

# **Understanding Adolescent Pregnancy through Adolescent Perspectives**

A critical review of the literature



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# **INTRODUCTION**

#### **Statement of Issue**

Adolescent pregnancy remains an issue of great concern in Canada, and other developed countries around the world. In 2005, more than 30,000 Canadian teens became pregnant, representing almost 7% of all pregnancies (Statistics Canada, 2008), and research tells us that a significant number of adolescent pregnancies are unintended (Sex Information and Education Council of Canada (SIECCAN), 2004). One study found that more than 90% of 15 to 19 year olds describe their pregnancies as unintended (Klein, 2005). Although rates of adolescent pregnancy seem to be declining, these numbers still fall short of what is acceptable and attainable (Spear, 2004b). Despite efforts to increase sexuality education and accessibility to contraceptives for teen girls living in Canada, this country still ranks 17<sup>th</sup> out of 24 Organization for Economic Cooperation and Development (OECD) nations for teen fertility rates (UNICEF, 2007).

It is also important to consider that although overall rates of teenage pregnancy appear to be declining, these declines in pregnancy and birth rates tend to be limited to urban, economically advantaged geographic locations (Best Start, 2007). Rates among marginalized groups remain high, and in some cases continue to climb. National trends can mask a number of realities that exist in a country. Teen birth rates from specific subpopulations reveal a more complex picture of adolescent pregnancy within a society (Best Start, 2007). Recent statistics from Ontario's Ministry of Health and Long-term Care (MOHLTC) show higher birth rates in northern, remote areas, as compared to southern, urban communities (Ontario Maternity Care Expert Panel, 2006). Provincial statistics reveal a wide range of birth and pregnancy rates for teens, from a low of 9.7 live

births/1000 women aged 15 to 19 years in British Columbia, to 104.4/1000 in Nunavut, and a low of 19.3 pregnancies/1000 women aged 15 to 19 years in Prince Edward Island, to a high of 145.6 pregnancies/1000 young women in Nunavut (Statistics Canada, 2008b).

Early adolescent childbearing is associated with a wide range of diverse consequences and restricted life opportunities for young girls and the children they bear (Cowley, 2001). These consequences have been well documented in the literature, and found to affect not only the young mother and her child(ren), but families, communities, and society at large. Mothers who have children during adolescence are more likely to have truncated education, lower paying jobs, higher levels of unemployment, larger families with closer spacing of children, higher likelihood of marital disruption, higher likelihood of future out-of-wedlock childbearing, and higher likelihood of living in poverty (Aquilino & Bragadottir, 2000).

Children born to adolescent mothers have a number of disturbing outcomes, including higher likelihood of low birth weight, higher likelihood of difficulties in school, and are at risk for negative social behaviours and delinquency (Carter & Spear, 2002). Teenage parents and their children also face greater risks of adverse medical, educational and socioeconomic consequences (including having poorer housing, fewer employment opportunities and less adequate nutrition) than do older parents and their children (Stone & Ingham, 2002). Further, 42% of children born to teen mothers live in poverty, nearly twice the overall rate for children (Annie E. Casey Foundation (AECF), 1998). In fact, one of the best ways to improve overall child well-being and to reduce persistent child poverty is to prevent teen pregnancy (National Campaign to Prevent Teen Pregnancy, 2004).

The societal and economic consequences of unintended adolescent pregnancies have also been well documented (Jaccard et al, 2003). For example, in the United States, the gross annual cost to society of adolescent pregnancy, including social programs and medical expenses, is an estimated \$29 billion (Maynard, 1996). The cost of adolescent pregnancy to teens, children, families, communities and society at large warrants a well co-ordinated, multi-dimensional, public health approach.

Numerous efforts have been made to prevent pregnancy in adolescence; most focus on improved accessibility and availability of contraceptives, and/or sexual and reproductive health education. Although both are necessary tools for pregnancy prevention, these efforts fail to consider the complexity of this issue. It is now evident that teen pregnancy is not a simple social problem that can be fixed with appropriate educational and health messages alone; a more comprehensive understanding and approach is required (Best Start, 2007). To better understand the many contributing factors, and how they might be influenced, it is important to gather information from adolescents themselves about how they perceive adolescent pregnancy, and what they believe influences sexual decision making. Although several studies have examined the factors and motivations underlying adolescent contraceptive behaviour, teen attitudes toward pregnancy are still poorly understood (Cowley, 2001).

There has been considerable empirical attention devoted to understanding the dynamics of adolescent pregnancy and its prevention (Jaccard et al, 2003). Though the literature is replete with studies documenting adult perceptions about teen pregnancies and methods for prevention, relatively few studies examine the insights of teens themselves (Herrman, 2008). A recent review of the literature on teen pregnancy noted

that out of 36 studies from the United States and the United Kingdom that examined teen pregnancy and motherhood, none included any consideration of pregnancy intention (Bonell, 2004). Research on teen pregnancy often fails to include the voices of the very people who are most affected, the young women themselves (Best Start, 2007), and even fewer studies consider the views of the adolescent males and/or groups of adolescents who may be more vulnerable. There has also been limited research that explores and/or evaluates the application of adolescent perspectives to public health practice and policy.

# **Research Questions:**

Through preliminary reviews of the literature, a number of questions related to adolescent perspectives on adolescent pregnancy have emerged, including:

- What are adolescent perspectives on sexual decision making, contraceptive use, adolescent pregnancy/parenting, and pregnancy prevention efforts?
- What gaps exist in our understanding of adolescent perspectives on sexual and reproductive health matters?
- How can adolescent perspectives influence public health practitioners, policy-makers and researchers?
- How can adolescent perspectives support teen pregnancy prevention efforts?

# **Background**

Most studies related to adolescent pregnancy that have been conducted to date have focused on demographic variables and correlates related to risk for teen pregnancy, statistical analyses of incidence and prevalence rates, and outcomes/consequences of teenage pregnancy and early childbearing (Carter & Spear, 2002). The complex nature of

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young people's sexual lives and the diversities of their practices are only just beginning to be understood (Stone & Ingham, 2002).

According to a Statistics Canada Health Report, in 2005 43% of 15 to 19 year olds reported having had sexual intercourse (Rotermann, 2008). About one-third of those who had had intercourse in the previous year did so with more than one partner, and approximately 25% of sexually active adolescents did not use any contraception (Rotermann, 2008). When you consider a population of greater than 2 million adolescents living in Canada, this translates to 500,000 or more adolescents who are at risk of early pregnancy and parenting.

There is no single definitive reason why young women have children in their teens. Explanations based on simple concepts such as lack of knowledge or irresponsibility fail to consider the complex nature of early sexual activity (Stone & Ingham, 2002). A number of possible risk factors for adolescent pregnancy have been identified, including:

- having been born to teenage mothers (Carter & Spear, 2002)
- living in poverty (Carter & Spear, 2002)
- having a sexual relationship with a male 2 to 3 years older than themselves
   (Carter & Spear, 2002)
- low self-esteem (Commendador, 2007)
- social exclusion (Stone & Ingham, 2002)
- having been brought up in a home where there has been marital discord (Best Start, 2007)
- history of abusive relationships (familial and/or social) (Best Start, 2007)

There have been a number of hypotheses about why teen pregnancy persists in developed countries. The Best Start Resource Centre (2007) concludes that teen pregnancy can result from many different situations, for example:

- a teen who does not have the motivation to delay pregnancy,
- a teen who has limited knowledge about sexuality and reproduction,
- a teen who does not have access to effective birth control,
- a teen who does not have the skills to use birth control effectively,
- a teen who does not have the confidence and communication skills to negotiate condom use,
- a teen who would prefer abstinence, but who feels pressured into having sex, or
- a teen who feels that having a baby at a young age is normal and desirable.

Regardless of the context in which adolescent pregnancy occurs, it is agreed that it is an issue of great concern. In a report of current research from the Best Start Resource Centre (2007), it was found that teen pregnancy raises concerns about possible health risks to the pregnant teen and her growing baby; the ability of the teen parent to care for and support her child; the effect that pregnancy/parenting at a young age can have on the teen's life plan, goals and aspirations; the effects that pregnancy/parenting at a young age can have on the potential development of the child; and the social costs of supporting young mothers and their children.

Given the current profile of sexual behaviour among adolescents and the likely consequences of teen pregnancy, there is a definite need to improve existing programs aimed to reduce the rate of teen pregnancy (Aquilino & Bragadottir, 2000). The complex nature of adolescent pregnancy needs to be considered when developing effective

approaches to address this concerning issue. The process leading to teenage pregnancy involves a sequence of turning points, including sexual intercourse, use of contraception, pregnancy, and pregnancy resolution (Moore et al, 2007). Understanding the influences on decision making and behaviours at each of these stages in a teen's life, may offer helpful insight into pregnancy prevention.

Based on the literature, it has been assumed that basic demographics (gender, race, age, family income, perceived academic performance, and extra-curricular activities), family and peer influence, knowledge, and attitudes (about sexuality, life goals, intent to become pregnant) affect behavioural choices related to sexual activity and pregnancy prevention (Carter & Spear, 2002). An in-depth account of the perspectives of adolescents on the important factors that contribute to adolescent pregnancy and parenting is necessary to further understand this multi-dimensional phenomenon.

#### **Definitions**

In 1904, the concept of *adolescence* as a distinct time of turbulent transition from childhood to adulthood was introduced by American psychologist, G. Stanley Hall (Best Start, 2007). Throughout this paper, the terms "*teen*" and "*adolescent*" may be used interchangeably, and refer to youth aged 13 to 19 years. It is important to note however that much of the research studying adolescent pregnancy focuses on adolescents aged 15 to 19 years.

Teen and/or adolescent pregnancy refers to pregnancy in young women who are aged 19 years and under (Best Start, 2007).

Pregnancy rates include live births, fetal loss, and induced abortions.

Sexual decision making refers to the range of decisions that influence the engagement in sexual activity, contraceptive practices, and pregnancy outcomes.

Pregnancy resolution refers to the range of pregnancy outcomes, including: emergency contraceptive use, abortion, adoption, and parenting.

# Purpose

The main purpose of this research paper is to facilitate a more in-depth understanding of adolescent pregnancy through the perspectives of adolescents on sexual decision making, contraceptive use, pregnancy, early parenting, and pregnancy prevention. A critical review of the research on such adolescent perspectives can inform public health practitioners, policy-makers and researchers so that they may explore and establish an improved system that addresses this issue, and that they may develop an increased understanding of its complexities.

# **Objectives**

The main objectives of conducting this review of the literature are:

- to identify gaps in the current research about adolescent perspectives with respect
  to sexual decision making, contraceptive use, pregnancy and early parenting, and
  pregnancy prevention,
- to raise awareness about the complexities of adolescent pregnancy from the perspectives of adolescents
- to make recommendations for public health practice, policy and research based on adolescent perspectives, and
- to provide information that may guide a comprehensive approach to teen pregnancy prevention.

# **Conceptual Framework**

There are a number of different theories and frameworks that have been used to describe and understand adolescent behaviours and decision making processes. During the adolescent years parts of the brain, such as the prefrontal cortex (responsible for decision making), that are less mature may not be able to conjure up future consequences and their significance (Herrman, 2007). By viewing teen pregnancy from a developmental approach, the individuals' level and abilities, cultural context, age-appropriate impulsive and rational decision making styles, and response to stress may be used to conceptualize interventions (Herrman, 2007).

Steinberg (2002) has written that teen risk behaviour is largely 'non-rational' in nature, and that it is not faulty decision making in teens but *lack* of decision making.

Teen judgment is less developed related to cognitive and psychosocial variables, such as peer pressure, a tendency to socialize in groups, an orientation to the present, and an inability to inhibit impulses. Coupled with the inherent emotional influences and passionate arousal associated with sexual activity, youth may not rationally consider the pros and cons of sexual activity (Lowenstein & Furstenberg, 1991).

Researchers have explored teen pregnancy from the perspective of a conscious decision making process. Alder et al (1990) integrated the cost-reward framework into the theory of reasoned action to develop a decision making framework for adolescent contraceptive use. In this model, the beliefs about the consequences (i.e. perceived costs and rewards) are multiplied by the values those consequences hold for the individual, yielding a general attitude toward the behaviour. Within a cost-rewards framework, youth perceptions of costs and rewards are at the origin of a deliberate decision making

process related to teen sexual behaviour (Herrman, 2008). The perceptions of others multiplied by the motivation to comply with the wishes of others produces those general social expectations regarding behaviour. These attitudes and social expectations are then postulated to lead to the intention to engage in a particular behaviour (Herrman, 2007). Understanding the unique nature of decision making in adolescence is a foundation for further explanation of adolescent pregnancy.

# **METHODOLOGY**

Since the body of research exploring adolescent perspectives on factors associated with adolescent pregnancy has not yet been organized into a comprehensive, guiding document, this author chose to undergo a critical review of such literature.

Published reports and peer-reviewed articles were identified through: electronic databases (JSTOR, Ovid, CINAHL, ProQuest), manual searches, reference lists from primary articles, and contact with content experts. Key words used in the searches included: Adolescent, pregnancy, teen pregnancy, perspectives, attitudes, teen pregnancy prevention, sexual decision making and were used in various combinations with "AND".

## **Inclusion Criteria**

Studies chosen for inclusion in this review:

- were published within the past 10 years (i.e. 1999 and beyond),
- were published in credible, peer-reviewed journals,
- were conducted in developed countries, and
- explored adolescent perspectives on adolescent pregnancy and related sexual and reproductive health matters (including: sexual decision making, contraceptive use, pregnancy prevention efforts, etc).

# Analysis

Based on the quality of research evidence, each of the studies in this critical review has been assigned a level of evidence. Appendix A describes the levels of evidence in detail. The findings of all articles included in the review were thoroughly examined to identify themes related to adolescent perspectives on adolescent pregnancy and related topics, in an attempt to explore the previously described research questions.

# **RESULTS**

After considering the inclusion criteria, searches yielded 26 articles for review. Appendix B offers a summary table of the articles that have been included in this review. The number of participants across the studies ranged from 2 to over 4000, and less than one-third of the studies included adolescent male participants. Objectives of these studies ranged from very broad (i.e. "To investigate teens' perceptions of the costs and rewards of teen births, potential interventions to prevent teen pregnancy, and the presence of someone in their lives with whom teens could discuss sexuality" (Herrman, 2008)) to more specific (i.e. "To understand ethnic and gender similarities and differences in teen views of adolescent pregnancy to help neighbourhood-based planning groups tailor their interventions" (Kegler et al, 2001)); all of which contribute to the growing body of research that considers the perspectives of the population that is affected.

