-economic dynamics have an impact on the health of both teen mothers and their children. Teen mothers are more likely to be exposed to environmental stressors and develop depression and anxiety than non-parenting teens (Harrison, 2016; SmithBattle & Freed, 2016; Hodgkinson, 2014; Al-Sahab et al., 2012). Children of teenage mothers are at greater risk for educational disabilities and mental health disorders than children born to older parents (Harrison et al., 2016; Kingston et al., 2012, Lipman, Georgiades & Boyle, 2011; Teen Parent Child Care Quality Improvement Project, 2005b). Mental health is imperative in order to achieve overall health and well-being (Ottawa Public Health, 2014). Children of teenage mothers are also 25 % more likely themselves to become adolescent parents, thereby contributing to a complex and vicious cycle (Luong, 2008).

These educational, socio-economic, and health dynamics can have a negative influence on the development of the mother-child relationship. Teenage mothers are more likely to exhibit difficulty with the tasks of early parenthood (Letourneau, Stewart & Barnfather, 2004). Adolescent mothers are still in a significant developmental period of their lives. They have the important responsibility of parenthood with the added stresses and conflicts that typically arise during adolescence. This cognitive immaturity as well as the social conditions associated with adolescent motherhood may result in adverse outcomes, such as the limited emotional availability of the mother, which may lead to poor mother-infant interactions (Barnfather, 2004). A healthy mother-infant attachment tends to have more favorable long-term outcomes, while insecurely attached infants are more likely to have adverse outcomes such as poor mental health later on in life (Kelty Mental Health Resource Centre, 2014). The relationship between age at motherhood and parenting ability is multifaceted and complex.

Moreover, pregnant teens are at greater risk of developing health problems, such as anaemia, hypertension, pre-eclampsia and depressive disorders, which in turn could impact their infants' development (Ontario Ministry of Health and Long-Term Care, 2008; Wilson, Fowler & Koo, 2011). Due to physical immaturity and inadequate prenatal care, children of teen mothers are more likely to have low birth weight or be born preterm and, as a result, may be more likely to experience increased infant and childhood morbidities. Such infants are at increased risk for poor health outcomes, and their care involves substantial health system costs. However, the current rate of low birth weight infants being born to teenage mothers in Ottawa, Ontario, has not been established.

Although teenage pregnancy and parenthood are often viewed as problematic, it is important to acknowledge that many young mothers are very successful with the task of parenthood. For many young women becoming a parent can have a positive effect on their lives. Motherhood can help them develop resiliency and provide them with motivation to succeed. Their young age does not necessarily affect their ability to parent or to provide for their children (Anwar & Stanistreet, 2015; Al-Sahab et al. 2012). Also, the experiences of adolescent mothers may vary based on their age. Mothers that are of a younger age, for

instance 14 years old, will experience different circumstances and challenges than a mother that is 19 years of age.

### **1.1.2 Rapid repeat pregnancy**

“Rapid repeat pregnancy” – that is, the onset of pregnancy within 24 months of a previous pregnancy outcome – is common among teen mothers (Leftwich & Alves, 2017; Fleming, 2015; Luong, 2008). Indeed, recent studies have demonstrated that as many as 25% of adolescent mothers, women who have conceived their first child before the age of 20, will have a second child within two years of the first birth (Leftwich & Alves, 2017; Fleming, 2015; Luong, 2008). Adolescent mothers who carry a subsequent pregnancy to term and choose to parent are at even greater risk of negative health and socio-economic outcomes (Patchen, LeTourneau, & Berggren, 2013; Pinzon & Jones, 2012; Rotermann, 2007), including giving birth to a low weight infant and living in a low-income neighbourhood, than adolescent mothers overall (Rotermann, 2007). According to Rotermann (2007), the overall Canadian proportion of subsequent birth that were low weight in Canada was significantly higher for teen mothers than for mothers aged 25-34.

The issues already present after the first childbirth often become more serious and difficult to manage. Subsequent child births are strongly associated with lower level of education, living in poverty, increased dependence on governmental support, delayed initiation of prenatal care, increased infant mortality, and low birth weight/premature birth (Patchen, LeTourneau & Berggren, 2013; Pinzon & Jones, 2012; Rotermann, 2007). According to a study conducted in the United States, 19% of adolescent mothers experienced a pregnancy within one year of delivery and 38% of adolescent mothers within two years of delivery. Of those 38%, 17% decided to parent the child (Pinzon & Jones, 2012). In Canada, between 1992 and 2003, 25,000 adolescents had a subsequent birth (Rotermann, 2007). There are not any statistics on the rate of this specific phenomenon in Ottawa, Ontario.

Pinzon & Jones (2012) have identified key factors that are associated with rapid repeat pregnancies in the United States. The main factors include:

not returning to school within 6 months after delivery, being married or living with a male partner, receiving major child care assistance from the adolescent's mother, not using a long-acting contraceptive within 3 months of delivery, experiencing intimate partner violence (IPV), and having peers who were adolescent parents. (Pinzon & Jones, 2012, p. 1746).

Similar analyses have been conducted in Canada. In the Canadian Maternity Experiences Survey (MES), a strong association has been established between adolescent parents and intimate partner violence (Harrison, 2014; Al-Sahab et al., 2012; Kingston et al., 2012). Teenage mothers are at high risk of experiencing abuse, whether physical, emotional, and/or sexual, before, during and after their pregnancies, from partners and/or family members (Harrison, 2014). Experiencing violence has been associated with the development of substance abuse and mental health issues (Harrison, 2014).

### **1.1.3 Long-acting reversible contraception**

Teen mothers who experience rapid repeat pregnancies are especially vulnerable and thus in recent years a number of initiatives and interventions have been undertaken in North America to reduce subsequent pregnancy among teen mothers. It has been well established in the literature that adolescent mothers' postpartum use of long-acting reversible contraception (LARC), such as the intra-uterine device (IUD) and the hormonal implant, is associated with significantly lower rates of pregnancy than is the use of condoms or oral contraceptives (Sober, 2017; Bitzer, 2016; Whitaker, 2016; Patchen, LeTourneau & Berggren, 2013; Pinzon & Jones, 2012; Wilson, Fowler & Koo, 2011). IUDs in particular have proven to be extremely efficient in preventing unwanted pregnancies compared to other methods of contraception. Adolescent mothers who use LARC have been found to have lower rates of rapid repeat pregnancies than those using other methods (Bitzer, 2016; Whitaker, 2016; Wilson, Fowler & Koo, 2011).

There are two kinds of IUDs available in Canada; the Copper-T IUD and the hormonal intrauterine system (IUS). The Copper-T IUD is made of plastic and copper wire. It prevents pregnancy by interfering with the sperm transportation, inhibiting fertilization, and preventing implantation (Peck, 2013; Options for Sexual Health, 2012). Copper IUDs can provide up to 10 years of reversible contraceptive benefit (Cleland et al., 2012; Options for Sexual Health, 2012) and can also be used as

emergency contraception (EC) if inserted 5 to 7 days after unprotected sex (Options for Sexual Health, 2012). The approximate cost of a Copper IUD in Canada is \$80-160 (Options for Sexual Health, 2012).

The IUS is made of plastic and contains small amounts of synthetic progesterone hormone. The low-dose hormone is released daily and interferes with endometrial development, inhibits the ovary from releasing an egg, and thickens cervical mucus thereby making it difficult for sperm to fertilize an egg (Peck, 2013; Options for Sexual Health, 2012). The approximate cost of an IUS in Canada is \$325-360 (Options for Sexual Health, 2012).

However, the postpartum usage of LARC among teenage mothers is low. According to Wilson, Fowler & Koo (2011), a study looking at the postpartum use of LARC among adolescent mothers within seven states in the United States, only 12% of the participants were using LARC after delivery. This may be explained by a lack of knowledge and accessibility to LARC by this population (Patchen, LeTourneau & Berggren, 2013; Pinzon & Jones, 2012; Wilson, Fowler & Koo, 2011). Certain barriers, such as cost, lack of knowledge, and social stigma, can restrict young mothers from accessing contraception after childbirth (Leftwich & Alves, 2017; Gill, 2016; Whitaker, 2016). Programs that offer prenatal and postpartum counseling combined with individualized services which build on the young mother's strengths, and promotes the use of LARC, are more likely to be successful in preventing rapid repeat pregnancies (Patchen, LeTourneau & Berggren, 2013; Pinzon & Jones, 2012; Wilson, Fowler & Koo, 2011).

#### **1.1.4 Canadian context**

In Canada, it is estimated that every year approximately 40,000 adolescent girls become pregnant; of those roughly 20,000 have an abortion and 20,000 give birth (Al-Sahab et al. 2012). In the past 25 years, there has been a significant decline in teen pregnancy rates in Canada (Ontario Ministry of Health and Long-Term Care, 2012). The Canadian adolescent pregnancy rates declined by 33.9%, from 44.2 teen pregnancies per 1,000 women aged 15-19 in 1996 to 27.9 in 2006 (Society of Obstetricians and Gynaecologists of Canada, 2012). Moreover, the Canadian rate of subsequent teen births decreased from 4.8 per 1,000 women aged 15-19 in 1993 to 2.4 in 2003 (Best Start, 2009).

The Canadian live birthrate of 15–19 year old girls is approximately 4.1% (Al-Sahab et al. 2012). However, the provincial rates are quite different from each other. The highest rates of teenage birthrates are in Nunavut (24.0 %), in the Northwest Territories (10.6 %), and in Saskatchewan (10.1 %). The lowest rates are in Quebec (2.7 %), Ontario (3.3 percent) and British Columbia (3.5 %) (Al-Sahab et al. 2012).

Regarding the province of Ontario, in 2007 the pregnancy rate for women aged 15-19 was 25.7 per 1,000. Based on the 36 public health units in Ontario, the highest rate was 60.8 (rural areas), and the lowest rate was 9.5 (urban centers) per 1,000 women aged 15-19 (Ontario Ministry of Health and Long-Term Care, 2008). Specifically, in the Ottawa public health unit, the teen pregnancy rate has decreased from 25 per 1,000 teens in 2003 to 18 in 2012 (Ottawa Public Health, 2014). There are currently no available statistics on the rate of rapid repeat pregnancy in Ottawa, Ontario.

### **1.1.5 Interventions and support**

Despite the negative outcomes associated with teenage motherhood, for many adolescent mothers becoming pregnant and raising a child provides a strong motivation to make a better life for themselves and their children (Al-Sahab et al. 2012). The MES establishes that Canadian first time adolescent mothers are more likely to attend prenatal courses than average-aged mothers which is an excellent opportunity to promote postpartum contraceptive use and raise awareness on the issue of rapid repeat pregnancies. However, the focus of these classes or programs should be tailored to the needs of each individual teen mother (Patchen, LeTourneau & Berggren, 2013; Al-Sahab et al. 2012). Programs that provide individualized attention, that address all of the mother's needs, and build on her strengths have been proven to be more effective at reducing rapid repeat pregnancies. Every factor that may contribute to subsequent pregnancy, such as education and access to health care services, should be addressed. (Patchen, LeTourneau & Berggren, 2013). According to Pinzon & Jones (2012) "prevention programs need to focus on defining and supporting an adolescent's educational goals and on providing motivations for delaying a second pregnancy" (Pinzon & Jones, 2012, p. 1746).

In Ottawa, there are a few community-based services available to adolescent mothers and their children. Ottawa's Young Parent Support Network, which receives funding from the Public Health Agency of Canada, is a partnership of four agencies in Ottawa: Emily Murphy Non-Profit Housing Corporation, St. Mary's Home, Salvation Army Bethany Hope Centre, and Youville Centre. These non-profit agencies provide programs and support services to pregnant teens and young mothers and their children. The network's goal is to "Allow young women to live in a healthy family and community environment" (Ottawa Young Parents, 2017).

The Emily Murphy Non-Profit Housing Corporation (EM) reserves one third of their housing units, 38 stacked town homes, exclusively for single parents under the age of 24 and their dependants. In order to be affordable to this vulnerable population, the monthly cost of units is income-based. They are also considered a supportive housing community providing a wide range of social supports including parenting information, children and youth programming, respite care, collective kitchens, craft nights, referrals, crisis intervention, short-term counselling and other community development initiatives (Ottawa Supportive Housing Network, 2017).

St. Mary's Home is a centre that offers housing in a residential program as well as programs that focus on promoting a healthy pregnancy and birth, parenting abilities, and life and personal growth skills. The centre also does outreach work in the community to allow pregnant youth to learn how to have a healthy pregnancy, join support groups, access reproductive and sexual health care, access obstetric care, complete high school credits, and receive financial counselling (St. Mary's Home, 2017).

The Bethany Hope Centre offers medical care and numerous support programs for young parent families. These programs include family financial support, individual counselling, parenting classes, education and employment support (Bethany Hope Center, 2017).

The Youville Centre is a specialized school-based program that provides interdisciplinary services to pregnant and parenting adolescents while keeping them in school. The Centre's main feature is that it offers specialized childcare programs and services to facilitate the participation of mothers in school. The Centre's programs and services include mental health support, addiction counselling, healthy

relationships and violence awareness programs, parenting classes, nutrition and cooking classes, and many more. In addition to these programs, the centre offers the opportunity to consult health providers such as public social workers, health nurses, physicians, and dentists. As for their child development program, they provide a safe environment for children to learn and grow and promote parenting strategies that focuses on reducing risk factors for this high-risk population (Youville Centre, 2017).

