

**Parents as Sexual Health Educators
for Their Children:
A Literature Review**

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1. Introduction

Research focused on the sexual and reproductive health of Saskatchewan youth indicates that further education and health promotion measures are needed for this population. For example, youth in Saskatchewan represent the majority of cases of sexually transmitted infections (STIs) (Public Health Agency of Canada [PHAC], 2015b; Saskatchewan HIV Provincial Leadership Team, 2013). According to 2012 Canadian STI surveillance data, 61% of new cases of chlamydia and 46% of new cases of gonorrhea were identified in youth aged 15 to 24 (PHAC, 2015b). Research has also shown that 26% of new HIV diagnoses in Canada between 1985 and 2014 were in youth aged 15 to 29 (PHAC, 2015a). In 2014 alone, there were 474 cases of HIV diagnosed in Canadian youth (PHAC, 2015a).

In addition to high rates of STIs, Saskatchewan has the highest rate of live births from adolescent pregnancies in Canada (excluding the Canadian territories). In 2012, the rate of live births for Saskatchewan girls aged 15 to 19 was 33.5 per 1,000 and 77.0 per 1,000 for girls aged 20 to 24 (Statistics Canada, 2016). During the same year, the national average youth live birth rate was 12.0 per 1,000 for 15 to 19 year olds and 44.1 per 1,000 for 20 to 24 year olds. Taken together, these numbers are indication that Saskatchewan youth are participating in high risk behaviours, highlighting the importance of sexual health education for this population.

In addition to schools and other health educators, parents play an important role in the sexual health education of their children (Aspy et al., 2007; Beckett et al., 2010; Johnson & Williams, 2015; Meschke, Bartholomae, & Zentall, 2002). More specifically, parents can impact their children's sexual health by educating and talking to them about sexual health-related topics and by reinforcing safer STI and pregnancy prevention behaviours (Beckett et al., 2010). Although many parents may find this role challenging (Burgess, Dziegielewski, & Green, 2005; Davis, Gahagan, & George, 2013b; D'Cruz et al., 2015), research indicates that parents can be effective sexual health educators when provided with support and accurate information (Akers, Holland, & Bost, 2011; Aspy et al., 2007; Gavin, Williams, Rivera, & Lachance, 2015; Newby, Bayley, & Wallace, 2011).

Recognizing the importance of parents in the sexual health of their children, the Saskatchewan Prevention Institute conducted a review of the literature in this area. Definitions of sexual health and sexual health education, potential facilitators and barriers to this type of education, and suggestions for parents are also covered in the current review. North American research articles published in the last ten years (i.e., from 2006 onward) were the primary focus of this review. For more information about sexual health education for youth, including information about STIs and adolescent pregnancy in Saskatchewan, please refer to the Saskatchewan Prevention Institute's website (www.skprevention.ca).

2. Sexual Health Education

Before discussing parents and their roles as sexual health educators, it is important to first define sexual health and discuss what is involved in effective sexual health education. The World Health Organization (WHO, 2015) defines sexual health as:

a state of physical, emotional, mental, and social well-being in relation to sexuality. [It is] not just the absence of disease, dysfunction, or infirmity. [It involves] a positive and respectful approach to sexuality and sexual relationships [as well as the] possibility of having pleasurable and safe sexual experiences free of coercion, discrimination, and violence. The sexual rights of all persons must be respected, protected, and fulfilled (p. 1).

Sexual health education is important, both for dealing with current public health issues (e.g., adolescent pregnancy, HIV, STIs) and for contributing positively to sexual health decision-making (Walker, 2004). In these ways, sexual health education is vital as a means of promoting sexual health. The Canadian Guidelines for Sexual Health Education (PHAC, 2008) indicate that sexual health education should “equip individuals, couples, families, and communities with the information, motivation, and behavioural skills needed to enhance sexual health and avoid negative sexual health outcomes” (p. 5). Similarly, PHAC identifies two main goals of sexual health education in Canada: 1) improving positive sexual health outcomes (e.g., rewarding sexual relationships, informed reproductive decision-making); and 2) avoiding negative sexual health outcomes (e.g., avoiding STIs, unintended pregnancies, and sexual coercion).

According to Flicker et al. (Flicker, Guilamo-Ramos, & Bouris, 2009), healthy development in adolescence means learning to make informed decisions, manage risks, and negotiate options. Adolescence is generally thought of as a time of behavioural experimentation and risk-taking, where youth work to assert their increasing independence (Battles & Weiner, 2002; Silverman, 2013). As part of this strive for independence, adolescents often face decisions about romantic relationships, sexual activity, and substance use. Like people of all ages, adolescents are at risk of adverse outcomes if they engage in risky sexual and/or substance use behaviours (e.g., unprotected vaginal, anal, or oral sex; sharing needles or other substance use equipment) (Kapogiannis, Legins, Chandan, & Lee, 2014). Adolescents may engage in these types of high risk behaviours for many reasons, including peer pressure, lack of planning, being under the influence of substances, and a lack of accurate knowledge (Battles & Weiner, 2002). Therefore, adolescence is a vital time for sexual health education. Such education during this time period can help ensure that healthy attitudes about sexuality and healthy patterns of sexual behaviour are established (PHAC, 2014).

All Canadian provinces and territories mandate that sexual health education is taught in schools (PHAC, 2008). However, there is considerable variation among individual schools and communities in how fully these curricula are implemented (Byers & Sears, 2012; Miller et al., 2009). Therefore, parents should not rely solely on school-run programs for their children’s sexual health education. As highlighted previously, the risks of engaging in sexual behaviour without appropriate knowledge and skills are great for adolescents (e.g., STIs, unplanned pregnancies), and providing adolescents

with relevant knowledge and skills is crucial (Clawson & Reese-Weber, 2003). Positive sexual health communication between parents and adolescents has increasingly been recognized as an important determining factor in the development of healthy sexuality and sexual behaviour among adolescents (Davis et al., 2013b; Harris, 2016; Malacane & Beckmeyer, 2016; Meschke et al., 2002).

3. Parental Involvement in Sexual Health Education

Parents can play a key role as their children's primary sexual health educators (Aspy et al., 2007; Ballard & Gross, 2009; Eisenberg, Sieving, Bearinger, Swain, & Resnick, 2006; Guilamo-Ramos et al., 2015). The majority of parents agree that providing sexual health education is at least partially their responsibility (Byers, Sears, & Weaver, 2008; Dyson & Smith, 2012; Kelleher, Boduszek, Bourke, McBride, & Morgan, 2013; Lagus, Bernat, Bearinger, Resnick, & Eisenberg, 2011). Importantly, research also shows that children want their parents to take this role (Guilamo-Ramos et al., 2015; Lagus et al., 2011; Marques & Ressa, 2013; Newby et al., 2011; Thompson, Yannessa, Dunn, McGough, & Duffy, 2015; Turnbull, van Wesch, & van Schaik, 2008). Unfortunately, parents often underestimate their importance as sexual health educators and role models for their children (Lemieux, Frappier, & McDuff, 2010). As such, many adolescents report little to no communication with their parents about sex-related topics (Boyas, Stauss, & Murphy-Erby, 2012). Parental communication about sex, if it occurs at all, often consists of parents waiting for children to ask questions, providing brief answers, and shutting down future conversations (Martin & Torres, 2014; Stone, Ingham, & Gibbins, 2013).