The most common study design used by researchers to explore adolescent perspectives on this issue was qualitative, using mainly focus groups, and interviews. A large number of studies also used a survey design.

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A number of themes have emerged from this review that describe adolescent perspectives on adolescent pregnancy and related issues. The most significant themes can be categorized as:

- sexual decision making/planning,
- pregnancy intent/desire,
- ambivalence,
- contraceptive use,
- pregnancy prevention,
- male perspectives, and
- attitudes about early pregnancy and parenting.

A few studies also examined perspectives on pregnancy resolution during adolescence, and have been included in the discussion.

# **DISCUSSION**

First, it should be noted that overall, teens were found to be concerned about teen pregnancy. In one study, participants' views of the magnitude of the problem varied considerably. Some said it was a big problem, and others indicated they knew lots of girls who had been pregnant (Kegler et al, 2001). Aquilino & Bragadottir (2000) found that participants in 7 different focus groups felt that teens should not get pregnant, and that most prefer not to be pregnant. It is important to consider at the onset of a study of perspectives whether or not teen pregnancy is seen as a concern for the participants. The fact that majority of studies found that adolescents saw the concern is hopeful, and should be flagged as a consideration in pregnancy prevention planning.

The findings of the critical review of literature on adolescent perspectives of adolescent pregnancy and related issues will be discussed in terms of the themes that have emerged.

# Sexual Decision Making/Planning

As previously discussed, decision making is a complex process, particularly during adolescence. Many adolescents do not possess the cognitive development needed to evaluate clearly their situations and foresee the consequences of their choices (Spear, 2004). Adolescence is a time of growth, change, and exploration and is influenced by many factors. Promoting safe sexual choices requires a clear understanding of the complexity of these decisions and the factors that influence sexual decision making (Weiss, 2007).

There are a number of decisions to consider when exploring the dimensions of adolescent pregnancy, including: decisions about engaging in sexual activity, decisions to use contraceptives, and in the event of a pregnancy, decisions about pregnancy resolution. At any age, sexual decision making takes place within the context of passionate, emotion-filled experiences, all of which have an inherent degree of stress and peer pressure (Herrman, 2007).

A number of studies have examined sexual decision making in adolescence.

These studies identify the relationship between positive motivation and decision making, the influences that family members and others may have on decision making, and the importance of teaching and supporting the development of effective decision making skills in adolescence.

While perceived risks tells us what motivates adolescents to be abstinent or practice safer sex, they do not tell us what draws adolescents to sex (Ott et al, 2006). Theory and research suggest that sexual behaviour is influenced by positive motivations for sex, which may be: physical (the desire for feelings of pleasure), relationship-oriented (the desire for intimacy), social (the desire for peer approval or respect) or individual (the desire to gain a sense of competence and learn more about oneself) (Ott et al, 2006). Research with late adolescents has found that perceived benefits may be at least as motivating as perceived risks in sexual decision making.

Teen mothers in an ethnographic, descriptive study, spoke of the spontaneous nature of sexual activity and that it lacked planning or consideration of the consequences (Herrman, 2007). Pairing the positive motivation(s) for sexual activity with the spontaneity of this behaviour for adolescents further complicates the decision making process. Spear's (2004) exploration of the personal narratives of adolescent mothers-to-be revealed the adolescent awareness that pregnancy had placed the participants in situations where they were called upon to make adult decisions when they themselves were still children.

An understanding of adolescents' decision making about contraception use is one of the first steps toward the prevention of adolescent pregnancy (Commendador, 2007). Commendador (2007) analyzed responses to the Flinders Adolescent Decision Making Questionnaire and a contraceptive use questionnaire with a sample of ethnically diverse, female adolescents, and found a significant association between maladaptive decision coping and sexually active participants. For every one unit increase on the maladaptive

scale, the odds of using contraception were estimated to decrease by 7% (Commendador, 2007).

Understanding what may influence decision making in adolescence begins with an understanding of *who* may be influencing their decisions. Research shows a consistent finding that sexual decision making in adolescence involves parents, family members, other adults, and partners. Through focus group discussions, Aquilino & Bragadottir (2000) found that teens wanted parents and other adults to be involved in helping them understand sexuality and make decisions about sexual behaviour. Further, Spear & Lock's (2003) review of qualitative research on adolescent pregnancy revealed that decisions about resolving pregnancy were most often not made in isolation. Pregnant adolescents usually involved family members and/or partners in the decision making process.

In another study, Herrman (2008) found that teens recognized a need for adolescents to be educated about decision making, and need to be given the tools to make responsible decisions. This makes perfect sense if teenagers are expected to make 'adult-like' decisions during a time in their lives when they haven't yet developed advanced decision making ability.

These studies reveal a need for a deeper understanding of sexual decision making in adolescence, a need to consider that adolescents make decisions with their parents, partners, and peers, and a need to educate teens about decision making and give them opportunities to develop these necessary skills.

# **Pregnancy Intent/Desire**

The reasons women choose to become pregnant, or to continue a pregnancy, are many and diverse at any age (Best Start, 2007). The assumption that pregnancy during adolescence is usually unintended is supported by the research on adolescent perspectives. For example, adolescent participants in Kegler et al's (2001) focus groups suggested that pregnancy was largely an unintended consequence of sex.

Although it is often assumed that early childbearing is *always* unintentional, some adolescents do plan their pregnancies and may seek motherhood to gain adult status and a sense of fulfillment (Hanna, 2001). There have been reports of intended premarital adolescent pregnancies for the past 25 years (Bloom & Hall, 1999). Research examining pregnancy wanted-ness may be helpful in understanding the motivations of teens (Bloom & Hall, 1999). A better understanding of the factors associated with a desire for pregnancy among adolescents may help health care providers better predict the most atrisk adolescents (Cowley, 2001), and form hypotheses about the underlying factors associated with pregnancy intention. The studies reviewed by this author revealed a number of adolescent perspectives on pregnancy intention, including insights into why some teenagers may desire early pregnancy and parenting.

Through focus group discussions with male and female adolescents, Aquilino & Bragadottir (2000) found four main themes explaining why teens become pregnant: denial, lack of responsibility/planning ahead/failure to use contraceptives, need for somebody to love/be close to/to be wanted or needed, and to get attention. Kegler et al (2001) also found that adolescent participants could identify reasons why some teenagers want to become pregnant, including: wanting to prove something, show off, or be cool;

they are lonely and want to love or be loved; girls might want to have a baby to maintain a relationship with a guy.

Bloom & Hall's (1999) study of pregnancy wanted-ness explored the desire for pregnancy in a sample of adolescents who presented for pregnancy testing. They found that approximately 7% wanted the pregnancy test to be positive, 60% wanted it to be negative, and 33% were not sure (Bloom & Hall, 1999). Cowley (2001) found an even higher percentage of adolescent girls presenting for reproductive health services to desire pregnancy, and that only one significant difference existed between those who desired a pregnancy (19.8%) and those who were ambivalent (23.7%): girls desiring pregnancy were more likely to report that their boyfriends wanted a baby. Cowley (2001) also found that girls wishing to avoid pregnancy differed from girls desiring or ambivalent about pregnancy in 6 different parameters:

- ethnicity 68% of girls desiring pregnancy or ambivalent about pregnancy were
   Hispanic;
- school attendance 49% of girls desiring pregnancy or ambivalent about pregnancy were no longer attending school, compared to 14% of those girls wishing to avoid pregnancy;
- employment status almost 85% of girls desiring or ambivalent about pregnancy
  were unemployed while just 61% of girls wishing to avoid pregnancy were
  unemployed;
- family structure 39% of girls desiring or ambivalent about pregnancy were not living with any natural parent, compared with 16% of girls wishing to avoid pregnancy;

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- time spent away from home 73% of girls desiring or ambivalent about
   pregnancy has lived away from home for at least 2 weeks, while 36% of girls
   wishing to avoid pregnancy had done the same; and
- *desire of boyfriend to have a baby* 62% of girls desiring or ambivalent about pregnancy report their boyfriend wants a child, while 95% of girls wishing to avoid pregnancy report their boyfriend doesn't want a child.

Carter & Spear's (2002) anonymous survey of grade 9 students revealed that 13.89% felt that having teen friends or family members who have babies makes them want to have a baby. While on a deeper level, Hanna (2001) tells the story of a young woman named Lauren, who may seek early parenthood as a way of creating love for herself when her family has rejected her; her pregnancy provided her with her "own family" and a source of unconditional love. Clearly, understanding the process of adolescent pregnancy intention has significant clinical application (Rosengard et al, 2004).

Although the number of teen pregnancies that are intended remains relatively low, it is significant that adolescent girls have this desire at all. It is important to understand adolescents' motivations for pregnancy; the factors (i.e. attitudes, beliefs, intentions) that characterize those adolescents who indicate a desire for pregnancy may aid in efforts to reduce the negative health consequences of teenage childbearing (Rosengard et al, 2004). It is also important to consider ambivalent attitudes toward pregnancy in adolescence to be just as significant as pregnancy intentions.

#### **Ambivalence**

We know that the majority of pregnancies among unmarried teenagers are unintended (Bruckner et al, 2004). Most adolescents do not want to become pregnant, although some are not opposed to becoming pregnant and others have ambivalent attitudes. As a sub-theme to pregnancy intention, ambivalence toward pregnancy was discussed in a number of the studies reviewed by this author. Research to date has not been conclusive neither in terms of documenting the extent of ambivalence that adolescents feel, nor in terms of implicating the role of such attitudes in the occurrence of adolescent pregnancies (Jaccard et al, 2003).

Even though a relatively small number of adolescents actually say they wish to become pregnant, many are ambivalent about the desire to postpone childbearing (Bloom & Hall, 1999). Teenagers who are ambivalent about whether they want to be pregnant do not differ significantly from those desiring pregnancy, and should be considered just as high risk (Cowley, 2001).

It is important to understand the context in which adolescents feel ambivalent toward pregnancy. Jaccard et al (2003) conducted a prospective, longitudinal study of 4,869 adolescent females and found that over 15% of the adolescents indicated some ambivalence towards getting pregnant relative to their peers, and this tends to be heightened in certain demographic sectors of the population. Adolescents with 2 parents living in the home tended to show more negative attitudes towards pregnancy than adolescents living only with their mother; and adolescents who were currently in a romantic relationship had less negative pregnancy attitudes than those who were not in a relationship (Jaccard et al, 2003).

It has been argued that ambivalence toward pregnancy is a risk factor for pregnancy because it leads to inconsistent contraceptive use (Bruckner et al, 2004).

Bruckner et al (2004) explored ambivalence and pregnancy using data from a nationally representative sample of 4,877 sexually experienced young women (aged 15 to 19 years).

Of the respondents, 14% were ambivalent about pregnancy, and it was found that a greater proportion of ambivalent respondents (35%) than those in other groups did not practice contraception (Bruckner et al, 2004).

Rosengard et al (2004) provide strong evidence to support the significance of ambivalence; they conducted a longitudinal, cohort study with 354 sexually experienced female adolescents and found that although the majority of the sample (76.5%) indicated no plans to become pregnant in the next 6 months, 66% of the sample indicated that there was at least some likelihood that they would become pregnant in the next 6 months. Further, those who perceived any likelihood of becoming pregnant report weaker intentions to use condoms in the future than those who reported no likelihood of becoming pregnant in the next 6 months, and nearly 40% of those with inconsistent pregnancy intentions reported not using contraceptives every time they have sex (Rosengard et al, 2004).

There seems to be strong evidence to support targeted approaches with teens who express ambivalent attitudes toward pregnancy. Understanding the relationship between ambivalence and contraceptive use, and the context in which ambivalent attitudes exist, is essential in planning pregnancy prevention efforts and requires greater attention in public health research.

# **Contraceptive Use**

There is acknowledgement in the research that consistent contraceptive use, as opposed to abstinence, should be the objective of adolescent pregnancy prevention. When studying adolescent pregnancy, it is therefore important to explore trends in, and influences on contraceptive use among this particular age group. Only 48% of a sample of adolescents in one study (Commendador, 2007), and 35.4% of another study (Hacker et al, 2000) reported using contraceptives every time they had sex.

Aquilino & Bragadottir (2000) found that the most consistent response among adolescent participants to the question of what the goal of pregnancy prevention should be was to increase contraceptive use. Interestingly, in a sample of pregnant, unmarried adolescent females the participants' knowledge of available birth control measures did not translate into consistent and effective birth control practices (Spear, 2004).

Participants in this study had varied experiences using birth control measures and/or reasons why they were not used. Statements made by participants, including "I wanted to have a baby" and "I'd forget (to take birth control pill), I'd be busy doing other things," suggested that they were not overly concerned about early maternity (Spear, 2004).

Contraceptive practices and sexual attitudes are linked, in that they ultimately affect behaviours that may lead to pregnancy (Spear, 2004). Critical factors associated with contraceptive use include social and demographic characteristics, family-related characteristics, and individual characteristics (Bruckner et al, 2004). It may be of significance to note that in Carter & Spear's (2002) study, 68.63% of respondents disagreed or strongly disagreed that 'teenagers who do not use birth control want to get pregnant'.

In a cross-sectional study, there were no significant relationships found between age, global self-esteem, decision self-esteem, decisional coping vigilance, and sexually active participants' contraceptive use (Commendador, 2007). Effective contraceptive use generally requires planning and preparation prior to having sexual intercourse (Moore et al, 2007). Bruckner et al (2004) found that having a positive attitude toward contraception was associated with increased likelihood of contraceptive use.

Some contradiction exists in the literature related to who should be responsible for contraceptive use in adolescence. For instance, 82.35% of a sample of grade 9 students agreed or strongly agreed that 'the responsibility for using birth control should be shared by both the man and woman' (Carter & Spear, 2002). However, in another study examining the perspectives of young mothers aged 16 to 19 years, respondents relayed the perspective that females bore the sole responsibility for birth control in their peer group (Herrman, 2007).