## **1.2 Rationale**

Despite this long-term trend of decline, meeting adolescent mothers and their children's needs is still a serious economic, social, and public health challenge. This challenge becomes even greater when teenage mothers experience second and subsequent childbirth. This vulnerable population requires further assistance and intervention programs in order to prevent rapid repeat pregnancies (Patchen & LeTourneau & Berggren, 2013).

There are important gaps in the Canadian literature surrounding rapid repeat pregnancy in Ontario, in general, and Ottawa, in particular. More in-depth qualitative studies are needed to identify the mothers' individual needs in order to understand the decision-making and circumstances surrounding rapid repeat pregnancy (Al-Sahab et al. 2012). This thesis aims to fill a gap in the literature. Through a qualitative study, we explored and documented the experiences of young mothers and involved stakeholders. We also documented how existing services in Ottawa could be improved or expanded to better meet women's needs.

## **1.3 Study objectives**

A better understanding of the circumstances and decision making of young mothers surrounding their pregnancies will help address the gaps in our knowledge regarding rapid repeat pregnancy among youth in Ottawa. The objective of our study is to understand the dynamics shaping rapid repeat pregnancies among young mothers in Ottawa. Through key informant interviews and in-depth interviews with young mothers living in Ottawa who have experienced rapid repeat pregnancy, our project aims to:

1. Identify young mothers' experiences with rapid repeat pregnancy;
2. Explore young mothers' knowledge of and experiences with a full range of contraceptive methods; and
3. Examine how services might be improved for young mothers in Ottawa.

#### **1.4 Outline of thesis**

This is a “thesis by articles” and is divided into five chapters. Chapter 1 includes a literature review on the circumstances surrounding teenage motherhood and rapid repeat pregnancy and examines the main organizations that young mothers and their children can access in Ottawa, Canada. The first chapter also includes the rationale for this multi-methods qualitative study, a list of specific objectives, and concludes with an outline of the thesis.

Chapter 2 describes the methods employed in the study including the recruitment strategy for both young mothers and key informants, and the analytic approach. At the end of the chapter, I provide the ethical considerations for this study.

Chapter 3 and 4 comprise two research articles which are the bulk of this thesis. Chapter 3 is entitled “It was kind of like if it happens it happens. It wasn’t planned, it wasn’t intentional”: young mothers’ experiences with rapid repeat pregnancy in Ottawa, Canada”. This article describes the experiences of young mothers living in Ottawa with rapid repeat pregnancy. This article has been submitted to *FACETS* and conforms to the standards of that peer-reviewed journal.

Chapter 4 is comprised of the second article entitled “I kept hearing all these horror stories from people close to me and it just turned me off from it”: Exploring young mothers’ experiences with postpartum contraception in Ottawa”. Drawing from in-depth interview with young mothers and service providers, this article describes young mothers’ experiences with postpartum contraception in Ottawa, Canada. This article sheds light on the barriers that young mothers face in accessing contraception. This article has been submitted to *Contraception* and conforms to the standard of that peer-reviewed journal.

Chapter 5 is the final chapter of this thesis and consists of a discussion section and begins with an overview of the two articles and how they relate to each other. By analyzing and combining the results from both articles, I provide a broader discussion of the main themes and an in-depth look into the intersectional issues that affect young mothers' sexual and reproductive health in Ottawa. This is followed by reflections on my positionality as a researcher which examines how my identities, values, and experiences influenced data collection, analysis, and interpretation. Afterwards, I include a section on the significance, implications, future directions, and the limitations of the study. This chapter concludes with a statement of contribution for the overall study and for each individual article and a conclusion. The bibliography and appendices can be found at the end of the document.

## **Chapter 2: Methods**

After an extensive review of the existing literature, we determined that a qualitative approach was the most appropriate method to investigate our research questions. The use of semi-structured in-depth interviews allowed us to explore young mothers' lived experiences and document their personal stories. Through this multi-method qualitative method, we were able to gain insight into the knowledge, perceptions, opinions, and motivations of young mothers living in Ottawa.

We conducted semi structured in-depth interviews with 10 young mothers and 10 key informants, experts who work with pregnant and parenting youth, in between the months of May 2016 and December 2016. We recruited young mothers who were currently residing in Ottawa, were 25 years of age or younger, had conceived their first child before the age of 20, had a subsequent pregnancy within 24 months of the birth of their child, and were sufficiently fluent in English or French to answer interview questions. We also recruited key informants who work with young mothers including: educators, counsellors, outreach nurses, nurse practitioners, family physicians, and obstetricians and gynecologists. Although participants were given the opportunity for in-person or telephone/Skype interviews, all interviews were conducted over the phone.

Based on an extensive review of the literature and anecdotal evidence, it evident that many young mothers living in Ottawa experienced rapid repeat pregnancy. E.F. has had significant experience working with young mothers and their children at centres for pregnant and parenting youth and has witnessed first-hand how common subsequent pregnancies are among young mothers as well as the challenges that are associated with rapid repeat pregnancy. Although there are organizations that are tailored to pregnant and parenting youth in Ottawa, there is still a difficulty in meeting young mothers' needs. For these reasons, we decided to base our study in the city of Ottawa. We recruited young mothers who are residents of the greater Ottawa region, this included rural and urban areas of the city.

## **2.1 Data collection**

### **2.1.1 In-depth interviews with young mothers**

Utilizing a community-based recruitment strategy, we recruited young mothers by posting flyers, in the centres and in the main organizations that are frequented by young mothers and their children, and by posting ads on social media outlets such as Kijiji, Craigslist, and Facebook groups. Once a participant expressed interest in the study, we conducted an intake call to ensure eligibility, provide more detailed information about the study, provide the consent form, and schedule an interview at a time that was convenient for the participant.

The interview guide consisted of open-ended questions based on an extensive review of the literature and anecdotal evidence. The first section of the interviews consisted of demographic questions followed by questions on the women's reproductive health history. Next, we explored the circumstances and decision-making surrounding the women's first and subsequent pregnancies and the participants' knowledge of and attitudes toward rapid repeat pregnancy and their postpartum contraceptive practices. In the final section of the interviews, we allowed participants to reflect on the ways in which services could be expanded or improved in the city of Ottawa. The interviews with young mothers averaged 60 minutes in length. As a thank you for their participation, we offered all participants a CAD20 gift card to Walmart as well as a short report summarizing the findings of our study.

With the consent of participants, we took field notes during the interviews and transcribed all audio-recorded interviews. We also engaged in a formal memoing exercise immediately after each interview.

Many of the young mothers interviewed in our study had experienced multiple forms of violence. Given the sensitive nature of this topic, we knew that certain parts of the interview could potentially be challenging for women. In order to support young mothers, we had resources available to offer them if they experienced difficulties during the interview. We were able to direct them to All-Options, an online resource which provides judgment-free support for people in their decisions, feelings, and experiences with pregnancy, infertility, parenting, abortion, and adoption. All-Options has a Talkline, which offers

free peer counselling over the phone ([all-options.org](http://all-options.org) formerly known as [www.backline.org](http://www.backline.org)). We were also able to refer participants to the Ottawa Young Parents Network, an online resource that helps pregnant and parenting youth connect with a wide range of services and resources, such as education and financial support services and parenting and cooking classes, in the Ottawa region ([ottawayoungparents.com](http://ottawayoungparents.com)). We were able to offer these resources to a few young mothers who participated in the study and shared the information verbally or by email. However, many of our participants did not need these resources and were more than happy to share their stories with us and enjoyed talking about their experiences with pregnancy, health support services, and especially motherhood.

Throughout the interview process we would assure the women that they were in control of the interview and that we could take a break or stop the interview at any time. Participation in this study conferred minimal risks to young mother participants, as these are voluntary and confidential interviews. Participants could refuse to participate or withdraw at any time, thus minimizing potential psychological risks. The benefits to participation are limited to the potential enjoyment participants will receive from participating in the study, sharing their experiences, and contributing to research which aims to help improve reproductive health care and services in the Ottawa community.

### **2.1.2 Key informant interviews**

We explored key informants' experiences working with young mothers who have subsequent pregnancies, and their experiences with the services offered in the Ottawa community. We aimed to interview experts in various fields in order to get a wide range of perspectives on the issues surrounding teenage motherhood and rapid repeat pregnancy.

In order to recruit key informants from various professions we sent emails detailing the study to experts who had publicly available contact information and as well as to all the major organizations who work with young mothers. E. F. is well connected in the sexual and reproductive health community of Ottawa and used her professional and personal connections in order to reach out to specific individuals

who have significant and valuable experience working with young mothers. After a key informant expressed interest, we sent them a consent form and scheduled the interview at a mutually inconvenient time. At the end of every interview, we asked key informants if they could recommend another expert for the study, who would have valuable insight on teenage motherhood and rapid repeat pregnancy, and if the participant would facilitate an introduction. The participants were not compensated for their time but will receive a final report on the findings of our study.

Throughout the interviews with key informants, we explored service providers' experiences working with pregnant and parenting youth, the risk factors associated with teenage motherhood and rapid repeat pregnancy, the issues surrounding contraception usage among young mothers and their experiences with the different services offered in Ottawa. Interviews with key informants averaged 60 minutes in length.

With the consent of participants, we audio-recorded all key informant interviews. We also transcribed all interviews, took notes during and engaged in formal memoing after each interview.

## **2.2 Data analysis**

The analytic process of this study began during the data collection phase. While conducting the interviews, we took written notes and wrote memos shortly after the interview was completed. Writing memos allowed us to reflect on the content of the interview, explore our personal reactions to the information shared, and understand our subjective influence on the interview process. The memos also helped with the analytic process and helped us determine when thematic saturation had been reached (Birks, Chapman, & Francis, 2008). After conducting 10 interviews with young mothers, we stopped recruiting participants because we had determined that we had reached thematic saturation with respect to the circumstances and decision making that shape young mothers' pregnancies and the current service delivery and the needed changes. The interviews illustrate the range of experiences and give voice to young mothers' complex experiences.

As we familiarized ourselves with the data from interview transcripts, notes, and memos, we developed a thorough comprehension of the data and developed a code book using both inductive and deductive techniques (Elo & Kyngäs, 2008). The initial categories and codes that were included in the code book were based on an extensive review of the existing literature, our interview guides, our study objectives and research questions. These categories and codes were refined based on the insights derived from the transcripts, notes and memos (Elo & Kyngäs, 2008).

We used Atlas.ti data management software to manage our data. After coding all of the transcripts and memos, we explored each code in order to identify themes and sub-themes. Using an iterative process, we were able to identify major themes and relationships between the interviews. We initially analyzed the data obtained from in-depth and key informant interviews separately, then focused on integrating the findings from both components, with specific attention to concordant and discordant themes.

### **2.3 Theoretical foundation**

The use of participatory research for this study has allowed us to engage young mothers and obtain their perspectives on reproductive and sexual health, the circumstances and decision-making surrounding their pregnancies, and their experiences with different services in Ottawa. Involving young mothers in the research process is important because they are able to voice the challenges they face as well as their health needs and priorities. Participatory research methods are very effective in engaging with a population that does not often have the opportunity to voice their opinions and experiences (Gill et al., 2016). This technique promotes the empowerment of individuals engaging in the process and allows them to contribute to research (Duffy, 2011).

Our experience conducting qualitative research in this setting suggests that women welcome the opportunity to discuss their experiences in a non-judgmental environment. However, in sharing experiences related to reproductive health, women may express sadness or other “negative” emotions. Participants were informed of this risk when asked to consent to participate in the voluntary and

confidential in-depth interview. Women were also informed at several points in the process that they do not have to answer questions they do not want to and can end their participation at any time. We were prepared to refer women to area organizations (and in particular the Ottawa Young Parent's Support Network), as appropriate.

#### **2. 4 Ethical consideration**

This study received approval from the Social Sciences and Humanities Research Ethics Board at the University of Ottawa (File# 03-16-12). The letter of approval from the University of Ottawa REB can be found in Appendix A. Although we were unable to recruit women under the age of 18, we did obtain approval to conduct interviews with adolescent mothers under the age of 18 without the consent of a parent or guardian. We were granted approval due to the fact that teenage mothers under the age of 18 in Ontario often live independently from parents and guardians, have decision-making authority over their child/children, and (with rare exception) are legally emancipated. Therefore, it would have been inappropriate in this context to require that a parent or guardian consent for the teenager to participate.

### **Chapter 3: Article 1**

**“It was kind of like if it happens it happens. It wasn’t planned, it wasn’t intentional”:**

**Young mothers’ experiences with subsequent pregnancy in Ottawa, Canada.**

We submitted this article to *FACETS* in June 2017. The article has been formatted per the guidelines of this specific peer reviewed journal.