Research has identified many advantages of parent-led sexual health education. For example, parental involvement in sexual health education can serve to increase the reach and timeliness of this education, provide more skills-based learning, and result in improved parent-child communication overall (D'Cruz et al., 2015; Hutchinson, Jemmott, Jemmott, Braverman, & Fong, 2003; Malacane & Beckmeyer, 2016; Widman, Choukas-Bradley, Noar, Nesi, & Garrett, 2016). Unlike other information sources, parental communication about sex can be continuous and can build upon previous discussions (Miller et al., 2009; Miller et al., 2011). In addition to being able to provide accurate information on sex-related topics, parents are able to tailor this information to their individual child's physical, emotional, and psychological level (Eisenberg et al., 2006; Hutchinson et al., 2003). Parents are also able to share their own values, beliefs, and expectations as part of their communication with their children around sexual health (Eisenberg et al., 2006; Jaccard, Dodge, & Dittus, 2002; Miller et al., 2009; Pearson, Muller, & Frisco, 2006). As well as providing information through communication, parents are able to reinforce safer sex-related and pregnancy prevention behaviours (e.g., contraceptive use) (Beckett et al., 2010; Davis et al., 2013b; Stone et al., 2013).

Parent-child sexual health communication is related to numerous benefits for adolescents in addition to increased knowledge, including safer sex behaviours (Widman et al., 2016; Wight & Fullerton, 2013). Such communication has been found to play a significant role in adolescents delaying sexual debut, reducing sexual activity, increasing contraception and condom use, and

decreasing their number of sexual partners (Harris, Sutherland, & Hutchinson, 2013; Hutchinson et al., 2003; Hyde et al., 2013). Adolescents who have open conversations about sex with their parents have also been found to be more likely to have these types of conversations with their sexual partners (Davis et al., 2013b; Harris et al., 2013; Hicks, McRee, & Eisenberg, 2013; Ogle, Glasier, & Riley, 2008; Widman, Choukas-Bradley, Helms, Golin, & Prinstein, 2014). Partner communication is an important skill for reducing sexual risks like HIV and STIs as it relates to the ability to negotiate condom use and birth control (Hicks et al., 2013).

Research has also consistently found that when parents communicate their sex-related values to their children (e.g., disapproval of early sexual activity) and set clear rules, their children are more likely to adhere to those values (Aspy et al., 2007; Dittus, Miller, Kotchick, & Forehand, 2004; Lemieux et al., 2010). Even for adolescents who do become sexually active, communication of values is associated with a higher likelihood of using birth control and having fewer sexual partners (Aspy et al., 2007). Taken together, the literature shows that parents are in a unique position to shape adolescents' attitudes, values, and beliefs toward sex, thereby influencing their sexual behaviours (Aspy et al., 2007; Boyas et al., 2012; Widman et al., 2016). Parents are able to do this by providing accurate information about risks, consequences, and responsibilities and by teaching their children the skills needed to make responsible decisions about health and sexuality (Dittus et al., 2004).

3.1 The Importance of the Parent-Child Relationship

A 2011 review of the literature found that five aspects of parent-adolescent communication are important: 1) the extent of communication (i.e., frequency, depth of discussions); 2) the style or manner in which information is shared; 3) the content of the information discussed; 4) the timing of the communication; and 5) the general family environment/overall relationship between the parent and child (Akers et al., 2011). This suggests that effective parent-child communication requires more than simply providing accurate information. The relationship that is formed between the parent and child is an important factor in whether discussions about sexual health occur and the effectiveness of this communication (Boyas et al., 2012; Jaccard, Dittus, & Gordon, 2000; Lefkowitz, 2002; Malacane & Beckmeyer, 2016). In fact, some research suggests that a close parental relationship may be one of the most important determinants of whether parent-child conversations about sex impact adolescent sexual health outcomes (Hicks et al., 2013; Kesterton & Coleman, 2010; Lefkowitz, 2002).

Important characteristics of this relationship include mutual interaction, parental openness, closeness, support, and warmth; all of which are related to parent-child connectedness (Kesterton & Coleman, 2010; Miller, 2002). Other facilitators of parent-child communication about sexual health include parental honesty, refraining from critiquing, and controlling emotional reactions to children's ideas (Afifi, Joseph, & Aldeis, 2008; Malacane & Beckmeyer, 2016; Turnbull, 2012). Positive parent-child relationships are associated with reductions in adolescent participation in sexual risk behaviours and improved sexual and reproductive health outcomes (Commendador, 2010; Dittus et al., 2004; Harris et al., 2013; Kirby & Miller, 2002; Wight & Fullerton, 2013). Specifically, positive parent-child relationships have been associated

with improved contraceptive and condom use, improved communication about sex with parents and sexual partners, and fewer sexual risk behaviours among adolescents (Advocates for Youth, 2010). This is particularly true when parental communication about sex is perceived by their adolescents as open, confident, responsive, and consistent (Davis et al., 2013b; Widman et al., 2014).

Several other aspects of the parent-child relationship have been highlighted by researchers, along with their impacts on the sexual health behaviours of adolescents. For example, higher levels of parental support (e.g., warmth, responsiveness), behavioural control (e.g., discipline, setting rules, providing consequences), and knowledge are associated with a delay of first sexual intercourse for adolescents (Beyers, Verlyser, & Verlee, 2015; Eisenberg et al., 2006; Harris et al., 2013; Miller et al., 2009). Explicit and clear parental communication about values and expectations related to their children's sexual behaviour is associated with a higher likelihood of using birth control and having fewer sexual partners (Aspy et al., 2007). Parental responsiveness has been associated with adolescents' communication with sexual partners, condom use, and a reduction in risk behaviours (Miller et al., 2009).

Unsurprisingly, youth's positive perceptions of their relationships with their parents are associated with increased sex-related communication and healthier sexual behaviours (Boyas et al., 2012). High quality parent-child relationships have been found to engender a sense of trust in the parent as a reliable source for sexual health education (Nielsen, Latty, & Angera, 2013; Wilson, Dalberth, Koo, & Gard, 2010). Adolescents also rate these types of conversations more positively when they occur within the context of a high quality relationship (Hicks et al., 2013). It is important to note that despite the known benefits of having sexual health conversations in the context of a close parent-child relationship, research indicates that these discussions can be effective even when these relationships are not considered close (Wisnieski, Sieving, & Garwick, 2015). This is particularly true when the communication is timely, frequent, and covers a variety of sexual health topics.

3.2 Parental Differences in Communication

The results of numerous studies indicate that there are differences in the ways that mothers and fathers communicate with their children about sexual health. The most commonly reported finding is that mothers tend to engage in more frequent and specific conversations about sex than fathers (e.g., Angera, Brookins-Fisher, & Inungu, 2008; Davis et al., 2013b; El-Shaieb & Wurtele, 2009; Harris et al., 2013; Nielsen et al., 2013; Wilson & Koo, 2010; Wisnieski et al., 2015). Research specific to fathers' impacts and involvement in the sexual health education of their children is limited. Fathers are not included in the analysis of many studies because too few (or none) participated (e.g., Byers & Sears, 2012; Turnbull, van Wersch, & van Schaik, 2011). The research that is available indicates that fathers are less likely than mothers to initiate or engage in sexual health discussions with their children, and when they do have these discussions, they tend to provide more information to their sons than their daughters (Angera et al., 2008; Harris et al., 2013; Nielsen et al., 2013; Ogle et al., 2008). Nielsen et al. (2013) suggest

that both sons and daughters often view mothers as the more appropriate parent with whom to discuss issues related to sexual health.