Jumping-Eagle et al (2008) examined the association of conventional goals and perceptions of pregnancy with female teenagers' pregnancy avoidance behaviour and attitudes, finding that teenagers who had goals were more likely than others to have used a contraceptive at last intercourse. Though, conventional goals appear to motivate teenagers to avoid getting pregnant *only* if they believe pregnancy will be an impediment; and of the adolescent respondents that had educational or vocational goals, fewer than half thought pregnancy would be an impediment to achieving these goals (Jumping-Eagle et al, 2008).

The review of these studies suggests that attitudes toward contraceptive use and pregnancy, and perceptions of how pregnancy may influence goal attainment, may have

greater influence on contraceptive practice than knowledge and accessibility. Truly, many of the characteristics associated with effective, consistent contraceptive use are still poorly understood, requiring more in-depth exploration.

# **Pregnancy Prevention**

Information and education about contraceptive choices are more available than ever before through school-based programs, clinics for adolescents, and with the support of parents and community groups, yet teenage pregnancies still occur (Hanna, 2001). The critical review of studies on adolescent perspectives reveals a wealth of information about pregnancy prevention, including a desire for earlier sexual education that includes information about relationships, emotional aspects of sexual activity, and communication, deliberate selection of teachers/facilitators, and an array of alternative pregnancy prevention strategies.

Teens often want knowledge about sexual matters long before parents and teachers recognize their need for this information (Weiss, 2007). Teens also want to talk about sexual feelings as well as the mechanical aspects of sex (Weiss, 2007). While parents and teachers may remain uncomfortably silent about sexuality, the media and peers bombard teens with sexual information (Weiss, 2007). A number of the studies reviewed by this author revealed that adolescents support earlier education on sexual and reproductive health matters in teen pregnancy prevention efforts. Bourton (2006) found that many of the students who participated in a short multiple choice questionnaire felt that sex education should be included at a younger age because the students felt they knew all the information prior to the lessons. In this study, the majority view was that having correct knowledge early was less likely to make students want to experiment with

sexual relationships, whereas only being given limited information was more likely to increase their curiosity and lead to an increase in underage experimentation (Bourton, 2006).

Teens in focus groups supported a comprehensive approach to sex education beginning in early elementary grades, with age and developmentally appropriate content and reinforcement from late grade school through high school (Aquilino & Bragadottir, 2000). More specifically, Aquilino & Bragadottir (2000) found that teens felt that basic anatomy and physiology of conception should be presented in late elementary grades, and contraception information should be presented in junior high school. These participants felt that this information should be repeated and elaborated on throughout secondary school. They also felt that other topics in sexual health education should include peer and parent-child communication, and emotional aspects of sexual behaviour (Aquilino & Bragadottir, 2000). Adolescents could potentially complete their compulsory education having had some biological sex education, but no teaching related to the life skills they require to participate in healthy sexual relationships (Bourton, 2006). Adolescents request honest communications about sexual activity, choices, birth control, and consequences of unsafe sexual behaviour; one adolescent declares, "There's not many things you can do to tell kids not to have sex, but there's a lot you can do to tell them how to safely have sex" (Herrman, 2008).

In Hacker et al's (2000) study, respondents were likely to say that more information about pregnancy and birth control (51.9%), education about relationships (33.2%), communication with parents (32.5%), easy access to birth control (31.3%), education about the realities of parenting (29.5%), and a greater emphasis on delaying or

abstaining from sex (26%) would prevent pregnancy. In another study, suggestions for other types of programs to facilitate teen pregnancy prevention, included: a teen sexual information hotline, parent education, presentations by pregnant and parenting teens, and childcare programs with real or simulated babies (Aquilino & Bragadottir, 2000). Evans et al (2002) found sexually active teens reported willingness to attend mall-based clinics. This is an example of alternative venues for delivering teen pregnancy prevention efforts.

Overall, students in Bourton's (2006) study felt that they got most of their sex education from television, magazines, books, friends, parents, and school. In this sample, students identified that it would be better if the person teaching sex education was someone from outside of the school. The skills that the person teaching the sex education should have included: confidence, being able to relate to young people and being able to talk about sex without embarrassment (Bourton, 2006).

A study in London, Ontario found that adolescents were less comfortable discussing sexual health with teachers than health professionals (Evans et al, 2002). The respondents in Herrman's (2008) study frequently cited the need to have someone with whom to communicate and the need for adult-youth conversation about sexuality and pregnancy. 83.67% of a sample of grade 9 students believed that mostly peers influenced their sexual behaviour (Carter & Spear, 2002). This finding may help support a peer-delivered model of pregnancy prevention. Herrman (2008) found that teens commented on the need to have teen parents share their personal stories and the realities of teen pregnancy.

Teens felt that the best pregnancy prevention advice could be given by peers who were a few years older. However, they stressed that the instructors, regardless of age, should be well informed and experienced in the content (Aquilino & Bragadottir, 2000). Lindberg et al (2006) found that when asked about providers, participants did not express any preferences related to gender, race, or religion, but in the words of a 17 year-old participant, they preferred providers who "know what they are doing and act like they respect you".

A sample of Aboriginal youth, recommended a number of alternative strategies for pregnancy prevention, including: showing the consequences of adolescent pregnancy, enhancing and developing more pregnancy prevention program for Aboriginal youth, improve access to contraceptives, discuss teen pregnancy with Aboriginal youth, and use key messages and media to reach Aboriginal youth (Garwick et al, 2008). Although there is limited research that explores the unique needs and perspectives of diverse populations, the participants in this study perceived limited access to comprehensive pregnancy prevention education, community based programs and contraceptives (Garwick et al, 2008). More research among specific sub-groups of adolescents is needed to help public health practitioners and policy-makers understand the disparities in reproductive health care and identify opportunities to meet the needs of *all* adolescent populations.

There is a great deal that can be learned by asking for the perspectives of adolescents on pregnancy prevention efforts. Further application of this type of research to public health practice should be supported; and clearly, a review of sexual and reproductive health curriculum is an immediate need.

# **Adolescent Male Perspectives:**

Because decisions about sexual activity and contraceptive use usually involve both men and women, it is important to understand factors associated with young men's intentions (Huang, 2005). Known effects of premature parenthood on adolescent fathers include depression, anger, interpersonal conflict, changes in peer relationships, increased recreational drug use, low academic achievement, decreased earning potential, and long-term career dissatisfaction (Lindberg et al, 2006).

Redmond's study (1985) found that most males wish to be included in the pregnancy decision making process and receive emotional and social support during this time. If not included, the male partners would feel confused and neglected (Redmond, 1985). The inclusion of male partners in teen pregnancy prevention is an issue that needs to be addressed in both program development and evaluation (Best Start, 2007). Disappointingly, very few studies that explore adolescent male perspectives on pregnancy and related issues have been published. In Spear & Lock's (2003) review of qualitative research on adolescent pregnancy, far less than half (27%) of the studies included male subjects, and fewer males participated in individual studies compared to females.

Five of the studies reviewed considered the unique perspectives of adolescent males on the issues related to adolescent pregnancy. Most of the studies on the perspectives of adolescent males focus on their response to a pregnancy rather than their intent, involvement in contraceptive planning and use, attitudes about adolescent pregnancy/parenting and/or perspectives on pregnancy prevention.

Hacker et al (2000), found that if they got their partners pregnant, 43% of male students said they would accept the baby; 37.3% said that they would take care of it; 20.3% would ask for a blood test; 8.7% said that they would tell the mother to have an abortion; 3% said that they would say it was not theirs; and 15% said that they were not sure what they would do. In focus groups, young men in one study commented that having a child could have a negative impact on future relationships (Herrman, 2008). The males in this study also discussed the need to help financially when bearing a child and the impact on future financial success (Herrman, 2008).

Interestingly, males in a study on adolescents' positive motivations for sex reported significantly higher expectations that sex would result in pleasure and social status than did females (Ott et al, 2006). Understanding how motivations for sex differ by gender may provide valuable information about messaging for both sexes.

One study specifically explored the barriers to sexual and reproductive health care for male adolescents, using a focus group methodology (Lindberg et al, 2006). These adolescents voiced explicit concerns about the consequences of being seen by friends and other adolescents in a facility that provides sexual health services. Participants concurred that going to a clinic was to risk being seen and consequently suffering embarrassment and damage to their reputations (Lindberg et al, 2006). In this same study, attributes of the health care system that were seen as external barriers included a lack of confidentiality/privacy, disrespectful or impersonal treatment by providers, prolonged waiting times, and difficulty accessing and/or navigating the system of care (Lindberg et al, 2006). One reason that adolescent males may be underserved by reproductive health care compared to females is that for females, access to family planning or pregnancy-

related services provides entry to other health services, including health promotion activities (Lindberg et al, 2006).

Much more research is needed to fully understand the perspectives of adolescent males on pregnancy and related issues, and how these perspectives can be applied to public health practice, policy and research.

# **Attitudes toward Pregnancy & Parenting**

Questions about the relevance of attitudes are important because attitudes may mediate the often-observed association between socio-economic disadvantage and pregnancy risk (Bruckner et al, 2004). Jaccard et al (2003) found, through a prospective, longitudinal study of 4,869 adolescent females, that adolescent females' attitudes towards pregnancy were predictive of the occurrence of a pregnancy one year later. When the attitude toward pregnancy was lowest, the percentage of adolescents who became pregnant over the ensuing year was 3.6%. By contrast, when the attitude toward pregnancy was favourable, the percentage of adolescents who became pregnant was 29.4% (Jaccard et al, 2003). In the literature reviewed it was generally found that teens had accurate perceptions of the immediate challenges of adolescent pregnancy and parenting, but limited long-range forecasting.

In Herrman's (2008) qualitative look at teens' perceptions of the costs and rewards of teen births, the teens without children generally agreed that having a child during the teen years negatively affected friends. The participants were adamant about the stress a pregnancy may impose on a relationship, and several respondents indicated that some young mothers sustain the pregnancy in order to affirm the relationship. Many of these teens believed that the teen's family life may already be stressed and that a teen

birth would just add to the family's level of turmoil (Herrman, 2008). In the same study, having a baby during the teen years was thought to limit educational options, restrict study time, and pose significant challenges in juggling school and parenting (Herrman, 2008).

Many of the participants in this study articulated living in poverty, relating that money was a constant stressor (Herrman, 2008). Kegler et al (2001) also found that the financial costs associated with having and caring for a baby, inability to support a child, and child support were considered to be negative aspects of having a baby as a teenager, for participants.

The vast majority of adolescent females in Jaccard et al's (2003) study agreed with the statement that getting pregnant at this time would be one of the worst things that could happen and disagreed with the statement that getting pregnant at this time would not be so bad. In Kegler et al's (2001) study, participants in all focus groups, identified negative aspects of having a baby as a teenager. A disadvantage of teen pregnancy identified for both female and male teenagers in this sample was the loss of freedom and increase in responsibility associated with becoming a parent (Kegler et al, 2001).

Participants also talked about this aspect of teen pregnancy in terms of teens missing, ending, or losing their childhood (Kegler et al, 2001).

In some cases, pregnancy and parenting in adolescence were perceived to have some positive influence on the teen's life. Several qualitative studies have reported that pregnant teenagers assign positive meaning to early maternity and childbearing, and feel motherhood will transition them into adulthood and bring purpose and meaning into their lives (Spear, 2004b). Although the phenomenon of childbearing during adolescence is

widely recognized as a serious public health and societal problem, most research studies that examine the personal perspectives of pregnant and parenting adolescents themselves indicate that teenage childbearing, although not without challenges and most often unplanned, is viewed by these young women as a normative and acceptable life event (Spear, 2004b).

When a sample of 20 pregnant teens was asked how life has changed since becoming pregnant and whether their goals had changed, the majority voiced the importance of completing high school. There was recognition among this group of the importance of education for their future and likewise for their babies' welfare (Rentschler, 2003). All of the participants in Spear's (2004) personal narratives of adolescent mothers-to-be believed that they would be able to meet the challenges of single parenthood with the support of their families, primarily their mothers.

The non-parenting youth in Herrman's (2008) study perceived that childbearing during the teen years often resulted in an increased focus on success, more mature judgment skills, better behaviour, and a greater sense of responsibility. Young mothers in this study noted that they developed an increased ability to manage time and learn organizational skills (Herrman, 2008).

Rentschler's (2003) interviews with pregnant adolescents revealed that emotionally, the adolescents described themselves as now having a good attitude, and being calmer, mellow and motivated. These young women held values for pregnancy and motherhood that were solidly conventional, and the majority of the teens voiced an overwhelming desire to be the best mother one could be, yet only two of the teens spoke to reading about baby care and development (Rentschler, 2003). Similarly, Spear & Lock

(2003) reviewed the qualitative research on adolescent pregnancy, and found that in general, studies that explored the personal perspectives of adolescent females on pregnancy and its impact on their lives found that adolescent pregnancy was viewed as a normative and positive, albeit challenging, event.

Spear's (2004b) follow-up case study revealed that the sentiment expressed in the first study in 2001, that early maternity would have little effect on their lives no longer held true. Even though the participating mothers still maintain a sense of optimism and hope for the future, it was noticeably tempered by feelings of regret, isolation, and mourning of a lost childhood (2004b). These adolescent mothers emphasized that "it's hard" to be a mother and stressed that adolescent pregnancy and motherhood should be avoided (Spear, 2004b). It is apparent through this literature review that many teens are able to identify the challenges of early parenting, but still some have positive attitudes about adolescent pregnancy and parenting. Since adolescent mothers reveal the challenging reality, it may be helpful to figure out meaningful ways to demonstrate these realities and long-range consequences to non-pregnant adolescents.

#### **Pregnancy Resolution**

When adolescents are confronted with the life event of pregnancy, they are faced with difficult decisions related to abortion, adoption, or parenting (Spear, 2004). In 1997, as the birth rate continued to decline but the abortion rate remained relatively steady, abortion became the most common outcome of teenage pregnancy in Canada (SIECCAN, 2004). There is not a large body of research related to adolescent perspectives on pregnancy resolution, and those studies that have been conducted yield mixed conclusions.

Rosengard et al (2004) conducted a longitudinal, cohort study with 354 sexually experienced female adolescents, and over 90% of those who participated completed the follow-up; at that time, more than 75% of those who reported positive pregnancy test results reported that they would be terminating or had already terminated the pregnancy. However, previous literature says that 56% of teen pregnancies result in live births and one in four teenage mothers has another child within 2 years (Rosengard et al, 2004).