**“It was kind of like if it happens it happens. It wasn’t planned, it wasn’t intentional”:  
Young mothers’ experiences with subsequent pregnancy in Ottawa, Canada**

Elyse Fortier, MSc(c)<sup>1</sup>  
Angel M. Foster, DPhil, MD, AM<sup>1,2</sup>

1. Faculty of Health Sciences, University of Ottawa, ON, Canada
2. Institute of Population Health, University of Ottawa, ON Canada

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Young mothers’ experiences with subsequent pregnancy in Ottawa

**“It was kind of like if it happens it happens. It wasn’t planned, it wasn’t intentional”:  
Young mothers’ experiences with subsequent pregnancy in Ottawa, Canada**

**Abstract**

Young mothers constitute a vulnerable population in Canada. Teens with children are at significant risk of subsequent pregnancy, a dynamic which can exacerbate health, emotional, and socio-economic challenges. We aimed to understand better the dynamics shaping “rapid repeat pregnancy” among young mothers in Ottawa, explore young mothers’ subsequent pregnancy experiences, and identify how services could be improved in Canada’s capital. In 2016, we conducted in-depth interviews with 10 young mothers and semi-structured interviews with 10 key informants working with pregnant and parenting youth. We analyzed interviews for content and themes using a multi-phased, iterative process. Four major themes emerged: 1) Young mothers often plan their pregnancies actively or passively; 2) Violence before, during, and after pregnancy is common; 3) Mental health and substance abuse issues shape pregnancy risk; and 4) Becoming pregnant often serves as a source of motivation for young mothers. Our results further indicate that young mothers have difficulty finding youth-friendly, non-judgmental support services and that integrated, multidisciplinary services offering individually tailored support and building on women’s strengths will likely be more successful in helping young mothers prevent subsequent pregnancies. Increasing awareness about existing services and supporting efforts that approach teen pregnancy comprehensively and holistically appear warranted.

**Keywords**

Teenage motherhood, adolescent pregnancy, rapid repeat pregnancy, mental health, substance abuse, intimate partner violence

## **Introduction**

In Canada, it is estimated that every year approximately 40,000 adolescent girls become pregnant; roughly 20,000 have an abortion and 20,000 give birth (Al-Sahab et al. 2012). Young mothers and their children are a vulnerable population requiring support and programmatic attention (Harrison et al. 2016; Harrison et al. 2014; Beers & Hollo 2009). Although young mothers can provide children with a loving, stable, and nurturing environment, they often lack a healthy support system, experience high levels of stress, and miss out on important educational opportunities (Al-Sahab et al. 2012; Kingston 2012; Luong 2008). In North America, teenage motherhood is associated with a higher risk of being unemployed or underemployed, living in poverty and in an unhealthy/unsafe environment, having a large family and an unstable household, and raising children as a single parent (Kingston et al. 2012; Luong 2008; Singh, Darroch & Frost 2001).

Overarching socio-economic dynamics can impact the health of both young mothers and their children; teen mothers are more likely to develop depression and anxiety than non-parenting teens (Harrison 2016; SmithBattle & Freed 2016; Hodgkinson et al. 2014; Al-Sahab 2012) and the children of teens are at greater risk for educational disabilities and mental health disorders than children born to older parents (Kingston 2012; Lipman, Georgiades & Boyle 2011). Children of teenage mothers are also 25% more likely themselves to become adolescent parents, thereby contributing to a complex cycle (Harrison 2016). These educational, socio-economic, and health dynamics can have a negative influence on the development of the mother-child relationship; teenage mothers are more likely than older parents to exhibit difficulty with the task of early parenthood (Singh, Darroch & Frost 2001).

“Rapid repeat pregnancy” is a term used to define the onset of pregnancy within 24 months of a previous pregnancy outcome. This phenomenon is common among youth; approximately 25% of young mothers will have a second child within two years of the birth of their first child (Luong 2008). Issues already present after the first childbirth often become more serious and difficult to manage after a subsequent delivery. Compared to adolescent mothers with only one child, young mothers with more than one child have lower levels of education, are more likely to live in poverty, and have increased

dependence on governmental support (Gill 2016; Patchen, LeTourneau & Berggren 2013). Lack of postpartum contraception (Sober et al. 2017; Whitaker et al. 2016; Wilson, Fowler & Koo 2013; Al-Sahab et al. 2012; Kingston 2012; Pinzon & Jones 2012), experiencing intimate partner violence (IPV), and having mental health and substance abuse issues (SmithBattle & Freed 2016; Harrison 2014) have been identified as key factors associated with multiple pregnancies among youth.

Although some risk factors associated with multiple pregnancies among youth have been identified, there has been a lack of investigation in the experiences of young mothers who have had subsequent or “rapid repeat” pregnancies. In Ontario, the pregnancy rate for women aged 15-19 was 25.7 per 1,000 in 2007 (Ontario Ministry of Health and Long-Term Care, 2012) and according to the Ottawa Public Health Unit, the teen pregnancy rate decreased from 25 per 1,000 teens in 2003 to 18 in 2012 (Ottawa Public Health, 2014). However, no information is available about “rapid repeat” pregnancies in either Ontario or Ottawa and little information is available about the lived experiences of young mothers in these settings. Capturing women’s stories is crucial to understanding how services can be improved and/or expanded. In 2016, we conducted a qualitative study to understand better the experiences of young mothers with subsequent pregnancy and motherhood in Canada’s capital.

## **Methods**

From May to December 2016, we conducted semi-structured in-depth interviews with 10 young mothers and 10 key informants, experts who work with pregnant and parenting youth. In order to be eligible for the study, young mothers had to be currently residing in Ottawa, be 25 years of age or younger at the time of the interview, have conceived their first child before the age of 20, have had a subsequent pregnancy, irrespective of outcome, within 24 months of the birth of their child, and be sufficiently fluent in English or French to answer interview questions. Using publicly available contact information and personal networks we recruited key informants who work with teenage mothers in the greater Ottawa area. This group included educators, counsellors, outreach nurses, nurse practitioners, family physicians, and obstetrician-gynecologists. Although we gave participants in both groups the

opportunity to engage in telephone, Skype, or in-person interviews, we conducted all interviews over the phone.

### *Data collection*

Adopting a community-based recruitment strategy, we posted flyers in the centres that are frequented by young mothers and their children and ads on social media outlets such as Kijiji, Craigslist, and Facebook. Once a young mother expressed interest in the study, we conducted an intake call to ensure eligibility, provide more detailed information about the study, provide the consent form, and schedule an interview time that was convenient for the participant. To recruit key informants, we sent emails detailing the study to experts who had publicly available contact information and to all the major organizations in Ottawa that work with young mothers. After a key informant expressed interest, we sent him/her/them the consent form and scheduled a mutually convenient interview time. At the end of every interview with a key informant, we asked him/her/them to recommend another expert for the study who would have valuable insight on teenage motherhood. Through early participant referral, we were able to recruit experts from various professions allowing us to obtain a range of perspectives.

EF, a master's student in the Interdisciplinary Health Sciences program at uOttawa, conducted all interviews. EF had previous experience working with young mothers and their children and received training from AMF, her supervisor and a medical anthropologist and medical doctor with considerable experience conducting qualitative research on sexual and reproductive health. Using a guide developed specifically for this study, we asked young mothers a series of questions related to their demographic information and reproductive health history, the circumstances and decision-making surrounding their first and subsequent pregnancies, the outcome of all subsequent pregnancies, their experiences with motherhood, and the ways in which services in Ottawa could be expanded or improved. We sent each young mother a CAD20 gift certificate to Walmart as a token of our gratitude. In the interviews with key informants, we explored service providers' experiences working with pregnant and parenting youth, the risk factors associated with teenage motherhood and subsequent pregnancy, and their experiences with the

different services offered in Ottawa. With the permission of participants in both groups, we audio-recorded and then later transcribed all the interviews, which averaged 60 minutes in length.

### *Data analysis*

During the interviews EF took detailed notes and she wrote memos shortly thereafter. The memos allowed EF to reflect on the content of the interviews, explore her personal reactions to the information shared, and understand her subjective influence on the interview process (Elo & Kyngäs 2008). The memos also helped the analytic process and allowed us to determine when we reached thematic saturation (Birks, Chapman & Francis 2008); we suspected we had reached thematic saturation after eight interviews with young mothers and completed two additional interviews for confirmation. We analyzed our interviews for content and themes. This was an iterative process that began with data collection and continued with the use of deductive and inductive techniques to develop a codebook (Elo & Kyngäs, 2008). We used ATLAS.ti to manage our data, comprised of transcripts, notes, and memos. After coding our data we then moved to an iterative phase in which we identified major themes and relationships between ideas. We analyzed each component of the study separately and in the final analytic phase we combined results and explored concordant and discordant findings.

### *Ethical considerations*

The Social Sciences and Humanities Research Ethics Board at the University of Ottawa approved this study (File# 03-16-12). We have used pseudonyms for the young mothers who participated in the study and have masked or redacted all personally identifying information about young mothers and key informants. We have organized our results around significant themes and have also included a series a narrative vignettes to provide a thick description (Geertz 1973) of the young mothers who participated in our study.

## Results

### *Participant characteristics*

The young mothers who participated in our study were between 21 and 25 years of age. Their age when they conceived their first child ranged from 13 to 19 years (inclusive). Participants' level of education varied from having completed grade 10 high school education ( $n=2$ ) or having a high school diploma ( $n=6$ ), to being enrolled in a post-secondary education program ( $n=2$ ). Almost all participants relied on some form of financial assistance such as Ontario Works and all identified as Anglophone and Caucasian. Most participants identified as being a single parent ( $n=9$ ) and most had experienced living in an unstable situation, including in residences for young mothers ( $n=2$ ) and shelters ( $n=3$ ). We provide more information about these participants in Table 1.

The key informants who participated in our study worked in a range of professions and institutions, including all four of the organizations specifically dedicated to young mothers in Ottawa. All key informants had experience as direct service providers, including obstetrician-gynecologists ( $n=4$ ), prenatal and outreach nurses ( $n=2$ ), nurse practitioners ( $n=1$ ), counselors ( $n=1$ ) and educators ( $n=2$ ). These experts had over 83 years of combined experience working with young mothers and brought unique perspectives to the issues surrounding teenage motherhood.

**[Figure 1 here]**

### *Young mothers often plan their pregnancies actively or passively*

Young mothers in our study expressed considerable ambivalence about subsequent pregnancies. Like Kelly (Fig. 1) most participants did not use any form of contraception after the delivery of their first child. Indeed, six participants explained that although they chose not to use postpartum contraception they were not actively planning on becoming pregnant in the near future. Maureen, a 23-year-old mother of two children, described her feeling toward pregnancy after the birth of her first child as, "It was kind of like if it happens it happens. It wasn't planned, it wasn't intentional." Although a small number of

participants expressed a desire to have children close together or to complete childbearing at a young age, most engaged in a more passive strategy that included not using contraception.

Key informants explained that they frequently see young mothers who are actively or passively planning their pregnancies. An obstetrician-gynecologist who works in a centre for pregnant and parenting youth stated that one third of the pregnant adolescents seen at the centre fall into this category. Key informants identified a number of factors influencing the decisions of young mothers including wanting a small age gap between their children, wanting a child of a specific sex, desiring their own family and family stability, and being part of the cycle of teenage motherhood. Although young mothers who participated in our study did not explicitly identify inter-generational cycles of adolescent parenting as a major influence, four participants were born to teenage mothers and nine described childhood experiences that can be characterized as chaotic. As a family physician who runs a clinic for pregnant and parenting youth explained:

Those that decide to parent you know they've been in a cycle where their mother was a teenager...so they've lived through the experience of that...I remember having one young person, she was 14 and she had planned the pregnancy and I remember having a medical student with me, he was like stunned to hear that she wanted a person to love her for herself and that was her motivation for being pregnant.

**[Figure 2 here]**

#### *Violence before, during, and after pregnancy is common*

Almost all of the young mothers who participated in this study experienced violence and abuse at different stages in their lives. As showcased in Calla's story (Fig. 2) many expressed having experienced physical, sexual, and/or emotional violence in their childhoods, in past relationships, and/or in current relationships. Indeed, nine young mothers reported having experienced IPV prior to and during their pregnancies. Twenty-one year old Olivia, who obtained an abortion when she became pregnant for the second time, described her experience with the father of her first and only child, "After we had broken up he became very mentally abusive and came back and vandalized my car and physically abused me. I

didn't have my daughter in my care at the time, my parents were watching her, thank God.” Clare, a 22-year-old mother of two, discussed the abusive relationship she was in when she became pregnant with her second child and explained that she didn't feel safe discussing contraception with her partner. “I don't think I was using birth control at that time. At that point I think that I was in such a difficult place I don't think that even crossed my mind.”

A number of young mothers in our study also specifically reported having experienced reproductive coercion perpetrated by a past or current partner. Reproductive coercion refers to a range of behaviours, including contraceptive sabotage, forced abortion or pregnancy, and refusal to engage in safer sex practices, that interfere with an individual's ability to make free and autonomous sexual and reproductive health choices (Planned Parenthood Ottawa et al. 2013). Sophie, a 25-year-old mother of three, explained how she became pregnant with her third child a few weeks after giving birth to her second child:

So we had planned a vasectomy and last minute he cancelled his appointment and didn't mention it to me...I had missed my period and I think I was three weeks late. But after that pregnancy I guess because I had breast fed her for 6-7 months so they were never back on schedule yet so I think a month and a half went by before I was like ok [my periods] haven't come back yet what's happening?