Although research has shown that mothers do more of the sexual health education, fathers in Ballard and Gross's (2009) study expressed a desire to be more involved. The relatively low levels of communication by fathers found in numerous studies suggest that fathers need additional support to talk to their children about sex (Boyas et al., 2012; Nielsen et al., 2013; Santa Maria, Markham, Bluethmann, & Mullen, 2015; Widman et al., 2016; Wilson & Koo, 2010). Research has suggested that fathers experience higher levels of discomfort than mothers when talking about sex with their children, regardless of their child's gender (Ogle et al., 2008; Goldfarb, Lieberman, Kwiatkowski, & Santos, 2015). It is important to examine other barriers fathers face in communicating with their children about sex. Guidance could then be provided as to how fathers can overcome these barriers, including the right developmental time to talk with their children and reassurance that their children value what they have to say (Widman et al., 2016; Wilson & Koo, 2010). Programs aimed at helping parents communicate more effectively with their children about sex could also work harder to engage and retain fathers in programming (Ballard & Gross, 2009; Boyas et al., 2012; Santa Maria et al., 2015).

In addition to gender differences in parental communication, differences in the education received by sons and daughters have been identified. Parents typically communicate more frequently and about a wider variety of sexual health topics with their daughters than their sons (Jaccard et al., 2002; Nielsen et al., 2013; Wilson & Koo, 2010; Wisnieski et al., 2015), resulting in boys receiving very little information about sex from their parents compared to girls (Boyas et al., 2012; Epstein & Ward, 2008; Hicks et al., 2013; Schouten, van den Putte, Pasmans, & Meeuwesen, 2007; Sneed, 2008; Swain, Ackerman, & Ackerman, 2006; Tobey, Hillman, Anagurthi, & Somers, 2011). Almost a quarter of the male participants in Epstein and Ward's (2008) study reported that their parents had told them nothing about sex and relationships. Instead, they report learning about sex mostly from their peers and the media. Other researchers agree (Turnbull et al., 2008), suggesting that boys may be more vulnerable to inaccurate information about sex received from friends and the media (Thompson et al., 2015).

Research has also shown that the education received by boys and girls is qualitatively different, with girls receiving messages primarily about abstinence and avoiding pregnancy, and boys receiving more neutral messages and messages focused on condom use (Epstein & Ward, 2008; Goldfarb et al., 2015). The effects of these differences in communication have also been identified. A meta-analysis of 52 articles, dated through 2014, found a significant relationship between parent-adolescent sexual communication and safer sex behaviours in adolescents (Widman et al., 2016). The effects were larger for communication with girls than with boys, and were also larger for those adolescents who communicated with their mothers than their fathers. This suggests that boys and fathers are particularly in need of further education and support.

3.2.1 Importance of Paternal Involvement in Sexual Health Education

Although fathers are often not adolescents' first choice for communication about sex, research has shown that fathers can provide valuable guidance and support (Wisnieski et al., 2015). A review of eight studies examining the effects of paternal factors on their children's sexual health behaviours found that more paternal monitoring and discipline and a good father-child relationship were associated with fewer sexual partners (Guilamo-Ramos et al., 2012). After reviewing the literature in this area, these authors concluded that more positive relationship qualities (e.g., higher quality relationships, greater paternal involvement) were associated with decreased adolescent sexual risk behaviours. Similar findings were reported by Boyas et al. (2012).

In a study of fathers and daughters, good paternal sexual health educators were viewed as being emotionally close, displaying attentiveness, were open and honest when discussing sexual health topics, monitored behaviour while also showing trust, and were direct communicators (Nielsen et al., 2013). Closeness with fathers was experienced by daughters when they reported talking on a regular basis, sharing similar interests, and feeling comfortable talking about sexuality. Traits that were familiar in those who were perceived as poor paternal educators included appearing uncomfortable when talking about sex, not talking in general, avoiding sexual conversations, and using humour to avoid serious conversations (Nielsen et al., 2013). These findings indicate that interventions should focus on providing fathers with the knowledge, skills, and confidence needed to engage both their sons and daughters in conversations about sexual health (El-Shaieb & Wurtele, 2009; Santa Maria et al., 2015; Walker, 2004).

3.3 Potential Explanations for Contradictory Findings

Although the majority of the literature identified through the current review showed a positive association between parental sexual health communication and adolescent sexual health outcomes, some contradictory findings were also identified. For example, some research indicates that parental communication about sex is associated with the initiation of both oral and vaginal sex (e.g., Bersamin et al., 2008). Clawson and Reese-Weber's (2003) review identified some studies suggesting that parent-adolescent sexual communication was related to less sexual behaviour, and others suggesting that more parent-adolescent sexual communication was related to more sexual behaviours.

Numerous potential explanations for these unexpected findings have been offered. For example, some authors suggest that parents who anticipate that their children are, or will soon be, sexually active are more likely to engage in discussions about sexual issues (Bersamin et al., 2008; Eisenberg et al., 2006). In other words, parents may only start having sexual health conversations with their children after they suspect that their children are engaging in a sexual relationship. Therefore, parental communication may not be resulting in more sexual participation; instead, sexual participation may be resulting in parental communication (Clawson & Reese-Weber, 2003; Pearson et al., 2006). Parent-child communication is more effective when

it takes place before a young person initiates sexual activity than after such behaviours have begun. For example, Miller and Whitaker (2001) found that mother-child communication about condoms prior to an adolescent's sexual debut was associated with greater likelihood of subsequent condom use. The same conversations were not related to later condom use if they occurred during the first year of intercourse.

Aspy et al. (2007) included a review of some of the contradictory findings related to parent-child communication about sex and sexual health outcomes. Their review showed that some studies have found that such communication reduces the likelihood of adolescents engaging in sexual intercourse, while other studies have not found a consistent relationship. These authors suggested that the differences in outcomes may be due to differences in the quality and quantity of the communication, as well as differences in the relationship between the parents and their children. Others have also suggested that the effectiveness of parental communication is associated with the quality of the parent-child relationship and the parents' abilities to strongly convey their values (e.g., Kirby & Miller, 2002; Wight & Fullerton, 2013).

According to Fletcher, Steinberg, and Williams-Wheeler (2004), there are distinct differences in the quality of parental behaviours, particularly when talking about monitoring and control. For example, they suggest that parental monitoring and control, when combined with warmth and knowledge about a child's life, acts to reduce the occurrence of high risk behaviours in children. Without warmth or knowledge, the same behaviours are often interpreted as over-controlling and can result in higher risk behaviours. Therefore, the associations between monitoring and sexual health outcomes should be interpreted in the context of additional factors such as warmth and parental knowledge.