Hacker et al (2000) surveyed 1,000 randomly selected 10<sup>th</sup> and 11<sup>th</sup> grade students, and found that if they or their partners got pregnant, the majority of female students (61.9%) said they would keep the baby, but 24.4% said that they were not sure. Decisions about resolving the pregnancy were most often not made in isolation. Pregnant adolescents usually involved family members or partners in making their decisions (Spear & Lock, 2003). Redmond's (1985) examination of the attitudes of adolescent males revealed that acceptance of keeping the child was significantly correlated with discussion with the male's mother. Practitioners need to understand the factors associated with pregnancy resolution decision making and be equipped to offer counseling on a number of different options.

## **LIMITATIONS**

The study of adolescent perspectives on adolescent pregnancy presents many complexities that need to be considered if a comprehensive understanding of the issue is to be reached. The limitations of each of the studies reviewed for the purposes of this paper, have been included in the summary table (Appendix B).

Most studies that are concerned with attitudes toward pregnancy rely on small convenience samples or on retrospective accounts of pregnant adolescents' attitudes,

which may be colored by the pregnancy (Bruckner et al, 2004). When discussing factors related to pregnancy, it is somewhat difficult to establish set trends or patterns due to the inherent complexities associated with influences such as culture, social and familial factors, human development, and sexuality. Interrelationships between factors further complicate the issue (Spear & Lock, 2003). This author has identified a number of gaps in the research on adolescent perspectives on adolescent pregnancy, which offers some limitations to the conclusions in this review.

#### **IMPLICATIONS FOR PUBLIC HEALTH**

Adolescent pregnancy, which impacts adolescents, their families, and society, presents a number of challenges and merits the concern of health care providers today (Spear & Lock, 2003), especially in the public health realm. Helping adolescents delay early childbearing has long been a goal of health care providers, researchers, and policymakers (Cowley, 2001).

Communities need to be treated as unique entities, and assessment of populations at risk is necessary to develop appropriate preventive interventions that reduce the number of unwanted pregnancies and improve fetal outcomes (Carter & Spear, 2002). Decisions about teen pregnancy prevention strategies should be made in a reflective, rather than reactive, manner by involving both service providers and youth in discussions about local needs and concerns (Best Start, 2007). Determining teen perceptions of the personal and social costs associated with teen births may assist in designing interventions, messages, and policies based on these insights, increasing the potential effectiveness of initiatives informed by teens (Herrman, 2008). Involving adolescents in consultation

processes leads to the development and implementation of responsive services and fosters empowerment (Valaitis & Sword, 2005).

Though there is still a great deal to understand about the complexities of adolescent pregnancy, this critical review of the literature allows this author to articulate a number of recommendations for public health practice, policy and research.

#### Practice

Gaining insight and understanding about adolescent pregnancy, particularly from the perspectives of young pregnant women, can facilitate the development of knowledge that may be useful to nurses (Spear & Lock, 2003), and other service providers, who provide care to adolescents. It is important to include pregnant and parenting teens' perspectives when planning programs to meet their needs (Valaitis & Sword, 2005).

From the literature reviewed, it is clear that adolescents recognize the need for earlier sexual and reproductive health education, interventions that include providing information about relationships, communication and decision making, parent involvement in pregnancy prevention and planning efforts, peer-to-peer approaches, and gender-specific interventions. The studies also reveal some need for targeted approaches, tailored to specific needs of at-risk sub groups (i.e. those adolescents with ambivalent attitudes toward pregnancy) and diverse populations. While improved universal access to high quality sexual health education and health services must remain a priority, intensified, targeted and tailored sexual health interventions for youth that disproportionately suffer the burden of unintended pregnancy are required (SIECCAN, 2004).

It is apparent that the mixed nature of teen sexual activity warrants a multi-faceted approach to enhancing responsible behaviour (Herrman, 2007). At a macro level, institutions, such as schools, must provide universal access to comprehensive and effective sexual health education and physicians and other health care providers must routinely incorporate sexual health assessment including contraceptive counseling/education as a standard component of adolescent health care (SIECCAN, 2004). Interventions at the micro level should be guided by an information, motivation, behavioural skills approach that effectively promotes consistent contraception and responsible sexual decision making (SIECCAN, 2004).

Since much of teen sexual activity is spontaneous, unplanned, and sometimes involuntary, interventions must be created that take the nature of this sexual activity (Herrman, 2007) and the context in which adolescents are making decisions into account. Encouraging safe sexual practices, providing an opportunity for questions, and being a resource for information rather than a judge regarding choices that seem foreign are important strategies for public health practitioners (Weiss, 2007).

The promotion of adolescent sexual health involves equipping young people with the relevant knowledge, motivation, and behavioural skills to enhance sexual health (SIECCAN, 2004) and make responsible decisions. It is understood that in order to be able to make informed choices about sexuality, teens need information about their reproductive and sexual health, as well as access to reproductive health services, including access to birth control. Additional strategies are required to address the many underlying or predisposing factors involved in adolescent pregnancy (Best Start, 2007).

Because those adolescents with inconsistent pregnancy intentions in Rosengard et al's (2004) longitudinal cohort reported more suspected pregnancies and more positive pregnancy test results than those with clear intentions to avoid pregnancy, it is important to consider and intervene with this at-risk subgroup of adolescent females, especially with respect to the need for available emergency contraception, consideration of pregnancy termination, and/or preparation for a health pregnancy, delivery and baby.

Discussions regarding pregnancy plans and pregnancy likelihood may help focus counseling and educational efforts (Rosengard, et al, 2004), especially at sexual health clinics and similar public health settings. Clinicians who offer pregnancy testing to adolescents generally have mechanisms in place for appropriate counseling and follow-up for girls who test positive for pregnancy. Equally important is the appropriate counseling and follow-up for girls who have a negative pregnancy test so they do not become part of the population of adolescents with an unplanned pregnancy (Bloom & Hall, 1999).

Programs and clinicians need to speak to an at-risk population in a language they understand, addressing the perceived benefits of sex as well as perceived risks (Ott et al, 2006). A balanced approach that explores a range of realistic options and outcomes for teens, and involves teens in defining and realizing needed services, would be most effective (Best Start, 2007).

Pregnancy prevention models must draw on more than merely a health information approach. Approaches that reflect the complexity of life have more meaning for youth and a greater chance of affecting change (Best Start, 2007). For instance, Commendador (2007) suggests that nurse practitioners need to take an active role in creating strategies to facilitate competent decision making among adolescents.

Teens want timely information on sexual development, conception, and contraception delivered in an honest and detailed manner (Aquilino & Bragadottir, 2000).

The overall view of students in Bourton's (2006) exploration of sex education in school was that their sex education was fairly good, but too basic; it did not cover emotional and moral aspects in a way which was acceptable to them. In the view of this group of students, sex education needs to be included earlier in the curriculum and continued throughout secondary education with increasingly complex issues (Bourton, 2006). The results of Hacker et al's (2000) survey indicate that young people are most likely to think that more information on pregnancy and birth control, communication with parents, education about relationships, and easy access to contraception would prevent teen pregnancy.

Whether pregnancy is wanted or unwanted by adolescents, sex education, relationship counseling and communication skills need to be developed through the education system so that teenagers can develop problem-solving skills, social skills, and self-assertiveness, helping them to become more able to make informed choices about their fertility (Hanna, 2001). These findings reinforce the role of public health practitioners in educational institutions.

Stimulating adolescents' own thinking around not only sexual issues, but also relationship and communication issues may facilitate a vigilant and increased competence in decision making (Commendador, 2007). Kegler et al's (2001) finding that some girls wanted a baby to prevent loneliness or to maintain a relationship with a boyfriend underscored the need for interventions to focus on and model healthy relationships and provide activities and skill development opportunities that increased teens' sense of self-

worth and competence. Health care providers may have a role in facilitating improved communication between girls and their partners (Cowley, 2001). Ott et al (2006) conclude that knowledge of adolescents' relationship goals may enable programs and clinicians to better meet adolescents' needs by addressing alternative ways to express sexuality and achieve relationship goals.

Most of the participants in Spear's (2004) naturalistic study revealed that they had friends who had children; Spear concludes that perhaps in engaging in risky sexual behaviour, even though it did not necessarily bring enjoyment or feelings of intimacy, helped to create a sense of belonging.

In order to reduce the rate of early childbearing, adolescents need help in the area of making competent decisions so that they can make the right choices for themselves and their families (Commendador, 2007). Clinicians may be able to help teens sort out contradictory messages about sexual activity (Weiss, 2007). Mall-based public health clinics may provide a valuable alternative service for teens that cannot talk easily with teachers or parents, but require information & support with sexual and reproductive health issues (Evans et al, 2002).

Carter & Spear (2002) found that adolescent attitudes related to pregnancy and pregnancy prevention highlighted the promising value of school-based and peer-focused interventions. Incorporation of a peer-educator program may be effective with adolescents, noting that more than 80% of respondents in Carter & Spear's (2002) study felt that their sexual behaviour was mostly influenced by peers. Staffing clinics with peer counselors may provide teens with needed comfort to seek help being sexually responsible (Evans et al, 2002). The personal stories in Spear's (2004b) follow-up case

study with adolescent mothers fervently recommend that adolescents delay pregnancy and could be used to educate other youth at risk for early maternity about the realities of childbearing and motherhood at a young age.

Practitioners, at all levels of intervention, are urged to reflect on their own attitudes and beliefs as they relate to teen pregnancy. Our assumptions about teen pregnancy and parenting have on impact on the services that we provide (Best Start, 2007). Adolescents are aware of the judgmental attitudes that some adults hold, and when asked how society sees teenage mothers, a group of young mothers in Ontario offered the following stereotypes:

- "they don't know how to raise their kid"
- "they waste their money on drugs and not formula"
- "they live off welfare and they don't do nothing with their life"
- "they don't know who their babies father is . . ."

(Darisi, 2007).

Although much of the literature on teen pregnancy recognizes the role that socioeconomic factors play in predisposing teens to unplanned pregnancy, there is still a focus
on what the individual can do to avoid pregnancy. An emphasis on individual behaviour
change is one way that prevention programs support a view of teen pregnancy as a
personal failing (Best Start, 2007). Prevention programs that draw on negative
stereotypes of pregnant and parenting young women may unwittingly encourage the
social exclusion of teen mothers and their children (Best Start, 2007).

Parents play a significant role in helping their young people avoid pregnancy.

Pregnancy prevention efforts should strive to involve parents, improve parent-child

communication, and encourage both parents and teens to address this important subject (Hacker et al, 2000). Informing or reinforcing parents' key role in monitoring teens, providing boundaries, and fostering decision making skills might be necessary to influence sexual behaviour in adolescents (Herrman, 2007). Public health practitioners working with families may have opportunities to educate parents on sexual development and parent-child communication. From early in parenting, nurses can help parents recognize teachable moments and understand that verbal and nonverbal responses to sexual behaviour and questions about sex can have an effect on the level of comfort that a child feels in discussing sexuality with a parent (Aquilino & Bragadottir, 2000). Nurses may reinforce the roles of parents and family in guiding adolescents; and areas of support, monitoring, education, communication and boundaries were identified as integral (Herrman, 2008). Parents and other adults need to address abstinence, responsible sexual behaviour, and healthy relationships on teens' own terms and learn to approach topics based on teens' level of knowledge, experience, and perspectives (Herrman, 2008).

Pregnancy interventions that focus on attitudes should prioritize attitudes toward contraception over those toward pregnancy, as effective contraceptive use seems to be shaped by such attitudes and is strongly associated with reduction of pregnancy risk (Bruckner et al, 2004). Programs need to also recognize the perceived interpersonal and social benefits of sexual behaviour alongside the risk of pregnancy (Ott et al, 2006).

It is critical to acknowledge the importance of the role of the males who father the children of adolescent mothers. It would seem appropriate for professionals to recognize the male sexual partners as part of the problem, as well as part of the solution (Redmond, 1985). Primary care providers should include boyfriends in any efforts to delay

pregnancy in at-risk adolescent girls (Cowley, 2001). Continuous involvement of the adolescent male partners should be encouraged and supported by health care professionals and others to promote healthful outcomes for mothers, fathers, their children, and future generations (Spear, 2004).

Certainly gender difference must be considered when designing programs to address teen pregnancy prevention (Hacker et al, 2000). Bourton's (2006) study revealed that students felt a single sex environment was the best way to teach sex education because individuals would feel more comfortable asking questions. Gender-specific interventions for females could move directly to programs that promote ways to avoid pregnancy. Programs for males, by comparison, need to begin by helping teen males understand the personal costs and consequences of teen parenting (Kegler et al, 2001). The adolescent males in Lindberg et al's (2006) study expressed the need for a "place of their own" where they could receive competent care in a relaxing and adolescent-focused environment. In one study it was suggested that online social support groups are a potential strategy to meet participants' needs and enhance health (Valaitis & Sword, 2005).

It was not the intention of this paper to explore the needs of adolescents who have chosen to parent, though a number of recommendations for this group have emerged.

Understanding pregnancy from the perspective of the adolescent is important to the discipline of nursing, for nurses must be prepared to manage the childbearing adolescents' needs as they relate to both pregnancy and teen parenting (Rentschler, 2003). Gaining insight and understanding about the worldviews and personal experiences of pregnant adolescents is vital for the development of appropriate nursing interventions and

community programs designed to meet their special needs and the challenges that go hand in hand with adolescent pregnancy and childbearing (Spear, 2004).

Young women who make the choice to parent need comprehensive services to support them in the parenting role, including appropriate child care, welfare and housing benefits, and support in dealing with parenting, a role which they may greatly desire but are not innately prepared for (Hanna, 2001). Rentschler (2003) made a number of recommendations for nurses working with pregnant adolescents; she found that nurses should be sure to:

- assess the pregnant adolescents' strengths, weaknesses, hopes and goals,
- assess their living situations,
- assess available support systems (family, school, and community),
- educated them about how to manage the normal changes of pregnancy,
- establish rapport and trust,
- provide prenatal/parenting classes specifically designed for adolescents, and
- demonstrate a sincere sense of caring for the individual teen and the outcome of their pregnancies.

Nurses who provide care in public health departments, schools, and other community settings have opportunities to inform adolescents and their families about adoption and can provide support as pregnant adolescents make decisions that will affect them for the rest of their lives (Spear, 2004). To further enhance effectiveness, supportive interventions for childbearing adolescents must include services for not only the adolescent mother, but her own parents, other family members, and siblings who are at risk for pregnancy (Spear, 2004b).