Key informants echoed young mothers' experiences and explained that both IPV and reproductive coercion are significant risk factors for “rapid repeat” pregnancy. As an obstetrician-gynecologist working in a specialized centre stated:

40% of our young women who are pregnant have experienced violence 6 months prior to pregnancy or during [the] pregnancy. The most common [form of violence] being physical violence by their partner or an ex-partner...screening for violence during pregnancy is extremely important in all pregnancies but especially in teens because it is quite prevalent.

Key informants repeatedly and consistently expressed that integrated, multidisciplinary centres that comprehensively meet the needs of young mothers and provide access to a team of health service providers and social workers are more successful in supporting women who have experienced violence.

However, both key informants and young mothers reported that these types of services were lacking in Ottawa.

**[Figure 3 here]**

*Mental health issues and substance abuse issues shape pregnancy risk*

Almost all of the young mothers who participated in our study reported having experienced mental health and substance abuse issues. Indeed, nine young mothers recounted histories of anxiety, depression, and postpartum depression and three young mothers, like Jessica (Fig. 3), described struggling with substance abuse. Susan, a 21-year-old mother of two, explained that she struggled with postpartum depression which in turn contributed to her alcoholism. “I was clean for a while but like when [my son] came home every other weekend he’d be at [his paternal grandmother’s] and every weekend that she didn’t have him my mom would have him so I was drunk every weekend.” At the time of the interview, Susan reported having been “clean” for 5 months and she had regained full custody of both her children. However, she expressed that it was very challenging for her to find proper mental health support services. “Realistically a lot of young parents need counselling, like there are reasons why we put ourselves into the situations that we are in now, you know? So I feel like counselling...it takes a while for us to find it.” Young mothers in our study repeatedly expressed a need for more youth-friendly mental health services and were generally unaware of the full range of services and programs available in the Ottawa community.

Key informants also identified poor mental health is a significant risk factor for “rapid repeat” pregnancy and believed that young mothers are at heightened risk of a range of disorders when compared to older mothers. An obstetrician-gynecologist explained, “There’s a lot of mood disorder that we see during pregnancy and in the postpartum period. Being depressed or being not necessarily mentally healthy in the postpartum can increase the risk of getting pregnant again.” Another physician, who works in a specialized centre for young mothers, stated that 30% to 40% of the young mothers seen through the

centre have underlying mental health issues. However, a number of key informants indicated that available services are currently inadequate.

**[Figure 4 here]**

*Becoming pregnant often serves as a source of motivation for young mothers*

Although this study sheds light on negative outcomes associated with teenage motherhood and subsequent pregnancy, many young mothers stated that having children significantly enhanced their lives, as highlighted in Nathalie's story (Fig. 4). Women repeatedly expressed that having children motivated them to leave an abusive relationship, stop using illicit drugs, alcohol, or tobacco products, and create a better life for themselves. Sonya, a 22-year-old mother of two, shared how becoming a parent changed her life.

It's probably one of the best decisions I've ever made for myself and really I don't know where I'd be if I hadn't become a mom. I've struggled with like depression my whole life and mental health and stuff like that but being a mom taught me...it's like I saw the unhealthy relationships my parents had and because they were so unhealthy with their relationships and their addictions and not emotionally available and it's like everything they weren't able to do taught me what I needed to make sure I'd be [there] for my son...My sons are a blessing like I really couldn't imagine where I'd be without them.

For a number of women in our study, decisions to make life changes were heavily influenced by having contact with the Children's Aid Society (CAS), a government funded agency created to protect children and youth from abuse and neglect. Indeed, seven of the women in our study had been involved with CAS. Although some described having negative experiences with the agency, several explained how the presence of CAS motivated them to make important changes in their lives and seek additional support or care. As Justine, a 23-year-old mother of two, shared, "[CAS] gave me the option that if I would stay with [my partner] I would never see my daughter again so I chose to leave."

Similarly, key informants expressed that for many young mothers becoming a parent motivated them to pursue their studies, find employment, find stable housing, and provide for their children. A

physician who works with young mothers explained, “It's also motivation to finish school and they want to be a good mother and they want to raise their kids not necessarily in the environment that they have been raised. For some it empowers them and they realise they can do something with their life.”

Moreover, key informants reported that young mothers who had an especially difficult time raising a first child were often motivated to improve their parenting skills with the second child. Indeed, key informants explained that young mothers who had a negative experience with CAS, such as having their child apprehended, often felt motivated to make important changes in their lives for their future children. As an obstetrician-gynecologist stated,

I've seen at times when some of these women have had children before, when they were in a very, let's say, rough part of their life, and the kids have been taken away by CAS...but then they sort of figure things out and they get their life on. There's that motivation of it's not going to be like last time, I'm on the straight and narrow here and they are not taking another kid away from me...and they're really motivated.

## **Discussion**

Women's experiences with early motherhood and subsequent pregnancy are complex. Their experiences showcase that a range of issues, including violence, mental health disorders, and substance abuse, influence the risk of both initial and subsequent pregnancies. Much effort in recent years has focused on reducing “rapid repeat” pregnancy within this population. Our results suggest that some young mothers are either actively or passively planning subsequent pregnancies. Indeed, consistent with reports from the US, there is significant ambivalence and even fatalism about subsequent pregnancy (Jones, Frohwirth & Blades 2016). Fatalism is the idea that life events can be predetermined by outside forces such as fate; in the context of unintended pregnancy the concept of “it was meant to be” may facilitate acceptance (Jones, Frohwirth & Blades; 2016). A number of our participants expressed this type of fatalism. Although efforts to promote contraception should continue to be supported, this dynamic must be acknowledged.

Our results echo the findings in the broader literature that suggest there is a need to support efforts to provide integrated, holistic, individualized services. Key informants expressed that providing

individualized support to young mothers and helping them to learn parenting skills increases their chances of “success” with their first child which in turn may reduce young mothers’ desire for an immediate subsequent pregnancy. Centres that offer multidisciplinary services and tailored care to young mothers are more likely to be successful in building a young mother’s confidence and self-esteem (Patchen, LeTourneau & Berggren, 2013; Pinzon & Jones 2012). As illustrated by our findings, many young mothers demonstrate a desire to better their lives when they find out that they are pregnant and decide to parent. Programs that build on this new found motivation are more likely to empower women to continue their education and acquire important skills and find employment (Pinzon & Jones 2012).

Similarly, programs that offer multidisciplinary services on-site appear to be more effective in supporting young mothers who have experienced violence and/or who have mental health and substance abuse issues. Service providers working in an interdisciplinary team are able to provide more holistic care to young mothers, engage in IPV screening and discussions of reproductive coercion, and assist young mothers in complex processes such as establishing a safety plan in a situation of abuse. However, these processes can take a lot of time, effort, and human resources which is not always possible in other medical settings. Key informants voiced that most general obstetrician-gynecologists and family doctors, that is those who do not provide obstetric services in tailored settings for pregnant and parenting youth, may be reluctant to inquire about a woman’s experience with violence or mental health issues because they do not have or are not aware of the resources available to support that young mother.

There is a significant need to identify non-judgmental, youth-friendly services and programs available in the Ottawa community and to make service providers and young mothers aware of them. Raising awareness and creating community ties will provide support to service providers and allow them to appropriately refer young mothers. Creating strategies to making these services visible appears warranted. This can be accompanied by outreach efforts to ensure that young mothers in need are able to access multidisciplinary centres and programs.

All of the young mothers that were interviewed were white and Anglophone. Therefore, perspectives of women from different ethnic groups and language-minority communities are not reflected

in our data. Future research would benefit from inclusion of these voices. Also, young mothers with more stable lives and partners are less likely to participate in this type of study or need services through area organizations. Their voices are also not included in this research. This study focused on greater Ottawa which limits the transferability of results. For future studies, this limitation could be taken into account and the scope of the study widened to include a sample from across the province or throughout Canada. Finally, the temporal nature of the study is such that policy changes influencing sexual and reproductive health services in Ontario that occurred after 2016 would not be reflected in our data.

Despite these limitations, our findings give voice to the experiences of young mothers in Ottawa. Although every young mother's experience is unique, the intersection between subsequent pregnancy, violence, mental health issues, and substance abuse appears common. Supporting and further developing non-judgmental, youth-friendly, holistic services appears warranted.

### **Acknowledgments**

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**Table 1: Characteristics of the young mothers in our study (n=10)**

Characteristic	n (%)
Language	
English	10 (100)
French	0 (0)
Race or Ethnicity	
Caucasian	10 (100)
Relationship status	
Single	9 (90)
Long-term partner	1 (10)
Age during study period	
21-22	3 (30)
23-24	6 (60)
25	1 (10)
Age when first child was conceived	
13-15	2 (20)
16-17	3 (30)
18-19	5 (50)
Number of children during study period	
1	3 (30)
2	4 (40)
3	3 (30)
Level of education	
Grade 10 high school	2 (20)
High school diploma	6 (60)
Post-secondary program	2 (20)
Financial assistance*	
Governmental assistance	5 (50)
Student loans	2 (20)
Family	4 (40)
Subsidized housing	6 (60)
Current living situation	
Living on one's own with child/children	6 (60)
Living with a partner	1 (10)
Living in family member's home	1 (10)
Unstable housing/living situation	2 (20)
Ever lived in a residence for young mothers	2 (20)
Ever lived in a shelter	3 (30)

\*Totals more than 100% as participants could indicate multiple responses

Kelly, a 23-year-old mother of three, had moved away with her partner at the age of 18 and became pregnant shortly. After the birth of her twins she experienced significant postpartum depression. She felt overwhelmed with the task of parenthood and felt isolated from her support system. She states that due to her mental health issues and always being at home with her children she did not have time or energy to consider contraception, even though she was not actively trying to become pregnant. She expressed that at the time she was so depressed and unhappy that she had thought to herself that if she became pregnant again it wouldn't make a difference in her life. Two months after the delivery of her twins she found out she was pregnant again. She thought that another child could maybe improve her mental health and decided to continue on with the pregnancy. A few months into her second pregnancy, Kelly and her family moved back to Ottawa to be closer to family. Although Kelly loves being mother, she feels that raising three children without a sufficient support network can be very challenging. At the time of the interview, Kelly was still struggling with mental health issues and stated that she was not accessing any mental health support services. (Interview conducted in November 2016)

**Figure 1. Kelly's story**

Calla is a 23-year-old single mother of two girls. She is enrolled part-time in a post graduate program and also works part-time. She lives with her two daughters and recently took in her younger sister's two children. Between the ages of 9 and 13, Calla was sexually abused by her biological brother. At 13, while she was out of town on a school trip, she gave birth to her oldest daughter. At the time she was unaware that she was pregnant and gave birth alone in a bathroom stall. The events that followed were very traumatic: having all of her school friends watch her leave for the hospital on a stretcher with a baby in her arms, disclosing the history of abuse to her family, service providers, and police officers, and having her daughter apprehended for the first 6 months of her life due to the nature of the abuse. Once the abuse was known, her biological brother was removed from the family home, subjected to a restraining order, and charged with sexual assault. Calla has since experienced other forms of violence from peers and partners and has experienced various mental health issues. Calla benefitted from counselling until the age of 18. (Interview conducted in August 2016)

**Figure 2. Calla's story**

Jessica, a 21-year-old single mother of two, has experienced depression, anxiety, postpartum depression and multiple forms of violence. She had a difficult childhood which included a history of poverty, unstable housing, and violence. She starting using substances at a young age as a coping mechanism and continued to use drugs and alcohol during all of her pregnancies. As a result of her mental health and substance abuse issues, her partner's mother gained custody of her children for over 6 months. She expresses regret and sadness when thinking about the months she missed with her children and states that her children motivated her to seek help for her mental health and substance abuse issues. When she was attending a centre for young mothers she saw a mental health and addictions counsellor which was very helpful. However, once she was no longer enrolled at the centre she had to navigate all of the services available in the Ottawa community on her own and few services were available. She put herself on a waiting list and had to wait over 6 months before being assigned a counsellor. When she was finally assigned a counsellor, she did not feel comfortable and had to go back on the waiting list. At the time of the interview she was still waiting to be assigned a new counsellor. (Interview conducted July 2016)

**Figure 3. Jessica's story**

Nathalie is a 22-year-old single mother of one child. She has shared custody of her son with her ex and although they have parenting disagreements, they are doing their best to co-parent. Nathalie experienced a very difficult childhood where she witnessed unhealthy relationships, mental health and addiction issues, violence, and neglect. Growing up, Nathalie's parents had alcohol and substance abuse problems. When Nathalie was 14 years old she ran away from her biological parents' home. She explains that her biological father had started smoking crack and was getting physically and emotionally abusive with her mother; she ended up being homeless for two years. She ended up getting kicked out of school and she started hanging out with the "wrong people" and using substances. When she was 16 years old she wanted a fresh start and moved to Windsor with her then-partner. However, she was in an abusive relationship and felt very isolated. She became pregnant shortly after and explains that when she found out she was pregnant for the first time she never considered any option other than parenting. She states that the pregnancy forced her to make a better life for herself and to make more mature decisions; soon after she left the abusive relationship and moved back to Ottawa with her mother. She wanted to invest in her future, a process that began with accessing prenatal courses offered by the city of Ottawa. She states that these courses gave her something to look forward to and helped her get excited about the pregnancy. Nathalie states that having her son was the best decision she ever made and that she does not know where she would be without him. She is proud of her parenting skills and of the way she is raising her son despite the various challenges she has faced in the past. (Interview conducted November 2016)

**Figure 4. Nathalie's story**

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## **Chapter 4: Article 2**

**“I kept hearing all these horror stories from people close to me and it just turned me off from it.”:**

**Exploring young mothers’ experiences with postpartum contraception in Ottawa**

We submitted this article to *Contraception* in August 2017. The article has been formatted per the guidelines of this specific peer reviewed journal.