An additional explanation for inconsistent findings is the fact that the interpretation of outcomes of programs is often limited by the lack of rigorous evaluations (Wight & Fullerton, 2013). Recognizing these inconsistencies in findings, Widman et al. (2016) undertook a meta-analysis of three decades of research with more than 25,000 adolescents. The results of this meta-analysis revealed a significant positive association between parent-adolescent sexual communication and safer sex behaviours among youth. This finding suggests that despite some inconsistencies between individual studies, parent-adolescent communication about sex is associated with protective adolescent sexual health behaviours.

4. Barriers to and Facilitators of Parental Involvement

Despite their beliefs about the importance of their role in their children's sexual health education, research indicates that the majority of parents have not discussed many of the topics related to adolescent sexual health with their children (Beckett et al., 2010; Kelleher et al., 2013; Malacane & Beckmeyer, 2016; Weaver, Byers, Sears, Cohen, & Randall, 2002). Even among parents who have provided sexual health education to their children, many report not providing a lot of detail and not covering a variety of topics (Weaver et al., 2002). Although most parents want their children to be

knowledgeable about topics like abstinence, contraception, and how to prevent STIs, they often report difficulty communicating about these topics (Advocates for Youth, 2010; D’Cruz et al., 2015; Weaver et al., 2002). This is particularly true for more sensitive topics, like sexual coercion and assault (Byers et al., 2008). That being said, parents have indicated that they want more information related to sexual health, including about sexuality in general and ways to communicate about sexual health with their children (Weaver et al., 2002). In order to assist parents to provide sexual health education to their children, it is important to understand both the barriers they face and facilitators to this education.

4.1 Barriers to Parental Communication about Sexual Health

A recent review of the literature identified four types of parent-based barriers to communication about sexual health: 1) limited sexual health knowledge; 2) believing adolescents are not ready to discuss sex; 3) discomfort discussing sex; and 4) demographic factors (Malacane & Beckmeyer, 2016). Demographic factors included cultural, political, and religious factors, among others. Numerous other researchers have highlighted these barriers and others, including lack of skills to communicate about sex and being unsure about what information is appropriate for various age levels (Afifi et al., 2008; Ballard & Gross, 2009; Byers et al., 2008; D’Cruz et al., 2015; Jaccard et al., 2000; Miller et al., 2009; Sneed, Somoza, Jones, & Alfaro, 2013; Stone et al., 2013; Turnbull et al., 2008; Weaver et al., 2002; Widman et al., 2014). The Sexuality Information and Education Council of the United States (SIECUS, 2004) reports that parents often fear they will not handle the situation appropriately, that they will speak to their child too early or too late, or that they will misinform their children.

These barriers may result in parents simply avoiding conversations about sex with their children altogether (Ballard & Gross, 2009). Other parents wait to provide information until their children ask questions (Newby et al., 2011; Walker, 2004). Stone et al. (2013) suggest that this lack of parental preparation can result in poorly considered or inconsistent answers being given. Other factors that prevent parents from having sexual health discussions with their children include the belief that their spouse is responsible, the perception that they do not have the ability to influence their children’s sexual behaviours (Newby et al., 2011), situational constraints (e.g., have not found the right time or place) (Jaccard et al., 2000; Marques & Ressa, 2013), parental desires to maintain their children’s innocence, and the belief that children receive the information they need elsewhere (Hyde et al., 2013; Jaccard et al., 2000; Martin & Torres, 2014; Newby et al., 2011; Stone et al., 2013; Wilson et al., 2010).

Although parents may not have these conversations with their children because their children report already knowing the information, adolescents’ perceptions of their own knowledge about sexual health related topics is often higher than their actual knowledge level (Jaccard et al., 2002). In addition, parents often think that they have done a much better job of discussing sex and puberty than they have (Ballard & Gross, 2009; Hyde et al., 2013; Jaccard et al., 2000). More specifically, parents typically report providing more extensive parent-child sexual health communication than their children report receiving (Byers et al., 2012). This means that parent-

child sexual health communication is likely happening at even lower rates than reported in many articles.

Parental knowledge is important for promoting open parent-child communication about sexual health (Miller et al., 2009; Walker, 2004) and parental comfort for participating in this communication (Newby et al., 2011). Parental embarrassment and discomfort are strong barriers to communication with children (e.g., Ballard & Gross, 2009; Burgess et al., 2005; Jaccard et al., 2000; Miller et al., 2009; Wilson et al., 2010), highlighting the importance of increasing parental knowledge to increase comfort levels. Parents' own sexual health education, or lack thereof, greatly impacts their own sexual health knowledge. Although some parents are motivated to provide better sexual health education than they themselves received (Byers et al., 2008; Davis et al., 2013b; Turnbull et al., 2011), their own lack of education may result in inaccurate information being shared and may increase their feelings of uncertainty about how to best educate their own children (Davis et al., 2013b; Dyson & Smith, 2012).

Other reported barriers to effective sexual health communication include failing to include critical topics (e.g., STIs, contraception), parents wrongly assuming their children are not sexually active, and failing to communicate until after a negative outcome has occurred (e.g., unplanned pregnancy) (Burgess et al., 2005; Hyde et al., 2013). Byers et al. (2008) found that when sexual health communication does occur, it is typically only in general terms and tends to avoid more sensitive topics (e.g., STIs, sexual coercion and assault). Parents appear to have particular difficulty talking about more private topics related to sex, including masturbation, orgasm, how to obtain and use condoms, and sexual decision-making (El-Shaieb & Wurtele, 2009; Martin & Torres, 2014; Martino, Elliott, Corona, Kanouse, & Schuster, 2008; Ogle et al., 2008; Weaver et al., 2002).

A common misperception among parents about sexual health education is that it promotes early and irresponsible sexual activity among adolescents (Hyde et al., 2013; Morawska, Walsh, Grabski, & Fletcher, 2015). In reality, numerous studies have found that adolescents who participate in well-designed, well-implemented school-based sexual health programs reduce their sexual risk behaviours (Advocates for Youth, 2012; Centers for Disease Control and Prevention, Division of Adolescent and School Health [CDC DASH], 2013). Outcomes identified in this research include delay of first sexual intercourse, a decrease in the number of sex partners, and an increase in condom and/or contraceptive use. None of the 48 studies examined by CDC DASH found an increased likelihood of having sex following participation in sexual health education. Not providing adolescents with education about sexual health, however, increases their risk of STIs and unplanned pregnancies, as they do not have the information necessary to protect themselves. For example, Crosby, Hanson, & Rager (2009) found that adolescents who had not had sexual health related conversations with their parents were significantly more likely to report having multiple partners, low self-efficacy for condom negotiation, and to have used alcohol or drugs before sex. As stated by Planned Parenthood Los Angeles (Marques & Ressa,

2013), even adolescents who are not having sex require education because saying “no” requires skills.