Adolescent perspectives about the risk for repeat pregnancy has not been well researched, but should be considered. Interventions designed to address repeat pregnancy in the teen years have generally developed based on adult beliefs of the consequences of teen pregnancy and have thus far been relatively ineffective (Herrman, 2007).

In order to be effective and respectful in working on teen pregnancy prevention, we must listen to teens, and be sensitive to their concerns, and to the challenges that limit their options and affect their sense of hope for the future (Best Start, 2007). Adolescent perspectives offer new learning and diverse interventions that should be considered in public health practice.

#### **Policy**

It is important to remember that young people's sexual and contraceptive behaviour does not occur in isolation from wider social and structural influences (Stone & Ingham, 2002). A number of policy considerations have been revealed through this literature review, including: involving adolescents in planning and program development, using the knowledge that exists regarding adolescent decision making to influence policies that affect this population, advocating for a stronger presence of public health practitioners in educational settings, and reducing barriers for adolescents who need to seek sexual and reproductive health care.

One possible strategy for enhancing pregnancy prevention interventions is to have teens directly involved in the program design and implementation. Program development principles support the inclusion of individuals and groups affected by proposed program in the initial planning and decision making (Aquilino & Bragadottir, 2000). Using youth-based perceptions to guide curricula, policies, messages, and programs may be more

effective than traditional prevention strategies (Herrman, 2008). It may be possible to develop better interventions and policies if more knowledge about adolescent sexual decision making and intentions about repeat pregnancy were available (Herrman, 2007).

Because over 30% of the students in Carter & Spear's (2002) study were already sexually active in the ninth grade, review of the late elementary school curriculum is especially important, as well as the role for public health nurses and other health professionals to guide and support this education.

Actors in the social policy domain may want to focus on teenagers' attitudes because they seem easier to change than the social and economic conditions in which those attitudes develop. For example, poverty is associated with teenage initiation of sex, nonuse of condoms at first intercourse and accidental pregnancy, but pregnancy intervention programs are not well suited to end poverty. They may, however, be well suited to shape attitudes (Bruckner et al, 2004).

Lindberg et al (2006) found that adolescent males expressed multiple reasons for avoiding reproductive health care, even while recognizing its importance. Though it may not be possible to completely destignatize the experience of seeking reproductive health care, providers should seek to alter policies, procedure, and physical surroundings to make sites more welcoming and comfortable to male adolescents (Lindberg et al, 2006). For example, providing opportunities for male adolescents to visit the clinic/health service when they are well, and to meet healthcare professionals that work there, may decrease their hesitancy to enter the facility when they need the services.

#### Research

This critical review of the literature reveals a general gap in quality research describing adolescent knowledge, attitudes and beliefs about adolescent pregnancy and related topics. It is clear from the research that there is a need to gain a deeper understanding of these perspectives in order to formulate ideas about improving teen pregnancy prevention efforts. Further research into adolescent perspectives on pregnancy and related issues, would provide a better understanding of the complex issue that is adolescent pregnancy. Research in this area may provide insight into best practice for increasing contraceptive use in teenagers, educating adolescents about pregnancy and parenting, and other prevention efforts.

Qualitative research could help uncover other possible predictors of teen pregnancy and thereby inform primary prevention strategies among diverse populations (Kegler et al, 2001). Qualitative research focuses on a more subjective approach to understanding an issue, and does so by listening to the voices of participants rather than by evaluating the actions of others (Best Start, 2007). More qualitative research studies that include a variety of ethnic groups and males are needed to gain insight and understanding about the phenomenon of adolescent pregnancy from male and other ethnic groups' perspectives so that programs and interventions can be designed to meet their needs (Spear & Lock, 2003). More longitudinal studies are also recommended to strengthen the body of knowledge and for the development of theoretical models of adolescent pregnancy (Spear & Lock, 2003).

Longitudinal research is also needed to address issues of causality and how the interactions among goals, expectations, gender, and sexual experience relate to behaviour

(Ott et al, 2006). Based on Spear's (2004) findings, there is a definite need to assess and study further the learning needs and motivators of adolescents regarding the initiation of sexual activity, proper use of birth control measures, and intentional pregnancy. Because the idea of pregnancy intention attempts to capture a woman's preconception attitude toward a pregnancy, it is important to recognize the timing of when questions about intent, are asked (Rosengard et al, 2004).

Obviously, further research needs to explore and evaluate the incorporation of teen perceptions into programs and policies (Herrman, 2008). Commendador (2007) suggests that nurse practitioners should get involved in research that includes studying measures of cognitive development and decision making, ways to help adolescents engage in consequential thinking and the relationship context in which sexual and contraceptive decision making occurs. This type of exploration may help researchers understand adolescent decision making in a number of risky domains (i.e. drug/alcohol use).

Few studies have approached the subject of adolescent pregnancy within the context of repeat pregnancy, and fewer still have used the young mothers' own words and perceptions (Herrman, 2007).

Primary reproductive health care for male adolescents has received little attention (Lindberg et al, 2006). Although there is general agreement among experts in adolescent and reproductive health that male adolescents need access to health services, the existing service structure for this group remains inadequate. In order to develop services that will attract adolescent males, providers must understand young males' needs and desires

relative to such services, yet little research has been done on male adolescents' attitudes and preferences regarding such services (Lindberg et al, 2006).

There is a need to conduct more in-depth comprehensive reviews and analysis of qualitative studies to avoid unnecessary repetition and to reveal areas that require additional exploration (Spear & Lock, 2003). Research needs to move beyond simple models of health behaviour to explore more fully the dynamics associated with the timing of early sexual activity, as well as the factors associated with effective contraceptive use (Stone & Ingham, 2002).

To effectively address the complexity of adolescent pregnancy, the unique issues for teens in each community must be understood (Carter & Spear, 2002). Also, more research on issues related to intimacy and needs met by sexual relationships among young people is warranted (Spear, 2004).

Computer technology has the potential to support effective public participation of adolescent groups through the use of online discussions (Valaitis & Sword, 2005).

Blending the needs of researchers with teens' needs for social support in an online environment should be explored further. With careful planning and design, online communications can result in mutual benefits for researchers, service providers, and adolescents (Valaitis & Sword, 2005).

Ideally, regular, consistent replications of nationally representative sexual risk behaviour surveys should be conducted in order to identify priority needs in the provision of adolescent sexual and reproductive health services and education in Canada (SIECCAN, 2004). Recognizing the sources adolescents consult for sexual and reproductive information and their personal perspectives regarding sexual decision

making emphasizes the need for understanding the known risk and protective factors that influence them (Weiss, 2007). Exploration and explication of factors influencing the disparity between knowledge and use of birth control methods is also essential. Research related to the mechanisms by which adolescents begin to put knowledge related to birth control into practice is needed (Bloom & Hall, 1999).

This author recommends a co-ordinated approach to this type of research that may be able to answer a range of questions about adolescent perspectives on adolescent pregnancy and more research and evaluation related to the application of adolescent perspectives into pregnancy prevention efforts.

#### **CONCLUSION**

Given the assumption that most teen pregnancies are unintended, a reduction in teen pregnancy rates can be realistically seen as an indicator that an increasing number of teenage women in Canada are exercising active control of their reproductive health (SIECCAN, 2004). However, there remains a high proportion of adolescents that are inconsistently using contraceptives, making risky sexual decisions, getting pregnant, and choosing to engage in early parenting.

Some general conclusions, reflecting the research questions described early in this paper, have been formed. First, adolescent perspectives reveal a range of issues that need to be considered when attempting to understand adolescent pregnancy. Adolescents have articulated perspectives on adolescent sexual decision making, pregnancy intention, contraceptive use, pregnancy and teen parenting, and pregnancy resolution.

This review of the literature on these perspectives has exposed a number of implications for public health practice, policy and research. We have learned that new

approaches to pregnancy prevention efforts in adolescence need to be explored, and current approaches need to be enhanced. A definite need for policies that support healthy sexual decision making in adolescence has been identified.

This author has also been able to recognize a number of gaps in this field of public health research, especially related to adolescent male perspectives, ambivalent attitudes toward pregnancy, and the implications that attitudes have on consistent and effective contraceptive use. A more in-depth understanding of the complexities involved in adolescent pregnancy and decision making may reveal necessary information to further minimize this public health concern.

Understanding adolescent pregnancy through adolescent perspectives is only one piece of this puzzle; but it is a piece that can bring an important layer to understanding best practices for public health practice, policy, and research.

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#### Appendix A: Levels of Research Evidence

Level of Evidence	Description
I	Evidence obtained from meta-analysis or systematic reviews,
	and/or at least one well-designed randomized controlled trial.
II	Evidence obtained from at least one well-designed controlled
	study without randomization, and/or from at least one other type
	of well-designed quasi-experimental study.
III	Evidence from well-designed non-experimental descriptive
	studies.
IV	Evidence obtained from expert committee reports and/or clinical
	experiences of respected authorities.

(Adapted from RNAO Best Practice Guideline: Enhancing Healthy Adolescent Development).

#### **Appendix B: Summary Table of Literature Review**

Level of Evidence	Title	Purpose	Study Design	Sample	Methodology	Limitations	Results	Conclusions
П	Aquilino, M.L., & Bragadottir, H. (2000). Adolescent pregnancy: Teen perspectives on prevention. MCN: The American Maternal/Child Nursing Journal. 25(4): 192-197.	The purpose of this study was to determine how teens felt about adolescent childbearing, and what they would recommend as ways to design pregnancy prevention programs that would be acceptable to and meet the needs of today's youth.	Qualitative – focus groups.	The sample consisted of 57 students (14 – 19 years old) in grades 9 to 12 who volunteered to participate in the study.  Participants were recruited through program administrators, nurses, and teachers.	Seven groups of teens met with the investigator twice over 2 consecutive weeks.  Instruments included a Screening Questionnaire and Focus Group Discussion Guidelines.	Because teens were self- selected, the results cannot be generalized.	44% of the participants reported having had sexual intercourse. The mean age of first intercourse of 14.8 years.  Teens were concerned about teen pregnancy, and supported a comprehensive approach to sex education beginning in early elementary grades, with age and developmentally appropriate content and reinforcement from late grade school through high school.  Participants felt that teens should not get pregnant and that most prefer not to be pregnant. However, they felt that more teens seem to be getting pregnant.  Four main themes emerged explaining why teens become pregnant: denial, lack of responsibility/planning ahead/failure to use contraceptives, need for somebody to love/be close to/to be wanted or needed, and to get attention.  Teens felt that basic anatomy &physiology of conception should be presented in late elementary grades, and contraception information should be presented in junior high school. They felt this information should be repeated and elaborated on throughout high school. Other topics should include peer and parent-child communication, and emotional aspects of sexual behaviour.  Suggestions for other types of programs with real or simulated babies.  The most consistent response to the question of what the goal of pregnants with real or simulated babies.  The most consistent response to the question of what the goal of pregnancy prevention should be west to increase contraceptive use, and to change teen attitudes and decision-making abilities in relation to sexual behaviour.  Teens felt that the best pregnancy prevention advice could be given by peers who were a few years older. However, they stressed that the	Nurses who work with families need to understand why teens are becoming pregnant, provide opportunities for teens to discuss sexual behaviour, and educate parents on sexual development and parent-child communication.  Nurses can help parents recognize teachable moments and understand that verbal and nonverbal responses to sexual behaviour and questions about sex can have an effect on the level of comfort that a child feels in discussing sexuality with a parent.  Teens want timely information on sexual development, conception, and contraception and contraception delivered in an honest and detailed manner. They want trustworthy, knowledgeable adults involved in this education.  Nurses need to listen and make adolescents partners in health care, and talk with teens and parents about sex and sexual behaviour on a regular basis.

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							instructors, regardless of age, should be well informed and experienced in the content.  Teens wanted parents	
							and other adults to be involved in helping them understand sexuality and make decisions about sexual behaviour.	
111	Bloom, K.C., & Hall, D.S. (1999). Pregnancy wantedness in adolescents presenting for pregnancy testing. MCN: The American Journal of Maternal/Child Nursing. 24(6): 296-300.	To explore and describe dimensions of pregnancy wantedness in adolescents who present for pregnancy testing.	Descriptive study.	A convenience sample of 89 adolescents (13 – 19 years old) was recruited at a comprehensive service centre for teens in an urban southeastern city.	Invited to participate by completing the Pregnancy Importance Questionnaire while awaiting the results of their pregnancy test.	Limitations of the study include the use of a relatively small convenience sample and the use of a survey design that did not allow for collection of qualitative data.	Approximately 7% wanted the pregnancy test to be positive, 60% wanted it to be negative, and 33% were not sure.  There was a moderately low desire for pregnancy, a moderately high knowledge of and access to birth control, and moderately low expected changes with a pregnancy.	Appropriate counseling and follow-up is necessary for adolescents who present for pregnancy testing, whether the pregnancy test is positive or negative.  The moderately high perceived knowledge of birth control found is interesting in this group who have presented for pregnancy testing. Although they consider themselves knowledgeable about the various methods of birth control, and do not have difficulty accessing birth control methods or supplies, they do not use a reliable method.  Clinicians working with adolescents should address sexuality issues as part of their routine assessments, exploring the adolescent's
								sexual risk taking and pregnancy prevention activities.
11	Bourton, V. (2006). Sex education in school: Young people's views. Paediatric Nursing. 18(8): 20-22.	The aims of this study were to explore adolescents' level of knowledge on sexual health issues and their views on the sex education they receive as part of their compulsory education.	Qualitative – focus groups/ questionnaire.	Those who provided consent and participated in the study consisted of 20 students (16-17 years old) from two schools.	A short multiple choice questionnaire containing closed questions was designed to gain a quantitative measure of the young people's factual knowledge regarding various aspects of sexual health. Focus groups were used after the questionnaires to gain a more in depth opinion from the participants regarding their sex education.	Small sample size may not be representative of all young people.	Young people had an excellent level of factual knowledge regarding sexual health issues: 75% of the answers to the questionnaire were correct.  Many of the students felt that sex education should be included at a younger age because the students felt they knew all the information prior to the lessons.  The majority view was that having the correct knowledge early was less likely to make students want to experiment with sexual relationships, whereas only being given limited information was more likely to increase their curiosity and lead to an increase in underage experimentation.	The overall view of these students was that their sex education was fairly good, but too basic. It did not cover emotional and moral aspects in a way which was acceptable to them.  In the view of this group of students, sex education needs to be included earlier in the curriculum and continued throughout secondary education with increasingly complex issues.  They also felt that a single sex