**“I kept hearing all these horror stories from people close to me and it just turned me off from it”:  
Exploring young mothers’ experiences with postpartum contraception in Ottawa**

Elyse Fortier, MSc(c)<sup>a</sup>  
Angel M. Foster, DPhil, MD, AM<sup>a,b</sup>

- a) Faculty of Health Sciences, University of Ottawa, Ottawa, ON, Canada
- b) Institute of Population Health, University of Ottawa, Ottawa, ON, Canada

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Introduction (542), methods (666), results (1,514), discussion (496)

**“I kept hearing all these horror stories from people close to me and it just turned me off from it”:**

**Exploring young mothers’ experiences with postpartum contraception in Ottawa**

**Abstract**

Objectives: Many young mothers experience subsequent pregnancies after the birth of their first child. Issues already present after the first childbirth often become more serious and difficult to manage after a subsequent delivery. Postpartum contraception plays a significant role in reducing subsequent pregnancy. However, young mothers in Ottawa face various barriers when trying to access contraception after delivery. Through this project we aimed to explore these barriers and understand the decision-making process of young mothers surrounding contraception.

Study Design: We conducted 10 semi-structured in-depth interviews with young mothers living in Ottawa who had experienced a subsequent pregnancy within 24 months of their first childbirth. In addition, we interviewed 10 key informants who work with teenage mothers. We audio-recorded and transcribed all interviews and analyzed them using inductive and deductive techniques. We used ATLAS.ti software to manage our data.

Results: Our findings suggest that young mothers in Ottawa often do not use postpartum contraception or inconsistently use their chosen contraceptive method. Many factors, including cost, personal beliefs, personal priorities, and knowledge influence young mothers’ decision-making surrounding contraception.

Conclusions: Our findings suggest that young mothers often do not use postpartum contraception; for some this is a choice and for others this is the result of systems-level, service delivery, and information barriers. Supporting policies to ensure that a full range of contraceptive methods are available and affordable and developing educational programs in Ottawa that are sex-positive and non-judgmental appears warranted.

Implications: Our results suggest that young mothers' use of postpartum contraception is complex. Ensuring that a full method mix is available and addressing the systems-level, service delivery, and information barriers through supporting evidence-based policies and sex-positive and non-judgmental educational programs appears warranted.

Keywords: Postpartum contraception, subsequent pregnancy, Canada, teenage motherhood, adolescent pregnancy

## 1. Introduction

Over the last two decades, the Canadian government, at both the federal and provincial levels, has implemented a number of policies and programs to reduce the rate of teen pregnancy and respond better to the needs of the 20,000 teens who choose to give birth and parent [1]. In Ontario, efforts such as sexual and reproductive health education, subsidized contraception, sexual health clinic services, and community partnerships with schools, hospitals, and community-based organizations to deliver sexual and reproductive health programs and services have been put in place [2]. These policies, in combination with changing social norms, have resulted in the lowest teen pregnancy rate in generations [2]. In Ontario, the pregnancy rate for women aged 15-19 in 2007 was 25.7 per 1,000; this rate is higher in rural areas in comparison to urban areas [2]. In the Canadian capital of Ottawa, the teen pregnancy rate has decreased from 25 per 1,000 teens in 2003 to 18 in 2012 [3].

Individual teens choose to carry a pregnancy to term and parent for a variety of different reasons and have a range of experiences. However, in North America teenage childbearing and parenting is associated with a number of negative physical, mental, and psychosocial outcomes [4-8]. These dynamics have prompted the government of Ontario to put in place the Learning, Earning and Parenting (LEAP) program to help young parents who receive financial assistance from the government complete their high school education and attend parenting classes [9]. In recent years, programmatic and service delivery efforts have shifted to explicitly focus on the prevention of subsequent pregnancies among teen mothers. The onset of pregnancy within 24 months of a previous pregnancy outcome (often referred to as “rapid repeat pregnancy”) is common among parenting adolescents [5,10-11]. Recent studies have demonstrated that as many as 25% of teen mothers will have a second child within two years of the birth of their first child [5,10-11]. Adolescent mothers who carry a subsequent pregnancy to term and choose to parent are at even greater risk of negative health and socio-economic outcomes than adolescent mothers overall [6,12-13].

Because postpartum contraception use is a significant protective factor for subsequent pregnancy among teen moms [14-16], a number of efforts have centered on increasing access to a full range of

contraceptive methods. Research shows that adolescent mothers who use long-acting reversible contraception (LARC), such as the intra-uterine device (IUD) and the intra-uterine system (IUS), have lower rates of subsequent pregnancy than those using other methods [7,15-17]. However, young mothers face a number of barriers to using postpartum contraception, including misinformation, high out-of-pocket costs, and social stigma [11,16,18]. In Canada, the contraceptive implant is not available and the postpartum use of available methods of LARC among teenage mothers remains low [14-15,19].

Despite these efforts, few studies have examined the dynamics surrounding contraceptive use and subsequent pregnancy among teenage mothers in Canada. Further, the voices of young women in Ontario, Canada's largest and most populous province, are notably absent. In 2016, we conducted a multi-methods qualitative study in Canada's capital to understand between women's experiences, their use of available resources, and ways that services could be improved or expanded [20]. In this article we focus specifically on women's decision-making surrounding and use of postpartum contraception.

## **2. Methods**

Our study comprised two components: 10 in-depth interviews with young mothers living in the Greater Ottawa area and 10 key informant interviews with a range of stakeholders working with this parenting and pregnant adolescents. We collected our data between May and December 2016 (inclusive). EF, a bi-lingual (English and French) master's student in the Interdisciplinary Health Sciences program at the University of Ottawa, conducted all interviews after AMF, a medical anthropologist and medical doctor with extensive qualitative research experience in reproductive health, provided training.

### *2.1 Data collection*

We used a multi-modal community-based strategy to recruit young mothers; we posted flyers in and around organizations frequented by young mothers, distributed information through community organization listservs, and posted ads on social media outlets. Women age 25 or younger were eligible to participate if they had delivered and began parenting their first child before the age of 20, had experienced

at least one pregnancy within 24 months of the birth of their first child, were currently residing in the Greater Ottawa area, and were sufficiently fluent in English or French to answer interview questions. Although we offered to conduct interviews in-person, EF conducted all of the interviews over the telephone, per participants' preference.

Using an interview guide developed specifically for this study and after obtaining informed consent, we began with a discussion of the young woman's demographic information, educational and employment background, and reproductive health history. We then explored the circumstances surrounding the woman's first and all subsequent pregnancies, irrespective of outcome, her knowledge of, attitudes toward, and experiences with contraception, and her use of services targeting young mothers in the Greater Ottawa area. We concluded with a discussion of how services could be improved or respond better to the needs of young mothers. As a thank you for participating, each participant received a CAD20 gift card to Walmart. With permission we audio-recorded all interviews and took extensive notes during and immediately after the interaction. EF also formally memoed in the wake of each interview, a process that allowed her to reflect on the researcher-participant dynamic and served as the first step in the analytic plan.

We purposively recruited key informants based on publicly available contact information and early participant referral. In order to obtain a range of perspectives, we invited appropriately positioned individuals within organizations and programs targeting young mothers as well as health service professionals working with teen parents in Greater Ottawa to participate. We tailored our interview guide to each participant and explored key informants' educational and professional backgrounds, experiences working with young mothers, and perceptions on the dynamics shaping postpartum contraception use and subsequent pregnancies within this population. We ended our interviews with a discussion of services available in Ottawa and efforts that could be undertaken to improve existing and future programs. EF conducted interviews in English and/or French over the telephone or in-person at the key informant's office, per the preference of the individual. We audio-recorded all interviews, took notes, and later wrote formal memos.

## *2.2. Data analysis*

Our analytic process began during data collection. In this first phase we familiarized ourselves with the data using audio-recordings, notes, memos, and verbatim transcripts. We then developed a codebook using both inductive and deductive techniques and used ATLAS.ti to manage our data [21]. We then coded our transcripts for content and themes, moving from more concrete to more abstract constructions [22]. Regular meetings between EF and AMF guided our interpretation; we resolved our rare disagreements through discussion. We first analyzed the interviews with women and the interviews with key informants separately; in the final analytic phase, we looked at the findings together in order to identify concordant and discordant themes.

## *2.3. Ethical considerations*

This study received approval from the Social Sciences and Humanities Research Ethics Board at the University of Ottawa. Below, we organize our results around key themes and include illustrative quotes from both young women and key informants. We have removed and/or masked all personally identifying information about all of our participants.

# **3. Results**

## *3.1. Participant characteristics*

The young mothers in our study ranged from 21 to 25 years of age at the time of the interview. All of the participants identified as Anglophone and Caucasian. All of the mothers in our study have relied on some form of provincial financial assistance, including Ontario Works ( $n=5$ ), the child tax benefit ( $n=10$ ), and the Ontario Student Assistance Program (OSAP) ( $n=2$ ); four participants also mentioned having relied heavily on assistance from family members. Two of our participants were enrolled in a post-secondary education program.

Our 10 participants were parenting 19 children at the time of the interview and provided detailed information about 28 pregnancies. This included the 10 index pregnancies and 15 pregnancies that occurred within 24 months of the index pregnancy. The 15 subsequent pregnancies resulted in 10 live births, 2 abortions, and 3 miscarriages; none of our participants had ever placed a child for adoption. Most of the participants in our study had tried a number of contraceptive methods over their reproductive lives, including oral contraceptive pills ( $n=8$ ), withdrawal ( $n=8$ ), condoms ( $n=5$ ), the IUS ( $n=4$ ) and the IUD ( $n=3$ ), the contraceptive patch ( $n=2$ ), and Depo-Provera ( $n=1$ ). Five women described using a method of LARC at some point after delivering their first child.

The key informants in our study all provided direct services to young mothers in Greater Ottawa. Our participants included obstetrician-gynecologists (Ob/Gyns), family physicians, nurses, nurse practitioners, counselors, and educators. On average, our key informants had worked in the field for 8 years. At the time of the interview, our participants worked in a range of settings including hospitals, non-governmental organizations serving pregnant and parenting youth, community health centers, family and women's shelters, youth-focused organizations, and area high schools.

### *3.2. Young mothers' subsequent pregnancies were both intended and unintended*

Our findings suggest that many young mothers intend to become pregnant again and actively or passively plan those pregnancies [20]. Key informants explained that there are both “pull” and “push” factors that influence young mothers who intend to become pregnant. Pull factors include desiring to start and complete their own families, wanting a small age gap between children, and balancing the sex of children within the family. Push factors include cycles of teenage parenting and difficult childhood experiences. Key informants explained that they see a lot of young mothers who “passively plan” their pregnancies by not using contraception. An Ob/Gyn who works in a specialized clinic for adolescent mothers explained, “What I didn't anticipate was that about one third of our pregnant teens actually plan their pregnancy. So either they actively plan it by wanting to conceive or they passively plan it by not taking birth control [contraception] knowing full well that they could become pregnant.” These dynamics

were also reflected in our interviews with young mothers. Isabelle, a mother of three, was not using contraception after her first childbirth. When asked if her subsequent pregnancy was planned she answered: “It was kind of, we weren’t using any contraception so we knew it was [possible]”.

### *3.3. Participants reported the cost of contraception as a significant barrier to consistent use*

Young mothers in our study consistently and repeatedly reported that the upfront and/or out-of-pocket costs associated with contraception influenced their decision-making as well as consistent use of their chosen method. Half of the young mothers who participated in our study ( $n=5$ ) had received government financial assistance from the Ontario Works (OW) program. Recipients of OW receive coverage for prescription drugs that are listed on the Ontario Drug Benefit Formulary [23]. However, not every contraception modality is covered. For instance, while the IUS, Depo-Provera, and oral contraceptives are covered the IUD, the contraceptive patch, and the vaginal ring are not. One Ob/Gyn who works in a specialized medical clinic for pregnant and parenting youth explained:

There are some contraceptives that are covered by Ontario Works but some others are not. So for example, birth control [pills] are covered by Ontario Works, but there is the patch or the ring, because some do prefer the patch or the ring, it's not covered...sometimes they really just want one type of contraception and if you don't provide this type of contraception they are not going to use contraception. So that can be a limiting factor to the usage of contraception.

Many key informants reported that even with the coverage provided by OW, some young mothers are still unable to pay the residual out-of-pocket costs. As one expert stated with respect to oral contraceptives, “I’ve heard from many of the girls, anecdotally, birth control is \$7 a month but an abortion is free. It’s still \$7 for these kids. I think it should be free!” Key informants also explained that the low-cost contraceptive programs funded by Ottawa Public Health subsidize contraception obtained in community health centres and sexual health centres but out-of-pocket costs can still be prohibitive.