4.2 Facilitators of Parental Communication about Sexual Health

Many of the facilitators of parental communication about sexual health are related to addressing the barriers discussed above. For example, existing reviews of the literature have found that when parents are educated about sexual health, have confidence in their knowledge, and believe they have the skills to communicate effectively, they are more likely to initiate these discussions with their children (Malacane & Beckmeyer, 2016). In other words, parents need the knowledge, comfort, skills, and confidence to communicate effectively with their children about sex (Miller et al., 2009). Parental knowledge is also important to children. Turnbull (2012) found that if children believe their parents are knowledgeable, conversations about sexual health are more effective. On the part of parents, it is important for them to understand that these conversations will benefit their children by influencing their sexual health behaviours (Malacane & Beckmeyer, 2016).

As discussed previously, parent-child communication related to sexual health is associated with improved contraception and condom use, improved communication about sex, and fewer sexual risk behaviours among adolescents (Advocates for Youth, 2010). This is particularly true when this communication is done in a confident, loving way (Advocates for Youth, 2010). Characteristics shown to decrease adolescents’ anxiety and avoidance, resulting in increased conversations with parents about sex, include when parents are receptive to their adolescents’ opinions and ideas, attempt to keep the conversation informal or casual, and remain composed during the conversation (Afifi et al., 2008). Research has shown that when adolescents see their parents as trustworthy, they also view them as more knowledgeable and accessible, resulting in more frequent discussions about sex (Guilamo-Ramos, Jaccard, Dittus, & Bouris, 2006).

Hutchinson and Wood (2007) report that determinants of successful communication include parents’ intentions to communicate; and their personal beliefs that they have the skills to communicate, that they will positively impact their child’s behaviour, and that important others would approve (e.g., partner, close friends, other relatives). Boone and Lefkowitz (2007) found that when mothers employed questioning tactics (e.g., asking children what they think or feel), children perceived their parents as being open and supportive, which increased the effectiveness of these conversations. Conversely, lecturing about negative consequences of engaging in sex often results in defensiveness in children, reducing the effectiveness of the conversation.

Mothers who reported having in-depth conversations about sexual health with their children tended to report more knowledge about sexuality, more comfort discussing sexual health, and more positive attitudes toward parent-child sexual health communication (Byers & Sears, 2012). As opposed to viewing sex education as “the talk”, parents should view sexual health education as an ongoing conversation. Walker (2004) suggests using the following techniques to increase

comfort during these conversations: doing another activity while talking and listening, using books and pictures to explain sex and relationships, and using everyday experiences as a starting point. Parent-identified facilitators for talking about sex with children include having a close relationship, creating opportunities for sex-related conversations, starting when children are young, using books, and talking about what is happening in children's sex education classes at school (Wilson et al., 2010).

A systematic review focused on interventions to improve parental communication about sex provided ideas for what kind of skills parents should be taught, including how to talk less and listen more, be less directive, ask more questions of their adolescent, and behave in a non-judgemental fashion (Akers et al., 2011). Adolescents whose parents engage in these behaviours report greater comfort discussing sex with their parents and discussing more topics. Direct, clear messaging is also important when parents are communicating their values and expectations around sexual behaviour. For example, adolescents who understand their parents' expectations about abstinence are less likely to engage in sexual behaviour than those who are unsure or who received no instructions (Sneed, 2008).

5. Role of Others in Facilitating Parent-Led Sexual Health Education

Many of the facilitators of parental communication about sexual health discussed above highlight the importance of education programs, services, and other supports for parents. While most strategies to reduce negative sexual outcomes in adolescents are directed at adolescents themselves, others are designed for parents of these adolescents. It is hoped that by providing parents with accurate information and skills relevant to providing sexual health education, parents will be able to influence the sexual beliefs and behaviours of their children (Jaccard et al., 2002; Lagus et al., 2011; Santa Maria et al., 2015; Swain et al., 2006; Villarruel, Cherry, Cabriaes, Ronis, & Zhou, 2008; Walker, 2004). Although parents report using many sources to gather information related to adolescent sexual health (e.g., the Internet, other parents, teachers, books), many parents express interest in a formal approach to learn more (Ballard & Gross, 2009).

Research has shown that group interventions designed for parents can effectively help parents build their knowledge, comfort, skills and confidence through education, role play, and other interactive exercises (Byers et al., 2008; Downing, Jones, Bates, Sumnall, & Bellis, 2011; Kesterton & Coleman, 2010; Klein et al., 2005; Miller et al., 2009; Swain et al., 2006). For example, Akers et al.'s (2011) systematic review of parent-focused interventions found parental increases in frequency and quality of communication, and intentions, comfort, and self-efficacy for communicating with their children about sex compared to the control groups. This review also highlighted the influence of parent-child communication about sex on adolescent sexual health outcomes. Another large-scale systematic analysis of published parent-based adolescent sexual health interventions (between 1998 and 2013) found that these programs resulted in increased communication and increased parental comfort

with communication (Santa Maria et al., 2015). Although the size of the increases differed between programs, positive effects existed regardless of the delivery mode (e.g., self-paced, short group, long group) or the intervention dose (i.e., intensity of the program).

Another recent systematic review examining the effectiveness of programs designed to increase parent-child communication about sexual health also showed promising results. Gavin et al. (2015) examined 16 studies and found that all showed a positive impact on at least one short-term outcome, with the majority showing an increase in parent-child communication about sexual health. Four of the seven studies that examined impact on sexual risk behaviours evidenced a positive impact (e.g., condom use). Downing et al.'s (2011) systematic review of parent-based interventions for preventing poor sexual health outcomes in adolescents found the following youth outcomes: less likely to report having unprotected sex, decreased STIs, and decreased unprotected sex at last intercourse. In addition, these authors found that sexual health communication was increased and improved following program participation.

Numerous other studies have shown that parent-focused interventions that target communication skills training are associated with increased sexual risk communication and knowledge, confidence, and comfort regarding communication (Klein et al., 2005; Leeds, Gallagher, Wass, Leytem, & Shlay, 2014; Turnbull et al., 2012; Villarruel et al., 2008). Such interventions have also been shown to increase parent-child connectedness (Harris, 2016; Leeds et al., 2014). The durability of the effects found after parent programs are less clear, perhaps suggesting a need for booster sessions or refreshers for parents (Akers et al., 2011). The importance of booster sessions for maintaining effective conversations over time has also been raised by other researchers (e.g., Kirby and Miller, 2002; Wang et al., 2014).

In addition to organized programs focused on helping parents educate their children about sexual health, healthcare providers can be important sources of information and support for parents. Since research indicates that many parents do not have sex-related discussions with their children before their children start having sex, it may be important for healthcare providers to facilitate and encourage this communication (Beckett et al., 2010; Edwards & Reis, 2014; Miller & Whitaker, 2001). This can be done, in part, by providing parents with information about sexual behaviour of adolescents. Widman et al. (2016) suggest that physicians and other healthcare providers can have clear and honest conversations about sexual health with parents to provide accurate information and to model communication skills (also Wisnieski et al., 2015). These authors also suggest that healthcare providers should encourage parents and adolescents to have these conversations at home, with tips about when and how to discuss these topics. Due to the effectiveness of parent-focused interventions, researchers have suggested that it may also be important for healthcare providers and others working with parents to refer parents to available programs to help them improve their sexual health communication skills (Gavin et al., 2015; Miller & Whitaker, 2001).