							Overall the students felt that they got most of their sex education from television, magazines, books, friends, parents and school.  Students identified that it would be better if the person teaching sex education was someone from outside the school.  The skills that the person teaching the sex education should have included: confidence, being able to relate to young people and being able to talk about sex without embarrassment.	environment was the best way to teach sex education because individuals would feel more comfortable asking questions.
11	Bruckner, H, Martin, A, & Bearman, P.S. (2004). Ambivalence and pregnancy: Adolescents' attitudes, contraceptive use and pregnancy. Perspectives on Sexual and Reproductive Health. 36 (6): 248-257.	To address whether sexually experienced adolescents' attitudes toward pregnancy influenced their risk of becoming pregnant.	Longitudinal	Nationally representative sample of 4, 877 sexually experienced young women, aged 15-19 years.	Data from National Longitudinal Study of Adolescent Health (Add Health) related to attitudes toward pregnancy, demographics, sexual behaviour, contraceptive use and contraceptive whowledge were used from 2 waves of interviews.		Of the 4, 877 respondents, 57% had 'mainstream' attitudes, 20% had 'antipregnancy' attitudes, 8% had 'propregnancy' attitudes and 14% were ambivalent.  A greater proportion of ambivalent respondents (35%) than those in other groups did not practice contraception.  Having a positive attitude toward contraception was associated with increased likelihood of inconsistent and consistent contraceptive use compared with nonuse.	Programs designed to prevent pregnancy need to give young women information about pregnancy and opportunities to discuss the topic so that they form opinions.  Programs should emphasize positive attitudes toward contraception, because effective contraceptive use is shaped by such attitudes and is strongly associated with reduction of pregnancy risk.  Pregnancy interventions that focus on attitudes should prioritize attitudes toward contraception over those toward pregnancy.
11	Carter, K.F., & Spear, H.J. (2002). Knowledge, Attitudes & Behaviours related to pregnancy in a rural teenage population. Journal of Community Health Nursing. 19 (2): 65-75.	To identify the knowledge, attitudes, and behaviours of a rural teenage population as they relate to pregnancy prevention & intention.	Cross- sectional survey design.	52 grade 9 students, predominantly college-bound and fairly active in extracurricular activities.	Anonymous survey completed (with parental consent); questions were derived from the Sex, Knowledge and Attitude Test for Adolescents (SKAT-A), middle school youth risk behaviour survey, and a previous local survey.	Small sample size resulting from low response with parental consent.  Demographically skewed sample due to selective bias.	76.92% had talked about sexual intercourse with their parents or other adults in family.  13.89% felt that having teen friends/family members who have babies makes them want to have a baby, while 73.47% felt it made them not want to have a baby.  83.67% believed that mostly peers influence their sexual behaviour. 82.35% agreed or strongly agreed that 'the responsibility for using birth control should be shared by both the man and woman.  68.63% disagreed or strongly disagreed that 'teenagers who do not use birth control want to get pregnant.  Age 13 or 14 was the most common first time for sexual intercourse among sexually active respondents (>173).	Attitudes related to pregnancy and pregnancy and pregnancy prevention highlighted the promising value of school-based and peer-focused interventions.  Because over 30% of the students were already sexually active in the ninth grade, review of the pre-high school curriculum is especially important.  Incorporation of a peer-educator program may be effective with this group noting that more than 80% of the respondents felt that their sexual behaviour was mostly influenced by peers.

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								To address effectively the complexity of adolescent pregnancy, the unique issues for teens in each community must be understood.
111	Commendador, K. (2007). The relationship between female adolescent self-esteem, decision making, and contraceptive behaviour. Journal of the American Academy of Nurse Practitioners. 19(11): 614-623.	To examine the relationship between female adolescent self-esteem, decision making, and contraceptive behaviour.	Descriptive, cross-sectional survey design.	98 ethnically diverse, female adolescents, aged 14-17, who came to five different clinics on the Big Island of Hawaii for health care.	Along with a data demographic questionnaire, three instruments were used to measure study variables: Rosenberg's Self-Esteem Scale (RSE), Flinders Adolescent Decision Making Questionnaire, and a sexual history and contraceptive use questionnaire developed for this study.	Small sample size may have affected outcome of analysis. Self-report survey could be linked to potential biases. Results may not be generalized to all adolescents in other communities. The sexual history and contraceptive use questionnaire was not piloted.	85% of subjects were currently sexually active or sexually active sometime in the past.  60% of the participants reported the current use of contraceptives. 48% reported using contraceptives all the time.  There were no significant relationships found between age, global self-esteem, decisional coping vigilance, and sexually active participants' contraceptive use.  There was a significant association between decision coping maladaptive and sexually active participants contraceptive behaviour. For every one unit increase on the maladaptive scale, the odds of using contraception were estimated to decrease by 7%.	Nurse practitioners need to take an active role in creating strategies to facilitate competent decision making and be involved in research that includes studying measures of cognitive development and decision making, ways to help the adolescents engage in consequential thinking and the relationship context in which sexual and contraceptive decision making occurs.  Stimulating adolescents' own thinking around not only sexual issues but also relationship and communication issues may facilitate a vigilant and increased competence in decision making.  In order to reduce the rate of carly childbearing, adolescents need help in the area of making competent decision so that they can make the right choices.
II	Cowley, C. (2001). Adolescent girls' attitudes toward pregnancy: The importance of asking what the boyfriend wants. Journal of Family Practice. 50(7): 603–607.	To investigate factors associated with adolescent desire for pregnancy among girls seeking reproductive health services at an adolescent clinic.	Cross- sectional provider- administered survey design	202 girls aged 13 to 18 years presenting consecutively for reproductive health services to an adolescent care clinic. Girls found to be already pregnant at the initial visit (n = 54) were removed from analysis.  148 participants were in the final data analysis.	Participants underwent an extensive, semi structured interview exploring attitudes toward pregnancy, childbearing, and contraceptive use.	The girls' perceptions of their boyfriends' attitudes, may not be a true representation of the boyfriends' attitudes.  Did not use a previously validated questionnaire to determine 'intendedness' of pregnancy.  Sample may not allow for generalization to other adolescent groups.	Of the 148 girls, almost all (92%) were currently dating, and most (88%) were sexually active with their partner.  56.4% of the girls were categorized as wishing to avoid pregnancy, 19.8% as desiring pregnancy, and 23.7% as ambivalent about pregnancy desire.  There was only 1 significant difference between those who desired a pregnancy and those who were ambivalent: girls desiring pregnancy were more likely to report that their boyfriends wanted a baby.  Girls wishing to avoid pregnancy differed from girls desiring or ambivalent about pregnancy in 6 different parameters: ethnicity.	The best predictor of an adolescent girl's attitude toward pregnancy is her perception of her boyfriends' desire for a baby.  Primary care providers should include boyfriends in any efforts to delay pregnancy in atrisk adolescent girls.  Health care providers may have a role in facilitating improved communication between girls and their partners.  Teenagers who are ambivalent about whether

								school attendance, employment status,	they want to be pregnant do not
								employment status, family structure, time spent away from home, and desire of boyfriend to have a baby.	pregnant do not differ significantly from those desiring pregnancy, and should be considered just as high risk.
	II	Evans, S.J., Wright, B.L., Goodbrand, L., Kilbreath, J.P., & Young, J. (2002). Teen sexuality: Reaching out in the malls. Canadian Journal of Public Health. 93(1): 47 – 51.	To identify knowledge about and use of birth control, comfort in discussing sexual health, and preferred sites, providers, and methods of service delivery.	Cross-sectional	A convenience sample of 539 adolescents (13-20 year olds) from two apparently diverse socio-economic and geographic neighbourhoods.	Questionnaire	Results are based on a community assessment rather than formal research with psychometric evaluation of the survey tool.  Over-representation of younger teens may explain the majority report of not being sexually active.	Fewer than half of teens (44.4%) reported being sexually active.  Most teens reported having some or a lot of knowledge about birth control. However, only 48.1% reported having knowledge about community resources.  Although most sexually active teens (71.1%) reported using contraception at least 75% of the time, 17% reported less than 25% use.  Few teens (13.4%) reported being comfortable or very comfortable in discussing sexual health with teachers, while 43.9%, 37.7%, and 75.4% reported similar comfort levels with physicians, parents, and friends respectively.  Sexually active teens were more willing to attend a mall-based clinic than all participants combined.	Knowledge alone does not impact important decisions about sexuality and contraceptive use.  Mall-based clinics may provide a valuable, alternative service for teens that cannot talk easily to teachers or parents but require information, birth control, STD prevention, or help with repercussions of sexual activity.  Staffing clinics with peer counselors and health professionals may provide teens with needed comfort to seek help to be sexually responsible.
1	ш	Garwick, A.W., Rhodes, K.L., Peterson-Hickey, M., & Hellerstedt, W.L. (2008). Native teen voices: Adolescent pregnancy prevention recommendations. Journal of Adolescent Health. 42: 81-88.	The aim was to identify pregnancy prevention strategies from the perspectives of both male and female urban Native youth to inform program development.	Community- based, participatory action research study – focus groups.	148 Native youth (13-18 years of age) who had never been involved in a pregnancy.	Four cohorts of 20 focus groups were conducted in 10 months to attain saturation of ideas. This report focuses on response to the core question: If you were in charge, what would you do to help Native teens prevent pregnancy?	Unable to generalize findings to other groups of adolescents.	Participants in all cohorts emphasized the following themes: show the consequences of adolescent pregnancy, enhance and develop more pregnancy prevention programs for Native youth in schools and community-based organizations, improve access to contraceptives, discuss teen pregnancy with Native youth, and use key messages and media to reach Native youth.	Native youth perceived limited access to comprehensive pregnancy prevention education, community-based programs and contraceptives.
	II	Hacker, K.A., Amare, Y., Strunk, N. & Horst, L. (2000). Listening to youth: Teen perspectives on pregnancy prevention. Journal of Adolescent Health. 26: 279- 288.	To determine what efforts teens believed would prevent teen pregnancy, to find out whether young persons with differing risks of pregnancy differed in their views of pregnancy prevention, and to determine the level of sexual activity and risk for pregnancy in the community.	Survey	Randomly selected sample of 10th and 11th grade classrooms in six Boston public high schools that most represented the target area and the linguistic diversity of students. The final sample size was 1000.	75 multiple choice questions with different sections on demographic and psychosocial characteristics of students, information on pregnancy and pregnancy prevention, sexual behaviour and attitudes, issues related to the use of and access to contraception, attitudes toward pregnancy and reproductive history, and external influences on sexuality.	Both minority and bilingual students were overrepresented in the sample.	Over half (63.1%) of the students reported having had sexual intercourse.  76% of students who had received grades between C and F in the previous year were sexually active compared with 62.3% of those with A's and B's.  Abstinent teens were significantly more likely not to have used drugs or alcohol than their sexually active counterparts.  Sexually active teens were more likely to have mothers who had their first child at 17 years or younger (21.6%), compared with abstinent teens (7.6%).  Only 2.3% of the	The results of this survey indicate that young people are most likely to think that more information on pregnancy and birth control, communication with parents, education about relationships, and easy access to contraception would prevent teen pregnancy.  Certainly gender difference must be considered when designing programs to address teen pregnancy prevention.  Although the

							respondents said that they had sex to get pregnant or get someone pregnant.  Among students who had sexual intercourse, only 35.4% used contraceptives every time.	majority of teens surveyed had no intention of getting pregnant, fewer than half of those who were sexually active were using contraceptives consistently.
							If they or their partners got pregnant, the majority of the female students (61.9%) said they would keep the baby, but 24.4% said that they were not sure. 43% of male students said that they would accept the baby, 37.3% said that they would ask for a blood test; 8.7% said that they would ask for a blood test; 8.7% said that they would tell the mother to have an abortion; 3% said that they would tell the mother to have an abortion; and 15% said that they would say it was not theirs; and 15% said that they were not sure what they would do.  When students were asked where they received most of their knowledge about contraceptives, the most common responses included: from parents/guardians (27.8%), health education class (18.2%), friends (14.5%).  Overall, respondents were likely to say that more information about pregnancy and birth control (51.9%), education about relationships (33.2%), communication with parents (32.5%), easy access to birth control (31.3%), education about the realities of parenting (29.5%), and a greater emphasis on delaying or abstaining from sex (26%) would prevent teen pregnancy.	This study reinforces the importance of listening to youth to prevent teen pregnancy.  Parents play a significant role in helping their young people avoid pregnancy. Pregnancy prevention efforts should strive to involve parents, improve parent-child communication, and encourage both parents and teens to address this important subject.
ш	Hanna, B. (2001). Adolescent pregnancy: A costly mistake or a search for love? Reproductive Health Matters. 9(17): 101-107.	To explore the mothering experiences of five sole-supporting teenage mothers who had a child over six months of age.	Qualitative - ethnographic approach.	5 adolescent girls who had a total of 7 children agreed to participate in the study.	Participant observation, interviews with participants and key informants, field notes and a personal reflective journal were used – guided by feminist principles.  The five stories were gathered and pieces assimilated in a number of meetings over a year. They were later read by participants to confirm their representativeness and accuracy.	In ethnographic research, such stories can never be a record of what actually happened, but only an expression and interpretation of the experience.	The five young women came from families where early prognancy was a familial trait.  All of them believed that their family lives were fraught with difficulties.  In four cases, their parents had a marital breakdown and they went through problems with blended families.  All of them had experienced developmental crises during their early teenage years, as well as violence and abuse from male family members and/or male partners.  Many of these young mothers feel stigmatized by older and middle class nurses and become irregular users of child health services,	Young women who make the choice to parent need comprehensive services to support them in the parenting role, including appropriate health care, welfare and housing benefits, and support in dealing with parenting, a role which they may greatly desire but are not automatically well prepared for.  Whether pregnancy is wanted or unwanted by adolescents, sex education, relationship counseling and