### *3.3. Prior negative experiences with contraception shaped postpartum use*

Many young mothers in our study reported having had unsuccessful experiences with multiple forms of contraception. Meaghan, a single mother of two, explained her frustrations, “Every time I would put it [the contraceptive patch] on I would get a huge hive rash on my body where it was. And then I tried the Depo-Provera and I gained like 60 pounds on that so I just stopped taking it.” Participants expressed that negative experiences with multiple contraceptive modalities were very discouraging and often led to their refusal of postpartum contraception or their inconsistent use of a chosen method. Six of the young mothers who participated in the study did not use any form of contraception following the delivery of their first child even though none of these participants were actively trying to become pregnant.

Key informants repeatedly referenced that a young woman’s confidence and “belief” in a contraceptive method is critical to adoption and consistent use. All key informants acknowledged that women’s histories with contraception, as well as their other sexual and reproductive health and relationship experiences, shape their perceptions of contraception and individual methods. A nurse practitioner who conducts contraception counselling with young mothers stated, “They have to have belief in the method...basic access to a choice that you...decide you want. Information has to be given over and over in different ways until each person understands, believes in it, and wants it”.

### *3.4. Lack of information and misinformation shape postpartum contraceptive decisions*

Our interviews suggest that a significant barrier to young mothers’ uptake of certain contraceptive modalities is misinformation shared among peers. This was especially prominent with respect to the use of LARC. Many young mothers shared anecdotal stories about someone they knew who had a negative experience with an IUD. As Ashleigh, a single mother of three, explained:

I wasn’t overly excited about [the IUD] because my cousin had problems with hers and I just haven’t heard great stories from personal friends. And I didn’t go on it after my daughter was born because my sister had one and it got lost somewhere in her. I kept hearing all these horror stories from people close to me and it just turned me off from it.

Women also expressed fear about the method and reported that they did not want to discuss this postpartum contraceptive option with their health care provider. Kate, a single mother of two, explains her interactions surrounding the IUD, “I think my family doctor mentioned it but again he knew that it wasn’t really something that I was looking into”. Many young mothers in our study expressed that fear of judgment discouraged them from accessing certain services or raising certain contraceptive topics with their health care providers. Catherine, a single mother of two, described an interaction that resulted in her refusing to use a postpartum contraceptive method and stopped her from asking questions, “He [the Ob/Gyn] turned around and he said so we better stick you on the pill so you don’t have another baby. I was like ok I’m not taking it.”

Most of our key informants expressed the need for more sex-positive, youth-friendly sexual and reproductive health education. A counsellor who has experience working with pregnant and parenting youth, explained:

There needs to be more comprehensive sexual education and I think that there also needs to be more openness around talking about sexual health and talking about unintended pregnancies, talking about pregnancy, and talking about miscarriages, talking about abortion, talking about people’s real life experiences not in the hypothetical as you know this could happen but in the this does happen, this does happen to most of us and why is that and what do we do when it does happen.

Key informants further emphasized that health literacy plays a big role in message delivery and that creative strategies are required. As a nurse practitioner who provides sexual and reproductive health education explained, “It’s like teaching math, it’s the right teacher for the right kid. We don’t expect everyone to learn math one way with one curriculum. There are so many different ways to give the same message. You just got to keep coming at it at a different angle.”

## **4. Discussion**

### *4.1. General implications*

Our study documents a number of obstacles that young mothers face when trying to access postpartum contraception. Women and key informants identified the cost of contraception in Ottawa as a significant barrier; all methods should be covered through existing insurance schemes. For vulnerable low-income populations, our findings confirm that even modest co-pays can be prohibitive. This needs to be addressed at a provincial level. In the interim, expanding the Society of Obstetricians and Gynaecologists of Canada' Compassionate Contraceptive Assistance Program [24] could support women in financial need. Further, all contraceptive options should be available, including the hormonal contraceptive implant. In the United States, research demonstrates that adolescent mothers who use contraceptive implants have lower rates of subsequent pregnancy than those using other methods [14]. However, the implant is currently not available in Canada [19] and thus Canadian women do not have access to a comprehensive methods mix.

However, women will only use contraception if they have information about a range of methods and receive comprehensive and non-judgmental care. Efforts to improve sex education, introduce more sex-positive and youth friendly education campaigns, and recognize that negatives experiences are real and are shared should be considered. Sex-positive services are founded in the belief that healthy sexuality can be a positive, pleasurable, and dynamic force in life and are committed to embracing the unique ways people choose to express this aspect of their lives. Non-judgemental services consist of creating spaces where personal beliefs, attitudes, and values are recognized. Our findings suggest that these efforts would resonate with young mothers' in Ottawa.

Although LARC may be right for some women, long-acting methods are not a panacea. Women's decisions need to be valued and women need to be supported in making decisions they believe in. Further, women who opt not to use postpartum contraception should be respected. Health service providers should be aware of young mothers' values and beliefs and approach them in a non-judgmental way.

#### *4.2. Limitations*

Qualitative research is not meant to be representative or generalizable and the same is true for this study. We are confident that the themes we have identified are meaningful but we caution against using them to determine broader trends. The positionalities of our team members likely influenced the interviews with young mothers. Participants might have perceived a power imbalance through our presence, as researchers, which could have had an effect on how young mothers answered the interview questions. However, memoing immediately after interviews allowed us to reflect on the content, explore our personal reactions to the information shared, and understand our subjective influences on the interview process.

#### *4.3. Conclusion*

Our findings suggest that young mothers often do not use post-partum contraception; for some this is a choice for others this is the result of systems-level, service delivery, and information barriers. Supporting policies to ensure that a full range of contraceptive methods are available and affordable and developing educational programs in Ottawa that are sex-positive and non-judgmental appears warranted.

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## **Chapter 5: Discussion**

Our findings support that young mothers and their children are a vulnerable population that require further assistance and support. The in-depth interviews with young mothers and interviews with key informants suggest that young mothers often experience disadvantageous life circumstances as well as significant barriers when accessing and adopting postpartum contraception. This final chapter discusses how the two articles relate to each other and explores the broader study findings. The chapter then examines the findings in regards to young mothers' health needs and priorities and potential improvements to current services available to young mothers and their children in Ottawa. I explore the implications and future directions of the study for local stakeholders and health service providers. This chapter concludes with a section on reflexivity, a statement of contribution, and the conclusion of this thesis

### **5.1 Integration of results**

When combining the findings from both research articles, it is evident that this study brings forth intersectional issues, which influence the circumstances and decision making of young mothers who experience rapid repeat pregnancy. A number of themes emerged from the two research articles: an array of intersectional social, relationship, and individual dynamics shape young mothers' risk of subsequent pregnancy; there exists a number of barriers to exiting services; and some young women desire subsequent pregnancies and actively or passively plan accordingly.

#### *5.1.1 Income, housing and educational history*

Young mothers are often disadvantaged in terms of low income, history of unstable and/or unhealthy housing, and low/lower education level (Harrison, 2014). Other socioeconomic factors such as having a large family, raising children as a single parent, and the cycle of teenage parenthood are common among young mothers. Indeed, it is estimated that 25% of children born to young parents will become young parents themselves (Luong, 2008). Through our study, which included 10 interviews with

young mothers, 9 women were raising their children as a single parent and four young mothers had a parent that also had children at a young age. Moreover, two women had grade 10 high school level of education, five women had relied on governmental financial assistance, and nine had experienced unstable and/or unhealthy living situations. These issues are overlapping and increase the risks of having an unintended pregnancy and not using postpartum contraception.

Youth that are not attending school are at higher risk of experiencing an unintended pregnancy and are less likely to complete their high school diploma (Luong, 2008). This in turn increases their risk of long-term governmental financial dependency and decreases their future employment and earning potential (Harrison, 2014; Luong, 2008). Also, women's housing and living situation had a direct impact on whether or not they attending school. For instance, one young mother lived on the street/couch surfed for over a year which resulted in her missing a lot of school and eventually being suspended. Women who participated in the study experienced different living situations; nine mothers stated having moved several times in the past few years, two women had lived with other young mothers in specialized residences, three women had lived in shelters, and one young mother had lived on the streets.

Although the young mothers ( $n=3$ ) who stayed in the specialized residences were grateful to have had access to this service, they expressed how living with other young mothers who had also experienced disadvantaged circumstances could often lead to conflict in the residence. Many described the environment to be unhealthy and stressful at some point during their stay. There were different reasons for young mothers to live in shelters. For all three women, this allowed them to be placed on the priority waiting list for subsidized housing. Within only a few months of living in a shelter all three young mothers and their children were able to access housing. For one young mother in particular, her decision to stay in a shelter was due to her fleeing an abusive relationship. Many young mothers stated having had experienced unhealthy physical environments including lack of privacy/personal space, low income and unsafe neighborhoods, and unhygienic environment. The physical environment is a significant health determinant that can impact many aspects of a young mother and her children's health (Gill, 2016).

### *5.1.2 Women experience multiple forms of violence*

Young mothers and their children are a population that is vulnerable to abuse and violence and research demonstrates that young mothers are at high risk of experiencing both sexual and physical abuse (Kingston 2012; Pinzon & Jones, 2012). Experiencing violence is often associated with unintended pregnancies and mental health and substance abuse issues (Harrison 2014; Kingston 2012; Pinzon & Jones, 2012). Through our study nine out of ten young mothers experienced some form of violence during their lifetime. Many of these women experienced multiple forms of violence from multiple people in their lives. Experiences of violence among our participants included childhood physical, emotional and sexual abuse, sexual assault, and intimate partner violence (IPV). Many women had experienced violence in their childhood from family members, in their adolescent years by peers, and in their personal relationships by partners. One participant, who has two daughters, shared her story of abuse with us and explained that she was sexually abused by her biological brother between the ages of 9 and 13. At the age of thirteen, while she was out of town on a school trip, she gave birth to her oldest daughter. At the time she was unaware that she was pregnant and had to give birth all alone in a bathroom stall. The events that followed were very traumatic, from having to disclose the history of abuse to her family and to service providers and police officers, to having her daughter apprehended for the first 6 months of her life due to the nature of the abuse. This young mother has since experienced other forms of violence from peers and other partners and has experienced various mental health issues.

Young mothers also expressed having experienced reproductive coercion from family members and partners prior to and during their pregnancies. Reproductive coercion is a term used to describe actions of control over an individual's ability to make decisions regarding their reproductive health. Examples of reproductive coercion include forced pregnancies or terminations, birth control sabotage, and refusal to negotiate condom use (Planned Parenthood Ottawa, 2013). Many young mothers who participated in our study expressed how they did not have control over their contraceptive usage and/or felt pressure to continue with a pregnancy or terminate a pregnancy. One young mother stated that she was in such an emotional and physically abusive relationship with the father of her children that she was

not even thinking of contraception, which resulted in an unintended pregnancy. Another participant who experienced an unintended pregnancy explained that when she disclosed to her family members that she was pregnant her sister threatened to push her down the stairs if she did not agree to have an abortion. Young women who have experienced a history of abuse are more likely to be pressured into not using a condom and becoming pregnant. “Invisible” contraception methods, such as the IUD and the IUS, could potentially reduce the risk of rapid repeat pregnancy among young mothers who experience reproduction coercion (Planned Parenthood Ottawa, 2013). Our participants that were experiencing forms of reproductive coercion were either unfamiliar with the IUD/IUS or were uninterested due to their busy lifestyles and/or mental health issues.

### *5.1.3 Mental health conditions and substance abuse issues*

The overarching socio-economic dynamics have an impact on the mental health of young mothers. Young mothers are more likely to develop depression and anxiety than non-parenting youth (Hodgkinson, 2014; Al-Sahab et al., 2012). Mental health issues are often associated with rapid repeat pregnancy and substance abuse issues (Harrison, 2014). Key informants in our study stated that women who experience depression and mood disorders prior to, during, and/or after their pregnancies are more likely to experience rapid repeat pregnancy. Nine out of ten of the young mothers who participated in our study expressed having experienced mental health issues including depression, postpartum depression, and anxiety. In addition, three women experienced substance abuse issues during different stages in their lives. Lacking adequate social support and support networks, experiencing violence, living in unstable housing and poverty can influence a young mother’s mental health and coping skills resulting in substance abuse (Harrison, 2016). Many key informants and young mothers who participated in the study stated that there is a significant need for more youth-friendly mental health services and service providers in the Ottawa community.

#### *5.1.4 Lack of knowledge, awareness and education about sexual and reproductive health*

The findings of our study suggest that there is a significant lack of knowledge surrounding sexual and reproductive health including various methods of contraception. Young mothers who benefit from education will often have increased confidence and self-esteem (Gill, 2016; Harrison, 2014). Many young mothers express a desire to improve sexual and reproductive health education (Gill, 2016; Harrison, 2014). Key informants who participated in our study explain how lack of knowledge surrounding contraception can often lead to non-compliance and/or refusal to use certain contraceptive modalities. They have also expressed how young mothers often access sexual and reproductive health information from their peers resulting in misinformation. Indeed, many young mothers who participated in our study have heard negative anecdotal stories from their peers regarding LARC such as the IUD and IUS. This resulted in them refusing to consider these modalities as a contraceptive option.