5.1 Recommendations for Parent-Focused Education

The results of the research just discussed indicate that parent-focused programs can provide parents with the tools and support they need to take an active role in their children's sexual health education, thereby helping their children avoid negative sexual health outcomes. Conversations about sexual health can be uncomfortable for parents and children; therefore, Widman et al. (2016) recommend that educational efforts provide clear, practical instruction, and help parents optimize the timing and language used in their conversations. Instead of simply encouraging parents to talk about sexual issues with their children, it is important that interventions provide parents with the skills needed to become more effective communicators (Aspy et al., 2007; Jaccard et al., 2002; Walker, 2004). Byers and Sears (2012) suggest that these programs need to focus on increasing knowledge, building intentions towards communicating, and providing skills to communicate effectively. In order to build these intentions and follow-through, programs need to show parents the value in having these conversations with their children.

Focus group participants in Ballard and Gross's (2009) study identified a number of topics that should be covered in programs for parents, including: timing of information, appropriate language and topics for various ages, and the importance of a consistent parental approach to parent-child sexual communication. These parents also highlighted the importance of skill-building techniques (e.g., role play) and of providing time for parents to talk with each other and share ideas and support. Other researchers have also discussed the importance of role-play and other skill-building activities to increase parental comfort and feelings of self-efficacy (El-Shaieb & Wurtele, 2009).

As many parents are concerned that discussions about sexual health will hasten sexual activity, it is important that educators and health professionals work to inform parents about the benefits of early and frequent conversations about sex (Malacane & Beckmeyer, 2016; Walker, 2004; Wisnieski et al., 2015). It is important that parents understand that having age-appropriate discussions related to sexual health will help to promote the health of their adolescent children. Another important aspect of parent-child communication about sex is parental willingness. Parent-focused programs should work to increase parental awareness of the influence they have on their children's sexual decision-making and encourage them to be actively engaged in these conversations with their children (Lagus et al., 2011). If parents are taught about the potential outcomes of not having these conversations, their willingness may increase. This is particularly true if they also have the knowledge and comfort to have these conversations with their children.

Programs can raise parents' awareness of the long-term benefits of talking openly, talking early, and developing positive communication with their children about sexual health (Walker, 2004). Due to the importance of the parent-child relationship on the effectiveness of communication, Wight and Fullerton (2013) suggest that parent-focused adolescent sexual health programs should also work to help parents improve parent-child connectedness and parental monitoring,

help parents communicate their values around sexual relationships, and encourage parents to model the behaviours they want their children to follow.

Based on findings about the effectiveness of parental communication on their children's sexual health behaviours, Aspy et al. (2007) concluded that prevention programming that targets both parents and their children may be of great benefit in promoting adolescent sexual health. Including other family members in these programs may also be important (e.g., grandparents, uncles, aunts), as research has shown that sexually active adolescents are likely to talk to extended family members about sex (Grossman, Tracy, Richer, & Erkut, 2015; Wisnieski et al., 2015). Therefore, it is important that these adults also have access to accurate information and skill-building opportunities. Klein et al.'s (2005) review of a parent-based sexual educator program found that almost 12% of participants were grandparents. This indicates that adults other than parents are seeking out these types of programs.

5.2 Potential Dissemination Methods

Most of the existing interventions in the literature involve face-to-face, facilitated formats. Face-to-face interventions require trained personnel, require significant time commitments by parents, and have limited reach because few parents can be accommodated per training cycle (Akers et al., 2011; Johnson, 2012). One possibility for increasing reach without significantly increasing the required resources is to include parents in existing education programs directed at adolescents. Including parents in adolescent-targeted interventions has been shown to increase parental knowledge, parental condom use skills, and parent-child communication about sex (Dinaj-Koci et al., 2015). Such combined programs have also been shown to increase perceived parental monitoring and adolescents' healthy sexual behaviours (e.g., condom use, number of sexual partners) (Wang et al., 2014; Wight & Fullerton, 2013). Other benefits of including parents along with their children include increasing the knowledge and comfort of both adolescents and their parents, ability to model discussions, and providing a space and time for these discussions to occur (Kirby & Miller, 2002).

Another possibility is to include parents in the sexual health education being provided through schools. Parents in Weaver et al.'s (2002) study of over 4,200 parents in New Brunswick indicated that they wanted more information from schools about their sexual health education curriculum, about sexuality in general, and about communication strategies to assist them with providing education to their children. Providing this information to parents will help to increase their knowledge and skills to effectively communicate with their children. Parents have also indicated their desire to be informed about what their children are being taught in school sexual health education programs so that they can be prepared for potential questions (Dyson & Smith, 2012; Turnbull et al., 2011; Walker, 2004). When parents are knowledgeable about the sexual health information their children are receiving at school, they are also able to reinforce and expand on this messaging at home (Downing et al., 2011; Turnbull, 2012; Walker, 2004; Weaver et al., 2002).

Instead of having parents travel to another location or program site, research has examined the potential of providing parent education programs through worksites. For example, the program 'Talking Parents, Healthy Teens' consists of eight weekly one-hour sessions during the lunch hour at a variety of workplaces in the United States. This program was designed to help parents improve communication with their adolescent children, with the goal of reducing adolescent sexual risk behaviours (Eastman, Corona, & Schuster, 2006). A randomized controlled trial evaluation of this program found a significant increase in the number of new sexual topics that parents and adolescents reported discussing (Schuster et al., 2008). As well, at nine months following the program, both parents and adolescents in the intervention group reported more openness and a greater ability to communicate with each other about sex. Other evaluations of this program have found that it is feasible and cost-effective (Ladapo et al., 2013).

Each of the methods discussed thus far may encounter challenges associated with many face-to-face programs. Face-to-face programs require funding, procedural manuals, and training of facilitators (Santa Maria et al., 2015). Programs that last longer than one session often face issues of recruitment and retention (Santa Maria et al., 2015). Kirby and Miller's review of the related literature found that many parents have practical obstacles (e.g., childcare, transportation, inability to get time off work), or have too little time, energy, or motivation to attend in-person programs. One way to deal with these issues is through the use of technology and computer-based programs. Santa Maria et al. (2015) suggest that such methods can reduce many of the common barriers, particularly for young parents who are familiar with technology (e.g., work and family obligations, time, transportation, childcare). Online interventions offer several other advantages including reduced cost, increased reach, anonymity, and the opportunity for individualized and tailored feedback (Johnson, 2012). Guilamo-Ramos et al. (2015) found that parents and adolescents were motivated to obtain sexual health information through these technologies due to their accessibility, widespread use, and ability to deliver large quantities of information.

A study examining the potential of transferring a group parental education program to an online format identified several parental preferences (Bayley & Brown, 2015). These included first person role play, home setting, realistic characters, and positively phrased feedback. Parents with younger children, as opposed to older adolescents, were more accepting of getting information through a game format. Another important point raised by Bayley and Brown (2015) was the amount of text in the game. More specifically, these authors found higher attrition rates in the game group as compared to the control group, likely due to the cumulative volume of text throughout the game. They suggest balancing content volume with message necessity.

Parents in Johnson's (2012) study identified four features as important for online programs (i.e., ask the expert, chat rooms, supplementary information, and links to face-to-face programming), with the 'ask the expert' tool being ranked as particularly important. Parents also expressed desire for an online program that they could participate in with their children, allowing parents

and children to learn together. Parents in this study also discussed the importance of face-to-face programs, where they would be able to hear what other parents are doing, share experiences, and share concerns (Johnson, 2012).