							preferring to turn to their own networks for advice and guidance. Young women like Lauren (one of the participants) may seek early parenthood as a way of creating love for themselves when their family rejects them; Her pregnancy provided her with her "own family" and a source of unconditional love.	communication skills need to be developed earlier through the education system so that tenagers can develop problem-solving skills, social skills and self-assertiveness, helping them to become more able to make informed choices about their fertility.
111	Herrman, J.W. (2007). Repeat pregnancy in adolescence: Intentions and decision-making. MCN The American Journal of Maternal Child Nursing. 32 (2): 89-94.	To examine the intentions and decision making associated with repeat pregnancy in a sample of teen mothers.	Qualitative - ethnographic, descriptive study	12 young mothers aged 16 to 19 years. 6 of the mothers already had two children, and 6 had one child and were pregnant again.  The sample of solicited from service agencies via word of mouth and recruitment signs.	Ethnographic, semi-structured interviews that explored the shared meanings about their experiences. Each participant took part in member checks to verify the data, and the interpretation of the data.	Small sample size.	All 12 of the mothers stated that their repeat pregnancies were unintended. Respondents relayed the perspective that females bore the sole responsibility for birth control in their peer group. Mothers spoke of the spontaneous nature of sexual activity and that it lacked planning or consideration of the consequences.	By viewing teen pregnancy from a developmental approach, the individuals' level and abilities, cultural context, age-appropriate impulsive and rational decision making styles, and response to stress may be used to conceptualize interventions.
								These data suggest that much of teen sexual activity is spontaneous, unplanned, and sometimes involuntary. As such, interventions must be created that take the nature of this sexual activity into account.
								Informing or reinforcing parents' key role in monitoring teens, providing boundaries, and fostering decision making skills might be necessary to influence sexual behaviour in adolescents.
							,	It is apparent that the mixed nature of teen sexual activity warrants a multi-faceted approach to enhancing responsible sexual behaviour.
11	Herman, J.W. (2008). Adolescent perceptions of teen births. JOGNN, 37: 42-50.	To investigate teens' perceptions of the costs and rewards of teen births, potential interventions to prevent teen pregnancy, and the presence of someone in their lives with whom teens could discuss sexuality.	Qualitative – focus groups.	Participants were recruited only by agency personnel, and no contact was allowed with the youth until parental permission and teen assent was obtained. The population for this study was the cohort of adolescents at risk for adolescent childbearing in	17 focus groups were conducted over a span of 6 weeks. Several summary statements were used at the end of each focus group session to clarify data and to validate interpretations. The interview tool was designed to ask participants about their lives and stresses, and the	Focus groups represented community groups targeting low-income teens and youth considered at-risk for teen pregnancy, yielding a skewed sample, and potentially a biased set of perceptions.	The participants noted both costs and rewards related to teen births. The teens without children generally agreed that having a child during the teen years negatively affected friends. The sample members were adamant about the stress a pregnancy and birth may impose on a relationship. Several respondents indicated that some young mothers sustain the pregnancy in order to	Teen perceptions related to the costs and rewards of teen birth, their thoughts on prevention, and the presence of an adult in their lives are key to designing interventions to promote responsible sexual behaviour.  Using youth-based perceptions to guide

				the state of study. Participants were solicited from school-based wellness centres, churches, non-profit teen groups, and adolescent support programs. The final sample included 120 youth: 72 females and 48 males. The mean age of participants was 16.1 years	costs and rewards related to teen births.		affirm the relationship. Youth discussed that having a teen pregnancy may cause male partners to leave the relationship. Young men commented that having a child could have a negative impact on future relationships. Many of the teens believed that the teen's family life may already be stressed and that a teen birth would just add to the family's level of turmoil.  The teens made insightful comments about the inequities associated with teen sexual behaviour and gender.  Having a baby during the teen years was thought to limit educational options, restrict study time, and pose significant challenges in juggling school and parenting. Young parents shared that sometimes parenting had a positive impact upon educational attainment.  Many of the youth articulated living in poverty, relating that money was a constant stressor.  Males discussed the need to help financiall success. The nonparenting youth perceived that childbearing during the teen years often resulted in an increased focus on success, more mature judgment skills, better behaviour, and a greater sense of responsibility. Youth mothers noted that they developed an increased ability to manage time and learn organizational skills. Teens recommend that adolescents need to be educated and given the tools to make responsible decisions. Teens also commented on the need to have teen parents share their personal stories and the resulties of teen pregnancy. Respondents frequently cited the need to have teen parents share their personal stories and the reed to have teen parents share their personal stories and the resulties of teen pregnancy. Respondents frequently cited the need to have teen parents share their personal stories and the resulties of teen pregnancy.	curricula, policies, messages, and programs may be more effective than traditional prevention strategies.  Further research needs to explore the incorporation of teen perceptions into programs and policies.
п	Jaccard, J., Dodge, T., & Dittus, P. (2003). Do adolescents want to avoid pregnancy? Attitudes toward pregnancy as predictors of pregnancy. Journal of Adolescent Health. 33: 79-83.	To document the extent to which adolescents feel ambivalent towards getting pregnant and to examine the relationship between pregnancy attitudes and the occurrence of a pregnancy one year later.	Prospective, longitudinal study.	Sub-sample of the National Longitudinal Study of Adolescent Health (Add Health) database. 4869 adolescent females in grades 9 through 11.	Participants completed 2 interviews at a one year interval. Logistic regression analyses were used to predict occurrence of a pregnancy at wave 2 from attitudes toward pregnancy at wave 1.	The research was correlational in nature and causal relationships cannot be made from such data.  The outcome variable was based on self-report.	Adolescent females' attitudes towards pregnancy were predictive of the occurrence of a pregnancy one year later.  The vast majority of adolescents agreed with the statement that getting pregnant at this time would be one of the worst things that could happen and disagreed with the statement that	Results suggest that a significant minority of adolescents have some ambivalence toward pregnancy relative to their peers and that these attitudes are predictive of the occurrence of pregnancy.

							I	
							getting pregnant at this time would not be so bad.	
							When the attitude toward pregnancy was at its lowest, the percentage of adolescents who became pregnant over the ensuing year was 3.6%. By contrast, when the attitude toward pregnancy was at its most favorable, the percentage of adolescents who became pregnant was 29.4%.	
							Over 15% of the adolescents indicate some ambivalence towards getting pregnant relative to their peers, and this tends to be heightened in certain demographic sectors of the population. Adolescents with 2 parents living in the home tended to show more negative attitudes towards pregnancy than adolescents living only with their mother. Adolescents who were currently in a romantic relationship had less negative pregnancy attitudes than those who were not in a relationship.	
п	Jumping-Eagle, S., Sheeder, J., Kelly, L.S., & Stevens-Simon, C. (2008). Association of conventional goals and perceptions of pregnancy with female teenagers' pregnancy avoidance behaviour and attitudes. Perspectives on Sexual and Reproductive Health. 40(2): 74 – 80.	To determine if conventional goals, such as planning to go to college, are independently related to pregnancy avoidance attitudes and behaviours among teenage women, or if any relationship is mediated by the belief that pregnancy would be an impediment to achieving such goals.	Cross- sectional survey design.	A racially mixed group of 351 sexually experienced female teenagers who were inadequate contraceptive users.	The participants completed surveys about goals, the anticipated impact of childbearing on these goals, and protective behaviours and attitudes.	The major limitations of this study were its reliance on self-reported, cross-sectional data and its focus on a socio-economically disadvantaged group.	Eight in 10 of these teenagers perceived their goals to be achievable, but fewer than half thought pregnancy would be an impediment to achieving these goals.  Teenagers who had goals were more likely than others to have used contraceptive at last intercourse.	Conventional goals appear to motivate teenagers to avoid getting pregnant only if they believe pregnancy will be an impediment.  It may be less important to encourage young women to formulate goals than to ensure that they consider adolescent childbearing a threat to their plans.
П	Kegler, M.C., Bird, S.T., Kyle- Moon, K., & Rodine, S. (2001). Understanding teen pregnancy from the perspective of young adolescents in Oklahoma city. Health Promotion Practice. 2: 242- 253.	To understand ethnic and gender similarities and differences in teen views of adolescent pregnancy to help neighbourhood-based planning groups tailor their interventions.	Qualitative study design – focus groups.	Sample of 102 young adolescents (mean age 13.7 years, range 12 to 16).	Focus groups, conducted as part of a needs and assets assessment for a teen pregnancy prevention project.  A facilitator moderated the discussions, which lasted approximately 90 minutes.  The focus groups were held in a variety of community settings, including community-based organizations, churches, and schools.	A limitation of this study stems from the use of focus groups. Although they can provide rich, contextual understanding of a topic, they are dependent on group dynamics, and because of the non-random sampling process, generalizability is usually limited. Another potential limitation is that members of some cultural groups may feel more or less comfortable talking about topics such as pregnancy in a group setting.	Participants' views of the magnitude of the problem varied considerably. Some said it was a big problem, and others indicated they knew lots of girls who had been pregnant.  Participants in the majority of focus groups, both male and female, indicated they knew girls, family, or friends who had experienced teen pregnancy.  Participants in all focus groups identified negative aspects of having a baby as a teenager. In general, participants discussed immediate as well as long-term consequences of teen pregnancy and described disadvantages for teen parents and for the child.	The young teens in this study identified several reasons a teenager might want to have a baby that have not previously been reported in the literature.  Gender-specific interventions for females could move directly to programs that promoted ways to avoid pregnancy. Programs for males, by comparison, needed to begin by helping teen males understand the personal costs and consequences of teen parenting.

					2		respect you".	they are well and to meet the healthcare professionals that work there may decrease their hesitancy to enter the facility when they need care (i.e. by offering
				(4)				tours to local student or community youth groups).
II	Ott, M.A., Millstein, S.G., Ofner, S., & Halpern-Felsher, B.L. (2006). Greater expectations: Adolescents' positive motivations for sex. Perspectives on Sexual and Reproductive Health. 38(2): 84- 89.	To examine how young adolescents perceive the goals of intimacy, sexual pleasure and social status within a romantic relationship; whether they expect sex to fulfill these relationship goals; differences in goals and expectations by gender and sexual experience; and the relative importance the adolescents attach to these goals and expectations.	Cross-sectional study design	637 ninth grade students from 23 largely socio-economically and ethnically diverse schools in Northern California.  Sample was 57% female, mean age of 14.1 years.  The proportion of sexually experienced participants was 17% among males, and 10% among females.	Self-administered survey with three scales measuring positive motivations for sex.	Cross-sectional design prevents the examination of causality.  The small number of sexually experienced participants.  The possibility of socially desirable responses is always a concern with surveys of sensitive behaviours.	Compared with males, females considered intimacy significantly more important as a relationship goal and considered pleasure significantly less important.  Participants with sexual experience attached significantly more importance to intimacy and to pleasure as relationship goals than did participants without sexual experience.  Sexually experienced females valued the goal of social status less than females without sexual experience.  Participants with sexual experience had higher expectations that sex would lead to intimacy than did participants with no sexual experience.  Males reported significantly higher mean expectations that sex would result in pleasure and social status than did females.  All participants rated intimacy as the most important goal in a relationship.	Findings challenge conventional beliefs about males, and paint a more complex picture of male sexuality. Young men valued intimacy as a more important relationship goal than sexual pleasure or social status.  Longitudinal research is needed to address issues of causality and how the interactions among goals, expectations, gender, and sexual experience relate to behaviour.  Research is also needed to examine how positive motivations for sex relate to noncoital sexual behaviours.  Individual clinicians and programs to prevent adolescent pregnancy may be most successful if they recognize the interpersonal and social benefits of sexual behaviour alongside the risk of pregnancy.  Knowledge of adolescents' relationship goals may enable programs and clinicians to better meet adolescents' needs by addressing alternative ways to express sexuality and achieve relationship goals.
111	Rentschler, D.D. (2003). Pregnant adolescents' perspectives of pregnancy. MCN: American Journal of	To gain a clearer understanding of teens' perspectives on pregnancy and parenting.	Descriptive qualitative study using grounded theory.	The sample was comprised of 20 pregnant 15 to 19 year old teens in the second or third trimester of pregnancy that	A taped interview of each participant was performed either in the school the teen was attending or in	Limited sample size. Lacks diversity.	Three major themes emerged: "The pregnant me – unexpected changes", "transformed relationships", and "envisioning mothering".	Nurses caring for pregnant adolescents who have made the decision to keep their babies should carefully

	Maternal/Child Nursing. 28(6):			planned to keep their child.	the privacy of her home. The		Once pregnancy became a reality, the feeling of	assess each individual's
	377 – 383.			Participants were	interviews were		shock gave way to	strengths,
			ŀ	unmarried, and	used to learn how		realization.	weaknesses,
				pregnant with	the pregnant		W/h	hopes, and goals
				their first child.	adolescent perceives and		When asked how life has changed since becoming	prior to developing a plan
					manages the		pregnant and whether	of care.
	l		ĺ		multiple changes		their goals had changed,	<b>.</b>
			1.1		that pregnancy brings to her life.		the majority voiced the importance of	Encouraging attendance and
					ornigs to net me.		completing high school.	participation in
	7.						There was recognition of	programs
							the importance of education for their future	specifically designed for
							and likewise for their	pregnant
							babies' welfare.	adolescents and
							Emotionally, the	adolescent parents may be a
	1						adolescents described	helpful strategy
							themselves as now	for these teens.
							having a good attitude, and being more calm,	This study's
							mellow and motivated.	results indicated
								that these teens
		Vi.					For these teens, the	viewed some of
			1				pregnancy led to changes in relationships, roles,	the inherent changes related
			l d				and responsibilities.	to pregnancy as
							These young women	unexpected and challenging, yet
							held values for	managed them in
							pregnancy and	a constructive
							motherhood that were solidly conventional.	and forthright way refuting the
1							Self-hood and	more
1							motherhood were	stereotypically
1							inextricable: protecting their babies was a route	perceived notion of the pregnant
							to developing a	teen.
							responsible self and vice	
							versa. The majority of the teens voiced an	These teens were positive,
		†					overwhelming desire to	responsible, and
							be the best mother one	accepting of the
							could be, yet only two of the teens spoke to	changes related to pregnancy,
							reading about baby care	feelings similar
							and baby development.	to those reported
ŀ		İ					Most of the teens did	by pregnant teens in previous
1							express feeling scared.	studies.
							For most of the teens the change led to a more	The adolescents in this study were
							positive relationship with	committed to
						7.	their mother,	taking better care
							symbolizing approval and support from the	of themselves by not drinking,
							individual who would	smoking, and
							serve as her role model	eating poorly in
						2	for mothering.	order to protect the welfare of
								their unborn
								child.
								Several of the
								teens in this study
								shared that
								participation in prenatal classes
								with mostly older
								and married
								women was uncomfortable
								for them. Classes
								on preparation
	_							for labour and
								delivery and on parenting skills
								designed for
								pregnant
							İ	adolescents may be more effective
		-						for the
						[-		adolescents than
								a class open to all pregnant women.
								Programs that are
								open to both the young mother
								and the new