Many of our key informants also expressed the need for more sex-positive, youth-friendly sexual and reproductive health education. They emphasize everyone learns differently and that health literacy plays a big role in message delivery. There are many ways to delivery a message, it is important to tailor education to the individual to ensure comprehension. They explain that a women's understanding, confidence and belief in a contraceptive method is key to her uptake and compliance to the chosen modality. They also explained that every young mother has a unique background and set of experiences which shape the way she perceives contraception. Individualized and tailored sexual and reproductive health education could be very beneficial to young mothers (Pinzon & Jones, 2012).

However, in order for young mothers to be open to receiving sexual and reproductive health information, it is essential that they do not feel judged. Many young mothers expressed that fear of judgment would often discourage them from accessing certain services or even from bringing up certain topics surrounding contraception with their health care providers. A young mother who participated in our study explained how she had felt judgment from her gynecologist which resulted in her refusing a contraception method and stopped her from asking further questions about contraception options. Young

mothers believe that service providers who care for them should be more respectful, compassionate, and non-judgmental (Harrison, 2016).

#### *5.1.5 Difficulty navigating services*

There are many intersecting issues that affect the health of young mothers and their children such as poverty, unstable housing, education, access to a health care provider, etc. Often young mothers need to access multiple services in order to address all of these issues. Through our interviews with key informants, it is evident that there are many resources, services, programs, and initiatives in Ottawa that young mothers could benefit from. However, young mothers in our study were unaware of all of these services that they can access. Also, service providers are often unfamiliar with the full range of services available in the community that they could potentially refer young mothers and their children to. Having very busy lives and/ or experiencing mental health and addiction issues can also make it very difficult for young mothers to navigate the health care system.

It has been established in the literature that multidisciplinary centres that offer a wide range of programs are more effective in providing holistic care to young mothers and their children (Harrison 2014; Pinzon & Jones, 2012). Although there are a few organizations targeted for pregnant and parenting youth that offer multidisciplinary services in Ottawa, our study suggests that many young mothers are not accessing them. There are many reasons why young mothers have not accessed these organizations such as lack of awareness, fear of judgment, traveling distance, and the eligibility criteria (these centres have a cut off age). These young mothers will often try to access other services in the community that are available to mothers and their children in general. However, many young mothers expressed that these services are often not youth-friendly and that will experience judgment from service providers and/or other parents. Stigma and fear of judgment will often stop young mothers from accessing services, which is associated with social isolation and mental health and substance abuse issues (Harrison, 2014).

### *5.1.6 Barriers to accessing postpartum contraception*

Postpartum contraception use is a significant protective factor for rapid repeat pregnancy among young mothers (Blitzer, 2016; Whitaker, 2016). However, certain barriers, such as cost, lack of knowledge, and societal stigma can restrict young mothers from accessing contraception after childbirth (Gill, 2016; Rotermann, 2007). Half of the young mothers who participated in our study have received governmental assistance from the Ontario Work (OW) program. Key informants explain that the OW program does not subsidize every contraceptive modality, which can be a significant limiting factor for young mothers. An obstetrician and gynecologist who participated in our study expressed that sometimes if a woman is set on one specific contraceptive option and it is not covered by OW, she might decide against contraception all together. Many key informants also explained that even with the coverage provided by OW, some young mothers are still unable to pay the residing amount. Participants also explained that there are low-cost birth control programs, funded by Ottawa Public Health, that are available through community health centres and sexual health centres, where people can receive subsidized contraception but are still required to pay an unrealistic out-of-pocket amount. Many service providers have expressed that cost should not be a barrier to contraception and that all contraceptive options should be free and available to everyone.

Many young mothers have had unsuccessful experiences with multiple forms of contraceptives. Participants have expressed frustrations with costs associated with different modalities, compliance issues, and negative side effects. Negative experiences with multiple contraceptive modalities can be very discouraging and often lead to their refusal of postpartum contraception or inconsistent use of a chosen modality. Six of the young mothers who participated in the study were not using any form of contraception following the delivery of their first child. All of them stated that at the time, they were not actively trying to conceive.

### *5.1.7 Young mothers actively and passively plan their pregnancies*

Findings presented in both articles suggest that many young mothers actively and passively plan their pregnancies. Key informants explained that there are different factors that influence young mothers who plan their pregnancies such as, the desire to start their own family, wanting a small age gap between their children, wanting a child of a different gender, having parents who were also young parents, and having experienced a difficult childhood. Key informants explain that they see many young mothers who will either actively plan their pregnancies or passively plan their pregnancies by not using contraception knowing full well that they could become pregnant. An obstetrician and gynecologist who works in a centre for pregnant and parenting youth stated that one third of the pregnant adolescents seen at the centre actively or passively plan their pregnancies.

### *5.1.8 Young mothers' strengths and motivations*

Despite the negative outcomes associated with teenage motherhood, for many young mothers becoming pregnant and raising a child provides a strong motivation to make a better life for themselves and their children (Al-Sahab et al. 2012). Although this study sheds light on negative socioeconomic and health outcomes associated with teenage motherhood and rapid repeat pregnancy, many young mothers stated that having children has significantly enhanced their lives. They have expressed that having children motivated them to leave an abusive relationship, stop using substances (illicit substances, alcohol, tobacco), and create a better life for themselves. All ten of the young mothers interviewed for our study stated that becoming a mother was an overall positive experience and that they have learned so much. Similarly, key informants have expressed that for many young mothers becoming a parent was a very empowering experience and that it often provided motivation for women to pursue their studies, find employment, find stable housing, and to provide for their children. Service providers and support services should empower young mothers by building on women's motivation and strength in order to identify and support their education and career goals, which in turn may provide motivations for delaying a subsequent pregnancy (Pinzon & Jones, 2012).

Moreover, key informants explained that some young mothers might have had difficulties with the child rearing process with their first child and that having a subsequent pregnancy can motivate them to do things differently the second time. Becoming pregnant again can empower women to provide for their family, develop a healthy bond with their child, build their self-esteem, and gain confidence in their parenting skills. Similarly, key informants expressed that young mothers who have had negative experiences with the Children's Aid Society (CAS), such as having their child apprehended, often felt motivated in making important changes in their lives. CAS involvement is common among young mothers, in fact 7 out of 10 young mothers we interviewed have had contact with them.

We interviewed service providers who do outreach work among the homeless youth population in shelters and on the streets in Ottawa. They explain that they often see young women who only access health care services while they are pregnant. Becoming pregnant provides the outreach workers an opportunity to bring in at-risk women into their centres where they can access basic primary care, obstetrical care, food bank services, housing support, etc.

## **5.2 The term “Rapid repeat pregnancy”**

Although the term “Rapid repeat pregnancy” is largely used in existing literature surrounding teenage pregnancy and teenage motherhood, we recognize that the term is problematic and brings forth negative connotations. When it comes to family planning among older mothers, it is quite common to plan subsequent pregnancies within 24 months of each other. However, when a young mother experiences a subsequent pregnancy with 24 months of a previous one it is seen as a negative outcome. The stereotype of a teenage mother, a woman who has left school, does not have the necessary skills to succeed and contribute to society, influences how their subsequent pregnancies are perceived in society (Gill, 2016). However, as previously mentioned many teenage mothers become successful parents and thrive in society. There is a need for a term that is non-judgemental.

### **5.3 Suggestions for improving access to postpartum contraception**

Our study documents a number of obstacles that young mothers face when trying to access postpartum contraception. For instance, the Ontario Health Insurance Plan (OHIP) does not cover prescription drugs provided in non-hospital settings such as contraceptive modalities prescribed by a family doctor or nurse practitioner (Service Ontario, 2017). Many of the young mothers who participated in our study had received government financial assistance from the Ontario Works (OW) program. The OW program helps people who are in financial need and offers financial assistance such as income support and health benefits. Recipients of OW receive coverage for prescription drugs that are listed on the Ontario Drug Benefit Formulary (Ontario Ministry of Community and Social Services, 2016). However, not every contraception modality is covered under this formulary. For instance, while the IUS, the Depo-Provera injection, and some oral contraceptives are covered under OW, other contraception methods such as the copper-T IUD, the hormonal patch and the vaginal ring are not.

According to Planned Parenthood Ottawa (PPO), young mothers can access a multitude of contraceptive modalities through pharmacies (pharmacy prices can vary depending on the individual pharmacy's dispensing fee), with a doctor's prescription, or through the low-cost contraceptive program offered at Ottawa Public Health Sexual Health Clinics. Oral contraceptives are available at pharmacies for approximately \$30/month, oral contraceptives are also available to youth under 25 years of age at the Sexual Health Centre for \$10/month; Depo Provera is approximately \$40 at pharmacies and youth under 20 years of age can access it for \$2 at the Sexual Health Clinic, and youth of 20-25 years of age can access it for \$30; diaphragms are available at some pharmacies for approximately \$65-\$75; the hormonal contraceptive patch is approximately \$30 at pharmacies and \$10 at the Sexual Health Centre; the hormonal contraceptive ring is approximately \$30 at pharmacies and \$10 at the Sexual Health Centre; the IUD is available at pharmacies for approximately \$60-\$80; and the IUS is approximately \$350 and is covered by most drug/health plans (Planned Parenthood Ottawa, 2009).

The significant cost of contraceptive modalities presents an important challenge and in order to support young mothers in accessing free contraception, service providers have to use creative approaches.

For instance, in the event where a young mother is unable to pay for contraception, health service providers can try to reach out to the companies who manufacture the contraceptive in question in order to get free samples. They can also reach out to the Compassionate Contraceptive Assistance Program, offered by the Society of Obstetricians and Gynaecologists of Canada (SOGC), and advocate on behalf of a young mother, in order to receive contraception funding (The Society of Obstetricians and Gynecologists of Canada, 2017). However, these approaches require time and effort from service providers who often already have too heavy workloads and limited time and resources. There is a need for increased financial support for young mothers in order to assist them in accessing contraception in a timely manner following delivery.

It has been well established in the literature that adolescent mothers' postpartum use of LARC such as the IUD, the IUS, and the hormonal contraceptive implant, is associated with significantly lower rates of pregnancy than is the use of condoms or oral contraceptives (Bitzer, Abalos, Apter, Martin & Black, 2016; Troskie, Soon, Albert & Norman, 2016; Wilson, Fowler & Koo, 2013). In the United States, research demonstrates that adolescent mothers who use hormonal contraceptive implants have been found to have lower rates of rapid repeat pregnancies than those using other methods (Wilson, Fowler & Koo, 2013). However, the hormonal contraceptive implant is currently not available in Canada (Troskie, Soon, Albert & Norman, 2016). Young mothers who live in Canada have fewer hormonal contraceptive options compared to the United States and United Kingdom. Having the hormonal contraceptive implant available to Canadian women could serve an important role in helping them plan and space their pregnancies (Troskie, Soon, Albert & Norman, 2016). The hormonal contraceptive implant is a small rod that is inserted under the individual's skin of the upper arm and releases progestin, which prevent pregnancy. The effects of this long-acting reversible contraceptive can last up to four years and the implant itself can be removed at any time should the person want to become pregnant (Planned Parenthood Federation of America, 2017).

Contraception counselling among young mothers is an important tool in reducing the risk of rapid repeat pregnancy (Sober et al., 2017; Bitzer, Abalos, Apter, Martin & Black, 2016). Youth-tailored,

individualized contraceptive counselling that is incorporated during prenatal care and postpartum care visits, with a trusted health care provider, have been proven in being more effective at reducing the risk of rapid repeat pregnancy among young mothers (Sober et al., 2017; Bitzer, Abalos, Apter, Martin & Black, 2016). In order for contraception counselling to be effective, the health care provider should inform the young mother of all of the contraceptive methods available, how to properly use the selected method, the potential side effects and benefits, the failure rates, and what to do in the event of a failure or if the contraceptive is not used properly (Bitzer, Abalos, Apter, Martin & Black, 2016). In Ottawa, many of the organizations that target pregnant and parenting youth have an obstetrics and gynecology clinic which young mothers access during and after their pregnancies. Key informants who work in these clinics have affirmed that they follow a model where the topic of postpartum contraception is approached with the young mother before after after delivery. However, key informants who provide obstetrics care to young mothers outside of these organizations indicate that the subject of contraception is usually approached only after delivery or very briefly during a prenatal visit. Incorporating this model, where the health care provider discusses contraception options with young mother prior to delivery, in other settings appears warranted. Prenatal and postpartum care are also great opportunities for sexual and reproductive health education among young mothers (Sober et al., 2017). Education should be more holistic and focus on increasing knowledge and understanding surrounding developmental changes, menstrual cycle, sexual orientation, sexuality and healthy relationships, contraception, sexually transmitted infections (STI) prevention and pregnancy (Bitzer, Abalos, Apter, Martin & Black, 2016).

In order for a young mother to uptake an effective postpartum contraceptive method it is essential that she believes in the method and decides for herself that she wants it. Health service providers should be aware and respectful of a young mothers' values and beliefs since they may be factors when women are considering contraception. Potential side effects, personal comforts, personal beliefs, and personal priorities can all play into contraception decision-making among young mothers. Health care providers should provide accurate, non-judgmental information and try to understand young mothers' situations in order to find a contraceptive method that they want for themselves and believe in. There is a clear need to

identify non-judgemental and youth-friendly services in Ottawa and to make sure young mothers and service providers are aware of them.