Although online and mobile technologies have the potential to reach large numbers of youth and their parents, there are some disadvantages to their use. These include the fact that they are impersonal and there may be issues with the trustworthiness of the available information. For example, parents have expressed confusion over which websites contain accurate information and the overwhelmingly large amount of information available online (Guilamo-Ramos et al., 2015). Adolescents in this study reported that reliable sexual health information requires interpersonal understanding and communication, with many identifying a parent as their first resource for sexual health information. Despite these potential disadvantages, research has shown that computer-based programs can effectively increase knowledge and confidence in knowledge, leading to increased conversations related to sexual health (Turnbull et al., 2011).

There is evidence to suggest that mass media campaigns may be another effective way to increase parent-child communication about sex (Davis, Evans, & Kamyab, 2013a). For example, the Parents Speak Up National Campaign in the United States targeted parents of children aged 10 to 14. This campaign aimed to empower parents to talk early and often with their children about sex, and to share their sex-related values and expectations with their children. An evaluation showed this campaign was associated with increased parent-child communication, primarily among mothers. Similarly, children of parents exposed to this campaign were more likely to report having conversations about sex with their parents. Davis et al. (2013a) suggest that further work needs to be done to develop effective messages for fathers, perhaps by creating gender-specific messaging.

Another mass media campaign, based in North Carolina, used television and radio public service announcements and billboards to encourage parents to talk to their children about sex (DuRant, Wolfson, LaFrance, Balkrishnan, & Altman, 2006). The message delivered through the campaign was "Talk to your kids about sex. Everyone else is." The evaluation results found that exposure to this message was associated with parents having recently talked to their children about issues related to sexual behaviours and intentions to talk to their children about these topics in the future (DuRant et al., 2006). The frequency with which parents reported seeing and/or hearing these messages was associated with the frequency with which parents reported talking to their children about sex. The evaluators of this campaign indicated that it is possible that the mass media campaign may have simply served as a cue to action for parents who were already inclined to talk to their children about sex. Even if so, they concluded that the campaign was successful because exposure to it was associated with increased parent-child discussions related to sexual health.

Other options for parent-focused education identified in the research include peer education programs and the use of games. Peer education programs for parents have been found to be successful in significantly increasing parental comfort for talking to their children about sexual health (Green & Documet, 2005). Parents who took part in these workshops were also found to be more likely to talk to their children about sex-related issues and to have discussed multiple topics. Provision of resources also appeared to be important, as approximately 85% of the parent participants reported having used the provided resources (guidebooks) four to six weeks after attending the workshop. The evaluators suggested that creating successful peer education programs for parents requires interactive activities (e.g., role-playing) and support materials for parents to use as a reference later. Parents and youth in D’Cruz et al.’s (2015) study indicated that an intergenerational game could offer a neutral point of shared learning about sexual health related topics. Youth reported that a game could be appealing, and parents indicated that a game could support them in their efforts to educate their children. Taken together, this research shows that parents can be taught how to communicate with their children about sexual health, especially when provided with information, support, and resources.

6. Recommendations for Parents

As indicated by the already summarized research, numerous factors impact the effectiveness of parent-child communication about sex. Fortunately, many of these factors are under the control of parents (e.g., timing and frequency of conversations, the topics covered, quality of communication). One of the strongest and most consistent findings in the research is the importance of starting parent-child conversations about issues related to sexual health early. Research suggests that the optimal time for parents to start talking to their children about issues related to sex and relationships is when they are of elementary school age (5 to 11 years old) (Newby et al., 2011; Walker, 2004). Parents often find it easier to talk about the subject at this age, and it provides a basis on which to build that coincides with sexual development (Walker, 2004; Wilson et al., 2010).

Parental comfort with, and confidence about, sexual health communication increases when they experience success with these conversations with their younger children. Ballard and Gross (2009) found that when parents experienced success early on with easier topics (e.g., proper name for body parts), it resulted in easier conversations about more difficult topics later on. Other researchers have also shown that encouraging open communication with children from an early age increases the ease with which parents can continue conversations about sexual health as their children age (Davis et al., 2013b; Walker, 2004). Adolescents also tend to be more receptive and positive about sexual communication with their parents before they have become romantically and sexually experienced (Foster, Byers, & Sears, 2011). After this time, they may shy away from these discussions, believing that their parents are trying to find out about their sexual activity.

It is important for these discussions to begin early because children need to understand risk behaviours and how to reduce risk before they begin participating in these behaviours (Afifi et al., 2008; Angera et al., 2008; Clawson & Reese-Weber, 2003; Malacane & Beckmeyer, 2016; Miller et

al., 2009; Tobey et al., 2011). These early discussions have also been identified as important for child sexual abuse prevention. For example, teaching children the correct names for their genitals is believed to be an essential component in preventing child sexual abuse (Boyle & Lutzker, 2005; Kenny, 2009). Such knowledge can increase children's abilities to resist abuse and to disclose abuse if it has occurred (Kenny, 2009; Wurtele & Kenny, 2009). Similarly, teaching children about good and bad touch, and how to say "no" to bad touches, from an early age is important for sexual abuse prevention (Kenny, 2009). As is the case for sexual health education in general, parental involvement is vital for effective sexual abuse prevention education (Walsh & Brandon, 2012; Wurtele & Kenny, 2009).

Unfortunately, many parents do not initiate conversations about sex until they believe their children are romantically involved (Eisenberg et al., 2006). Parents in Eisenberg et al.'s (2006) study were two to three times more likely to talk about sex with their children if they believed they were romantically involved. By waiting to have these conversations, parents are missing important opportunities to convey their expectations for their children's behaviour and to help their children make healthy decisions (Malacane & Beckmeyer, 2016). Research indicates that many adolescents engage in sexual behaviour before receiving relevant information from their parents. For example, Beckett et al.'s (2010) longitudinal study with 141 adolescents found that over half engaged in genital touching before discussing any of the following topics: birth control efficacy, resisting partner pressure for sex, STI symptoms, condom use, choosing birth control, or partner condom refusal. Forty percent of these participants had sexual intercourse before any discussion about STIs, condom use, choosing birth control, or partner condom refusal.

These facts highlight the importance of having these conversations early, before adolescents begin to engage in sexual relationships. This is particularly true because research suggests that preventing or influencing the development of a new behaviour is typically easier than stopping or changing an established behaviour (Clawson & Reese-Weber, 2003; Eisenberg et al., 2006). In other words, communication before an adolescent initiates sexual activity is likely to be more effective than if it takes place after such behaviours have begun.