								grandmother strengthen ties and build foundations for the developing families.
II	Rosengard, C., Phipps, M.G., Adler, N.E., & Ellen, J.M. (2004). Adolescent pregnancy outcomes: A longitudinal examination. Journal of Adolescent Health, 35: 453- 461.	To explore and	Naturalistic,	8 pregnant,	Data were collected as part of a larger study examining perceived risk of STDs, perceived risk of pregnancy, and sexual decision-making.  Structured interview were conducted in a private room and corresponding questionnaires were filled out.  Six month follow-up interviews were conducted at the clinics from which participants were recruited.	Relied on self-report data.  Results may not generalize to other adolescent populations who are not yet sexually active or who live in other geographical areas.  Not able to characterize the adolescents in our sample with respect to all of the issues that might have influenced their pregnancy intentions.	Suspected pregnancies and positive pregnancy test results were associated with baseline pregnancy intentions.  Although the majority of the sample (76.5%) indicated no plans to become pregnant in the next 6 months, 66% of the sample indicated that there was at least some likelihood that they would become pregnant in the next 6 months.  Those who indicated any plans to become pregnant in the next 6 months demonstrated more positive attitudes toward pregnancy, lower assessments of the risk of pregnancy while using no contraceptives, weaker intentions to get an abortion, less contraceptive use in the previous 6 months, and weaker contraceptive use in the previous 6 months, and weaker contraceptive use in the previous 6 months, and weaker contraceptive use in the previous 6 months, and weaker contraceptive use in the previous 6 months, and weaker contraceptive use in the future than those who reported any likelihood of becoming pregnant report weaker intentions to use condoms in the future than those who reported no likelihood of becoming pregnant in the next 6 months.  Nearly 40% of those with inconsistent pregnancy intentions reported no likelihood of becoming pregnant in the next 6 months.  Nearly 40% of those with inconsistent pregnancy intentions reported no likelihood determinations reported that they would be terminating or had already terminated the pregnancy.	To reduce adolescent childbearing we must assess pregnancy intentions in multiple ways.  The value of the current study is that non-pregnant adolescents were interviewed at baseline about their plans and likelihood of becoming pregnant and they were prospectively followed for a 6 month period to assess whether they suspected that they might be pregnant, whether they took a pregnant the results of the test.  Because those adolescents with inconsistent pregnancy intentions report more suspected pregnancies and more positive pregnancy est results than those with clear intentions to avoid pregnancy, it is important to consider and intervene with this 'at-risk' subgroup of adolescent females, especially with respect to issues of the need for available emergency contraception, consideration of pregnancy termination, and/or preparation for a health pregnancy termination, and/or preparation for a health pregnancy termination, and/or pregnancy plans and pregnancy likelihood may help focus counseling and educational efforts.  The findings
III	(2004). Personal narratives of adolescent mothers-to-be: Contraception, decision-making, and future	describe the adolescents' lived experiences related to pregnancy.	qualitative design.	unmarried females, aged 13- 19 years	interviewed individually. Interviews were conversational and allowed the participants the freedom to talk	size.	the data revealed few differences in the participants' attitudes or behaviours related to pregnancy and their life situations.	revealed that decisions regarding pregnancy were made with little deliberation and some participants
	expectations. Public Health				about what interested them.		Pregnancy placed the participants in situations	implied that pregnancy was

	Nursing. 21(4):				However, some		where they were called	planned.
	Nursing, 21(4): 338-346.				leading questions were used to initiate the interview.		upon to make adult decisions when they themselves were still children.  They needed guidance, support, and approval from parents, specifically their mothers.	Although knowledgeable about how to prevent pregnancy, participants did not consistently practice contraception and
							The participants' decisions regarding pregnancy were based on their perceptions of their alternatives, desires to please their mothers, and social, cultural, and familial influences.	their sexual experiences were marked by indifference and lacked intimacy.  Most of the participants revealed that they
		,					The participants' knowledge of available birth control measures did not translate into consistent or effective birth control practices.  Participants in the	had friends who had children. Perhaps engaging in sexual behaviour, even though it did not necessarily bring enjoyment or
							present study expressed some ambivalence regarding pregnancy, especially when asked whether or not the pregnancy was planned. Overall, the participants	feelings of intimacy, helped to create a sense of belonging.
						7	displayed an indifferent attitude toward sexual activity.	
							All of the participants believed that they would be able to meet the challenges of single parenthood with the support of their families, primarily their mothers.	
III	Spear, H.J. (2004b). A follow-up case study on teenage pregnancy: "Havin' a baby isn't a nightmare, but it's really hard". Pediatric Nursing, 30(2): 120-125.	To gain insight and understanding about the lives of adolescent mothers after giving birth and experiencing the realities of motherhood and being a single parent. To compare and contrast findings to the initial study. To discuss implications for nursing and further study.	Naturalistic, qualitative case study approach.	Two adolescent mothers who participated in a previously published study on teenage pregnancy agreed to participate in follow-up interviews 1 ½ years after giving birth.	Participants were contacted by phone and asked if they would be interested in participating in a follow-up interview. Each participant was interviewed privately in her home with her child present. The interviews lasted approximately 1 ½ hours and were conversational.	Data cannot be generalized.	The major themes that emerged from the data include: (a) regrets and hopes for a better future, which refers to a sense of loss and feelings of isolation moderated with anticipation of and plans for a better future; (b) mended and broken relationships refers to the reestablishment of some and termination of other interpersonal and familial relationships; and (c) thinking about and avoiding or engaging in fighting behaviours refers to decision to refrain from or participate in physical fighting with others.  The sentiment expressed in the first study in 2001, that early maternity would have little effect on their lives no longer held true based on the findings of this follow-up case study. Even though the two young mothers who participated still maintain a sense of optimism and hope for the future, it was noticeably tempered by feelings of regret, isolation, and mourning of a lost childhood.  Both mothers emphasized that "it's hard" to be a mother and a single parent and	Limited research has been done on fighting behaviour among females who experience pregnancy and childbearing during adolescence.  To further enhance effectiveness, supportive interventions for childbearing adolescents must include services for not only the adolescent mother, but her own parents, other family members, and siblings who are at risk for pregnancy.  The personal stories of the young mothers in this study fervently recommend that adolescents delay pregnancy and could be used to educate other youth at risk for early maternity about the realities of childbearing and motherbood at age 17.

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1	Spear, H.J., & Lock, S. (2003). Oualitative	The purposes of this study were to: a) examine qualitative	Descriptive review and analysis of	Criteria for inclusion of article in the	The findings of each article were independently	It is challenging to interpret collective results	stressed that adolescent pregnancy and motherhood should be avoided.  Consistent with the findings of the initial study, the participants demonstrated nurturing behaviours toward their children and expressed confidence in their abilities to manage single parenthood with the support of family, maternal grandmothers in particular.  The number of participants across studies ranged from 7 to	More qualitative studies that include a variety
	research on adolescent pregnancy: A descriptive review and analysis. Journal of Pediatric Nursing. 18(6): 397-408.	studies on adolescent pregnancy and determine methods used; b) describe and analyze primary findings; c) develop and define common themes across studies; and d) recommend need for further qualitative research based on the review.	literature.	sample included: a) published in a peer-reviewed journal from 1990 to 2000; b) cited in nursing or related literature; c) main focus on topic of adolescent pregnancy or parenthood; and d) primary use of qualitative methods for data collection and analysis with emphasis on narrative data.  Based on inclusion criteria, 22 articles were selected.	read and reread by each researcher several times to search for and develop emergent themes across the collective findings and to identify any differences or contradictions.	across studies as it involves a secondary analysis of reported findings.	80.  Less than half (27%) of the studies included male subjects, and fewer males participated in individual studies compared to females.  The collective findings of the studies reviewed in this analysis were categorized into four themes: a) factors influencing pregnancy; b) pregnancy resolution; c) meaning of pregnancy and life transitions; and d) parenting and motherhood.  Control over their lives and their relationship was an important factor related to the reproductive health choices made by adolescent females that led to a planned pregnancy.  Limited qualitative research reveals that adolescent sare strongly influenced by their families and that family influence can either promote or inhibit adolescent childbearing.  Several studies explored how adolescents and their families solve problems related to adolescent pregnancy.  Decisions about resolving the pregnancy were most often not made in isolation.  Pregnancy adolescents usually involved families or partners in making their decisions.  In general, studies that explored the personal perspectives of adolescent females on pregnancy and its impact on their lives found that adolescent pregnancy was viewed as a normative and positive, albeit challenging, event.	of ethnic groups and males are needed to gain insight and understanding about the phenomenon of adolescent pregnancy from male and other ethnic groups' perspectives so that programs and interventions can be designed to meet their needs.  More longitudinal study is recommended to strengthen the body of knowledge and for the development of theoretical models of adolescent pregnancy.  There is a need to conduct more indepth comprehensive reviews and analysis of qualitative studies to avoid unnecessary repetition and to reveal areas that require additional exploration.
п	Stone, N. & Ingham, R. (2002). Factors affecting British	To explore the broader social contexts in which teenagers' sexual	Qualitative – in depth interviews, and	Full time students aged 16-18 years.	40 students participated in in- depth interviews, and 1000	Relatively small sample that was not nationally representative.	60% of questionnaires were returned by young women, and 40% by young men.	The single determinant of contraceptive use that remained
1	teenagers' contraceptive use	and contraceptive behaviour occurs.	quantitative – questionnaires.		students filled out questionnaires		44% of the sample	significant throughout the

	at first intercourse: The importance of partner communication. Perspectives on Sexual and Reproductive Health. 34(4): 191 – 197.				under the supervision of a teacher or researcher in an exam setting. Respondents were given an envelope to seal their answers and were asked to place the envelope in a box to maintain confidentiality and anonymity.		reported having had intercourse at least once, including 47% of males, and 43% of females.  Roughly one-half of young people who had ever had sex, had their first experience before their 16th birthday.  88% of females and 83% of males reported using a modern method of contraception the first time they had sex. However, 42% of men and 27% of women reported not discussing at all the possibility of contraceptive use before having sex.  Results of the logistic regression emphasize the positive impact that communicating about contraceptive use before sex has on actual use.  The odds of method use increased by 76% with each year older a young woman was when she first had intercourse.	analyses for both sexes was the degree of communication about contraception.  Our study also reveals the importance of parents in equipping their children with the skills to communicate and interact effectively with future sexual partners. Parents' willingness and ability to discuss sexuality openly and portray it in a positive light throughout their children's lives appear to impart both competence and confidence.  Different results by gender suggest that efforts need to be directed to challenging gender stereotypes and assumptions through gender-sensitizing activities and skills-based training in communication among young men and young women.
111	Valaitis, R.K. & Sword, W.A. (2005). Online discussions with pregnant and parenting adolescents: Perspectives and possibilities. Health Promotion Practice. 6(4): 464-471.	To explore the use of online discussions as a means of obtaining pregnant and parenting adolescents' perspectives regarding needs, capacities, and service delivery issues.	Participatory, qualitative design	Participants were recruited through teen-parent group homes, and to a lesser extent, through prenatal and breastfeeding clinics, doctors' offices, alternative school settings, youth drop-in centres, public health nurses, and word of mouth.  17 teens took part in the online discussions. 14 of them were young women, and the 3 male participants were parents. Ranged from age 15 to 23 years. Participants' children ranged in age from 2 months to 2 years.	Two back-to-back 10 week virtual sessions were conducted. Five virtual conference rooms were created to host the discussions. Teens completed a short demographic survey when they enrolled in the study. Following each online discussion, individual face-to-face interviews were conducted with a purposeful sample.	There was a potential for social response bias. The findings represent the views and experiences of a small group of adolescents, and therefore may not be transferable to other populations.	Fifteen participants (93.8%) reported that they were "somewhat comfortable" or "very comfortable" using computers.  Participants felt that the computer interface was well laid out and suggested no improvements.  There were a number of barriers to online discussions: fatigue, lack of time, lack of computer access, technical computer problems, and lack of interest in discussions.  Participants identified a number of benefits of participation. Many felt decreased isolation. Respondents also appreciated the opportunity to share personal experiences. Some participants in the online discussion was gaining information about services.  During the interviews, the teens emphasized the importance of emotional and instrumental support.	Although the intent of the current study was not to provide online support group, the participants and moderators often perceived online exchanges as sources of social support.  Computer technology has the potential to support effective public participation of adolescent groups through the use of online discussion.  Blending the needs of researchers with teens' needs for social support in an online environment is encouraged. With careful planning and design, online communications can result in mutual benefits for researchers, service providers, and pregnant and parenting adolescents.

		Weiss, J.A.	To discuss important	Critical review	None.	A selective			To promote safe
	I	(2007). Let us	factors that			review of current			sexual decision
1	•	talk about it: Safe	influence teens and			professional			making in
		adolescent sexual	provide guidance for			literature, and			adolescents,
		decision making.	nurse practitioners			professional			communication
		Journal of the	to promote safe	İ		practice was			with parents,
		American	adolescent sexual			conducted.			other significant
1		Academy of Nurse	decision making.			conducted.			adults, and teens
		Practitioners. 19:	decision making.				1		is essential.
ı		450-458.					J		is essential.
		430-436.					ł	3	Nurse
									practitioners are
									frontline
									healthcare
		(4)							providers who
									have many
1									opportunities to
									promote safe
1									adolescent sexual
							1		decision making.
									Adolescence is a
1									time of growth, change, and
								T.	exploration and is
									influenced by
									many factors.
									Promoting safe
									sexual choices
									requires a clear
									understanding of
1									the factors that
1									influence sexual
									decision-making.
1									decision-making.
1									Encouraging safe
1									sexual practices,
									providing an
		}	12					=	opportunity for
									questions, and
									being a resource
									for information
1									rather than a
1									judge regarding
1									choices that seem
1								1	foreign are
1	i								important
1									strategies for NP
1									practice.
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