Misinformation and lack of knowledge surrounding contraception indicates a significant need to provide more comprehensive sex-positive sexual and reproductive health education to youth in Ottawa. It is also important that health care providers do not assume that all young mothers will understand the language that they are using when talking about contraception. Due to their different realities and experiences, young mothers have different levels of health literacy, which will impact the way the process information surrounding contraception. Health care providers should conduct tailored contraception counselling as much as possible and indicate a willingness to answer questions and explain further anything a young mother does not understand.

#### **5.4 Suggestions for improving services**

Our findings suggest that young mothers often actively or passively plan their pregnancies, experience forms of violence, have mental health and substance abuse issues, and find motivation in their pregnancies to create a better life for themselves.

Key informants have expressed that providing individualized support to young mothers and helping them to learn parenting skills increases their chances of success with their first child, which may decrease their desire to have subsequent children right away. Centres that offer multidisciplinary services and tailored care to young mothers are more likely to be successful in building a young mother's confidence and self-esteem (Patchen, LeTourneau & Berggren, 2013; Pinzon & Jones 2012). As illustrated by our findings, many young mothers demonstrate a desire to better their lives when they find out that they are pregnant and decide to parent. Programs that build on this new found motivation are more likely to empower women to continue their education and acquire important skills and find employment (Pinzon & Jones 2012). Similarly, programs that offer multidisciplinary services on-site appear to be more effective in supporting young mothers who have experienced violence and/or who have mental health and substance abuse issues. Service providers working in an interdisciplinary team are able

to provide more holistic care to young mothers and assist them in complex processes such as establishing a safety plan in a situation of abuse.

However, these processes can take a lot of time, effort and human resources, which is not always possible in other medical settings. Key informants have voiced that most general obstetricians and gynecologists and family doctors that provide obstetric services may be reluctant to inquire about a women's experience with violence or mental health issues because they do not have or are not aware of the resources available to support that young mother. There is a significant need to identify non-judgmental, youth-friendly services and programs available in the Ottawa community and to make service providers and young mothers aware of them. Raising service awareness and creating community ties will provide support to service providers and allow them to appropriately refer young mothers.

### **5.5 Significance and further directions**

To date, there is very little Canadian published data on adolescent mothers' who have experienced subsequent pregnancies or rapid repeat pregnancies. The findings from this study will help address this gap in the current literature. The findings of my thesis shed light on the experiences of young mothers who have experienced subsequent pregnancies in Ottawa. We were able to identify women's health needs and priorities and explore how services could be improved in Ottawa. This study will aim to contribute to the literature on the reproductive health of young mothers. The dissemination of our findings is necessary to promote the adoption of our recommendations. We plan on disseminating our findings through three avenues. First we intend to submit two articles for publication from our study: Chapter 3 has been submitted to *FACETS* and Chapter 4 has been submitted to *Contraception*. By publishing in these journals we intend to promote knowledge and awareness of the circumstances and decision-making of young mother who experience rapid repeat pregnancy in Ottawa. Second, we intend to share our findings in the form of a short report with all of our participants. We will also share this report with other stakeholders in hope that the information from our study will be useful to service providers and

agencies that provide support to teenage mothers in Ottawa. Lastly, we have disseminated the findings of this study at academic conferences in Canada to reach health services decision-makers and researchers.

## **5.6 Limitations**

Given the busy lives of young mothers, it has proven difficult to get young mothers to commit to an interview time. Often, we had to reschedule interviews multiple times or candidates simply changed their mind about participating due to their hectic schedules. Telephone interview allowed young mothers to participate in the interview at a time of their choice (evenings and weekends included) and from a location of their choice. They did not need to find childcare or pay transportation cost. Despite these efforts, we still had difficulty recruiting our original target of 20 participants. However, we reached thematic saturation after less than 10 interviews with women.

All of the young mothers that were interviewed were white and Anglophone. Therefore, perspectives of women from different ethnic groups and language-minority communities are not reflected in our data. Future research would benefit from inclusion of these voices. Also, young mothers with more stable lives and partners are less likely to participate in this type of study or need/obtain services through area organizations. Their voices are also not included in this research.

As this study was only a small-scale study for a graduate thesis, it was not feasible to conduct the study province-wide or Canada-wide. This study focused on greater Ottawa, which limits the transferability of results. For future studies, this limitation could be taken into account and the scope of the study widened to include a sample from across the province or even across Canada. Further, the temporal nature of the study is such that policy changes influencing sexual and reproductive health services in Ontario that occurred after 2016 would not be reflected in our data.

As is true with qualitative research in general, the findings from this study are not generalizable to all young mothers living in Ottawa who have experienced rapid repeat pregnancy. The in-depth interviews conducted with young mothers allowed us to capture their stories and to understand their experiences with rapid repeat pregnancy. This gave us insight into the dynamics that shape young mothers

pregnancies and into the services that they utilize in the Ottawa community. We are confident that the themes identified are valuable and meaningful but we caution against using them to determine broader trends.

### **5.7 Positionality and reflexivity**

When conducting qualitative research, it is important for the researcher to take account of their own positionalities. Determining your positionalities as a researcher involves examining your own experiences and the different aspects of your identity and how they influence how you conduct research and analyze and interpret data (Muhammad et al., 2015). It is also important to identify differences in privileges and organized structures between yourself and the participant that may cause a power imbalance such as; age, gender, class, race and class (Chang, 2017; Muhammad et al., 2015). Differences in background, knowledge and reasons for involvement in the study are important to be recognized (Change, 2017; Muhammad et al., 2015).

As a qualitative researcher, I made an effort to be aware of my positionalities and how they can influence how I perceive and interpret the data from our study. Positionality considers the researcher's position as an outsider and the inherent power imbalance between the researcher and the researched (Råheim, et al., 2016). The power imbalance can stem from the differences between the researcher and the researched's identity and experiences and how they might affect their perspective on the research being conducted (Råheim, et al., 2016). Reflexivity concerns an analytic self-awareness process where the researcher acknowledges the overall impact of their reasoning, personal experiences, and identity on the analysis and perception of the data (Råheim, et al., 2016). The process of memoing immediately after interviews allowed us to reflect on the content of the interviews, explore our personal reactions to the information shared, and understand our subjective influence on the interview process. This process enhanced the credibility and trustworthiness of the research.

As a woman who has worked in a centre for pregnant and parenting youth for over 2 years, I gained valuable experience working with teenage mothers and their children in Ottawa. More specifically,

I have been exposed to the struggles and experiences of adolescent mothers, which has allowed me to develop skills that are sometimes necessary when interacting with this vulnerable population. It also gave me insight into the barriers that young mothers face when trying to access sexual and reproductive health services and health support services in general. I often observed young mothers experience subsequent pregnancies and face challenging decisions. I have also observed many young mothers, who have multiple children, struggle accessing essential services.

For the past year, I have also been volunteering for Planned Parenthood Ottawa (PPO) in order to promote healthy sexuality and informed sexual reproductive health choices through education, counselling, information, and referral services. When I first started volunteering at PPO, we received comprehensive sexual and reproductive health training which has considerably broadened my knowledge and understanding of reproductive and sexual health topics such as; safer sex and contraception, sexual orientation and gender identity, sexual violence and sexual rights, pregnancy options, and sex positivity. As a PPO volunteer, I regularly provide accurate, up to date information on sexual and reproductive health topics, administration, services and practices to clients who physically come in to our office or who call our phone line.

However, even with my experience, I myself am not a young mother nor have I been raised by a young mother. Through the data collection phase and the analysis and interpretation process, I was conscious that I was outside of the young mother community and how there might be an imbalance in power while conducting the interviews. Moreover, as a Master's student, participants might have perceived a power imbalance through my presence, which could have had effect on how participants answered the interview questions. This imbalance affects the rapport that I was trying to establish during the interview process and might make young mothers uncomfortable to disclose certain information. For instance, many of the young mothers have had interactions with the CAS. Although most of the young mothers who had more positive experiences with the CAS felt comfortable disclosing their experiences with me, the young mothers who had negative experiences with the CAS, such as child apprehensions, did not feel comfortable sharing their experiences with me. This is likely a result from the complex

dynamics between young mothers in Ottawa and the CAS. Many young mothers fear being judged and fear the consequence that the CAS can impose. In order to minimize the impact that my presence had on the research, I debriefed with my supervisor and other students within our research team and sought out expertise and opinions from experts who work with young mothers.

Even though I do not have a background as a health service provider who works with young mothers, my work experiences and education background provided me with the knowledge to easily discuss the circumstances surrounding teenage pregnancy and sexual and reproductive health. I felt confident while conducting the interviews with experts who work with young mothers and their children.

Further, this study allowed me to realize that I am determined to take part in work that will improve young mothers' sexual and reproductive health in Canada. Ideally, I would like a career that incorporates research, policy, and practice. I see myself leading reproductive and sexual health initiatives and/or programs within the youth community, with the aim of improving young mothers' access to services and resources. I want to continue developing close ties within the reproductive health community of Ottawa as well as expand my reproductive and sexual health knowledge.

## **5.8 Statement of contribution**

As the Principal Investigator (PI) of the study, I completed this study in partial fulfilment of the requirements for the Master of Science degree in Interdisciplinary Health Science program at the University of Ottawa. Consistent with my role as PI, I conceptualized the study, designed the study instruments, collected and analyzed the qualitative data, and led the writing of the two research manuscripts.

My supervisor Dr. Angel M. Foster worked with me to design a feasible project in which I could report on the circumstances and decision-making surrounding rapid repeat pregnancy and the services available to young mothers living in Ottawa. She guided me through the research process to help me create the research proposal and get approval from REB, and provided me with feedback and guidance on

the study instruments and tools. She oversaw the project in its entirety including reading over the memos and the transcripts, approving the code books, and discussing interpretations of findings.

In preparation for this study, I received training during my first year in the master's program. I completed a directed study supervised by Dr. Foster in which I received training on how to conduct in-depth interviews. Through this directed study I had the opportunity to conduct interviews as part of the Canada Abortion Study. Conducting these in-depth interviews helped me develop the skills required to conduct the in-depth interview component of my study. I have also attended a qualitative methods workshop organized by my supervisor, where I received training on qualitative methods and training on the ATLAS.ti software, which assisted me in data management. Finally, as part of my supervisor's research team, we had weekly meetings where I received support from my supervisor and other students. These meetings also allowed me to gain knowledge surrounding sexual and reproductive health topics.

## **5.9 Conclusion**

Despite the overarching decline in birth among teenage women in Canada, failure to meet adolescent mothers' and their children's needs still represent serious economic, social, and public health challenges. Although pregnancy can be a positive experience for many young mothers, often socioeconomic and health issues that were present after the first childbirth can become greater and more difficult to manage after a subsequent childbirth. Understanding young mothers' experiences and perceptions surrounding rapid repeat pregnancy is crucial to improving and/or expanding available services in the Ottawa community.

This study assessed young mother's experiences, knowledge, and attitudes towards rapid repeat pregnancy and contraception. Our findings suggest that young mothers often do not use postpartum contraception or are non-compliant to their chosen contraceptive method. Many factors, such as cost, personal belief, personal and familial priorities, and knowledge, influence a young mother's decision making surrounding contraception. There is a need for increased financial support for young mothers in order to assist them in accessing contraception in a timely manner following delivery. Misinformation and lack

of knowledge surrounding contraception indicates a significant need to provide more comprehensive sex-positive sexual and reproductive health education to youth in Ottawa.

Many young mothers have difficulty finding youth-friendly, non-judgemental support services that address violence and mental health and substance abuse issues. Supporting and further developing non-judgmental and youth-friendly services that young mothers feel comfortable accessing appears warranted. There are many negative socioeconomic and health outcomes associated with teenage motherhood; however, for many young mothers becoming pregnant and parenting provides a strong motivation to create a better life for themselves and their children. Centres that offer multidisciplinary services, tailored support, and builds on women's strengths are more likely to be successful in preventing rapid repeat pregnancy. However, there is a need for further more comprehensive outreach work in order to reach young mothers who are not accessing these multidisciplinary centres.

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## Appendix A: REB approval

File Number: 03-16-12

Date (mm/dd/yyyy): 04/25/2016



**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
Elyse	Fortier	Health Sciences / Others	Student Researcher

File Number: 03-16-12

Type of Project: Master's Thesis

Title: Exploring the knowledge, attitudes and experiences of teenage mothers in Ottawa: A qualitative study dedicated to rapid repeat pregnancy

Approval Date (mm/dd/yyyy)	Expiry Date (mm/dd/yyyy)	Approval Type
04/25/2016	04/24/2017	Approved

#### Special Conditions / Comments:

N/A

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550, rue Cumberland, pièce 154 Ottawa (Ontario) K1N 6N5 Canada  
550 Cumberland Street, room 154 Ottawa, Ontario K1N 6N5 Canada  
(613) 562-5387 • Téléc./Fax (613) 562-5338  
[www.recherche.uottawa.ca/deontologie/](http://www.recherche.uottawa.ca/deontologie/) [www.research.uottawa.ca/ethics/](http://www.research.uottawa.ca/ethics/)