In addition to starting early, other variables that impact the effectiveness of parent-child communication about sexual health include friendly, attentive, and open communication; variation in content and topics; and frequent conversations rather than "The Big Talk" (Crosby et al., 2009; Dittus et al., 2004; Eisenberg et al., 2006). Parents tend to focus on the possible negative consequences of sexual activity (e.g., STIs, pregnancy) and less on prevention methods (e.g., condoms). Instead, parent-child sexual communication should include topics such as pubertal development, healthy relationships, pregnancy and contraception, and STI and HIV prevention (Beckett et al., 2010; Sneed et al., 2013). The inclusion of topics like love, dating, gender roles, and body image is also recommended (Ballard & Gross, 2009; Morawska et al., 2015). Dyson and Smith (2012) suggest that sexual health education should include comprehensive information and the

opportunity for adolescents to develop skills (e.g., how and where to ask for help, how to make informed decisions about sex and relationships, how to negotiate safer sex, refusal skills.)¹

These types of conversations are more likely to be effective if they are interactive, as opposed to being dominated by the parent (Edwards & Reis, 2014; Rogers, Ha, Stormshak, & Dishion, 2015). Parents can contribute to more open, positive communication with their children by inviting them to ask questions about sex (Foster et al., 2011). Edwards and Reis (2014) also recommend using visual examples, gently quizzing children to assess their knowledge, and setting the stage for future conversations.

As suggested above, frequency of conversations and repetition of information is also important (Aspy et al., 2007; Boyas et al., 2012; Martino et al., 2008; Mastro & Zimmer-Gembeck, 2015). Adolescents whose sexual communication with their parents involves more repetition tend to report feeling closer to their parents, more able to communicate with their parents about sex and in general, and greater openness in their communications with their parents about sex (Boyas et al., 2012; Davis et al., 2013b; Martino et al., 2008). Such communication patterns have also been associated with delay of intercourse (D’Cruz et al., 2015; Morawska et al., 2015), and use of contraception and fewer sexual partners in those having intercourse (D’Cruz et al., 2015; Miller et al., 2009; Morawska et al., 2015). A study of high school adolescents found that their perceptions of parental communication abilities and effectiveness were related to their own attitudes toward sex and sexual risk-taking (Holman & Kellas, 2015). More specifically, when adolescents believed their parents demonstrated good communication skills, comfort, and sincerity, these adolescents were less likely to report sexual risk attitudes and behaviours.

Many parents may also believe that their influence over their children lessens as their children move through adolescence. Research findings suggest, however, that parents have considerable influence on their adolescents’ sexual behaviour. This influence can be exerted in a way as simple as parents sharing their attitudes and values about sex with their children (Bersamin et al., 2008). Using every day, teachable moments to discuss sexual health may be an easy and flexible way to broach potentially uncomfortable topics (Morawska et al., 2015; Wilson et al., 2010). For example, Malacane and Beckmeyer (2016) recommend talking during a commercial break about a romantic moment in a television show, listening to song lyrics and discussing what they mean while driving in the car, seeing a group of teenagers at the mall, or simply asking what their peers do in groups. The more frequent these conversations are, the easier and more comfortable it becomes for parents to talk about sexual health topics.

Adolescent sexual behaviours are also shaped by parental monitoring and supervision of adolescents’ activities (Downing et al., 2011; Jaccard et al., 2002; Huebner & Howell, 2003; Kirby &

¹ There are numerous websites dedicated to providing parents with accurate information, conversation tips, and resources for educating their children about sexual health. A small selection of these websites is provided in Appendix A.

Miller, 2002; Miller, 2002; Morawska et al., 2015; Widman et al., 2016). Parental monitoring and supervision refer to parents' knowledge of where, how, and with whom their children spend time (Bersamin et al., 2008; Huebner & Howell, 2003). Research indicates that low parental monitoring is associated with more negative sexual health outcomes (e.g., early sexual activity for both sexes, more sexual partners and less condom use for females) (Ryan, Roman, & Okwany, 2015; Schouten et al., 2007; Wight, Williamson, & Henderson, 2006). Parental supervision of dating activities, parental monitoring of adolescents, family rules, and household routines have all been associated with adolescents not having intercourse, being older at first intercourse, and having fewer sexual partners (Miller, 2002). Parental monitoring has been shown to be an effective way to transmit behavioural norms to children, when it is done in a non-manipulative way and when it does not impose on adolescent autonomy (Ryan et al., 2015). It is important to note that if this monitoring and supervision is excessive, it has been related to early age of first intercourse and high risk sexual behaviours (e.g., unprotected sex) (Miller, 2002).

7. Summary and Conclusions

The importance of providing children with accurate, age-appropriate information related to sexual health has been highlighted in the current literature review. It is vital that these discussions begin early so that children understand the risks and know how to reduce their risks before they start engaging in sexual relationships. Unfortunately, many parents may lack the knowledge they need in order to provide their adolescents with accurate information about sex, sexuality, and prevention methods. Therefore, it is important that parents are provided with the necessary skills and information to have these types of conversations. Programs that teach parents how to communicate about sexual health with their children have been demonstrated to improve parental confidence and increase the likelihood that these conversations are initiated by parents.

When they themselves are informed and prepared, parents can influence the sexual attitudes and behaviours of their children through a variety of means. These include parent-child communication about sexual health, parent-child closeness, parental monitoring, and parental communication of values related to sexual activity. Sexual health education provided by parents is associated with reductions in adolescent risk behaviours, particularly when it is provided in the context of a loving, open relationship. Therefore, it is important that parents, with the support of available programs and professionals, work toward creating the kind of family atmosphere where sex can be discussed without fear or embarrassment. It is also important for parents to recognize that the development of the knowledge and skills needed for positive sexual health is a lifelong process. Ongoing conversations related to sexual health and repetition of information are necessary. Romantic feelings and sexual experimentation are a normal part of adolescent development and are not inherently risky. In order to reduce potential risks, adolescents need to be provided with accurate information and skills related to sexual health. The existing research suggests that parents can be a highly effective source for this information.

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Appendix A. Online Sexual Health Resources for Parents.

<http://www.advocatesforyouth.org/index.php>

- This website is developed by Advocates for Youth, an organization that champions efforts that help young people make informed and responsible decisions about their reproductive and sexual health. The parent-specific section of the website provides information about the importance of parent-child communication about sexual health, as well as advice, conversation starters, and activities.

<http://www.plannedparenthood.org>

- This website is developed by Planned Parenthood. The *Tools for Parents* section of the website contains information and resources related to sexual health, parent-child communication, and suggestions for parents.

<http://www.sexandu.ca>

- This website is developed by the Society of Obstetricians and Gynaecologists of Canada. Although this website is not specific to parents, it provides accurate, credible, and up-to-date information on a variety of topics related to sexual and reproductive health.

<http://www.siecus.org>

- This website is developed by the Sexuality Information and Education Council of the United States. The parent-specific section of the website contains information to help parents become informed sexual health educators for their children. It provides information and resources, as well as links to other helpful websites.

<http://www.talkwithyourkids.org/pages/parents.htm>

- This website is developed by the California Family Health Council. It provides information about healthy relationships, resources for parents, and a *Timeline and Tips* tool to help parents communicate openly and honestly with their children about issues related to their sexual health.

<http://www.teachingsexualhealth.ca/>

- This website is developed by Alberta Education, Alberta Health and Wellness, Alberta Health Services, and Alberta Society for the Promotion of Sexual Health. The *Parent Portal* section of the website provides answers to common questions asked by children, communication strategies, information about healthy sexual development, myths and facts on sexual health education, and print and web resources that supplement parents' understanding and knowledge of healthy sexuality.