Module 6

Prevention of Fetal Alcohol Spectrum Disorder (FASD)

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Introduction

Many people do not understand alcohol use in pregnancy the way experts would like (Fond et al., 2017). There are incorrect assumptions about who uses alcohol in pregnancy and why. These assumptions can lead to stigma and judgement for women who use alcohol in pregnancy, their children, and their families (Fond et al., 2017). They can also be a barrier to prevention and support for women and their families.

Women who use alcohol in pregnancy come from all walks of life and have a variety of life circumstances. Just as there are many reasons for alcohol use when not pregnant, there are many factors that may contribute to alcohol use in pregnancy. Even when a woman is aware of the potential effects of alcohol use while pregnant, she may face barriers to stopping her alcohol use. A woman's life circumstances do not suddenly change the day she becomes pregnant (Fond et al., 2017).

Women who use alcohol in pregnancy come from all walks of life and have a variety of life circumstances.

Module 6 has two parts:

1. Reasons for Alcohol Use in Pregnancy
2. Prevention of FASD

For information on alcohol use, alcohol's impacts on men and women, and why women are affected by alcohol use differently than men, please see **Module 5: The Role and Impact of Alcohol in Canada.**

Part 1 - Reasons for Alcohol Use in Pregnancy

To understand the factors that impact women's alcohol use during pregnancy, it is important to understand the context in which the alcohol use occurs. This includes having a picture of the prevalence of alcohol use in pregnancy, and an understanding of reasons for alcohol use, public perception of this alcohol use, and the impact of this on women.

Prevalence of Alcohol Use in Pregnancy

Even though there is greater awareness of the risks of alcohol use in pregnancy, studies show that there are still some women who use alcohol during their pregnancy. Research by Popova et al., (2017) found that about 10% of women use alcohol in pregnancy and about 3% engage in risky drinking.

In the United States, the Centers for Disease Control and Prevention examined data from the Behavioral Risk Factor Surveillance System (BRFSS) between 2015 to 2017. Results showed that 11.5% of pregnant women (18 to 44) reported alcohol use within the past month and 3.9% reported binge drinking in the same time (Denny et al., 2019). This was an increase from the 2011 to 2013 BRFSS survey. One limitation of these surveys is the potential of under reporting because of self-recall and social desirability bias (answering questions in a way to be seen positively by others) (Denny et al., 2019).

An examination of U.S. data from the National Survey on Drug Use and Health (NSDUH) from 2015 to 2018 showed that for women (12 to 44) who were pregnant when taking part in the survey:

- 19.6% (first trimester) and 4.7% (second or third trimester) reported at least one drink in the past 30 days
- 10.5% (first trimester) and 1.4% (second or third trimester) reported risky drinking (four or more drinks on at least one occasion) in the past 30 days
- 38.2% of pregnant respondents who reported current drinking also reported recent use of one or more other substances
- the most used other substances were tobacco and cannabis

(England et al., 2020).

This report also acknowledged the potential of under reporting because of social desirability bias or women not knowing they were pregnant when they took part in the survey (England et al., 2020).

The Canadian Maternity Experiences Survey looked at alcohol use by women in 2005 to 2006. They interviewed birth mothers who were living with their child. The report showed 62.4% of women reported drinking alcohol during the three months prior to pregnancy and 10.5% confirmed alcohol use in pregnancy (Public Health Agency of Canada, 2009). The majority (95.8%) who drank in pregnancy used low to moderate amounts of alcohol. Less than 2% (1.7%) had more than one drink per day (Walker et al., 2011). The report did note that "self-reports of alcohol consumption may be underestimates due to the potential under-reporting of socially undesirable behaviours by mothers" (PHAC, 2009, p. 89).

Public Perceptions about Alcohol Use in Pregnancy

FASD prevention is not simple; it is complex. Many members of the public understand prevention differently from experts (Fond et al., 2017). Research in Manitoba indicated public understanding can include "deeply held and widely shared beliefs about motherhood, substance use, choice responsibility, and morality" (Fond et al., 2017, p. 3). Many members of the public think FASD only occurs in a certain socio-economic status (Anderson, 2015). These perceptions make it difficult to talk about alcohol use in pregnancy and can lead to stigma, judgement, and stereotypes. View like this do not take into account the many factors that impact a person (of any socio-economic status or background) before pregnancy, during pregnancy, and after the child's birth. These perceptions can lead to negative experiences for women who may be looking for help with alcohol use.

People may not be aware of the various reasons for prenatal alcohol use. Many causes of alcohol use in pregnancy are closely related and are not always easily solved. The same social and environmental factors that can cause alcohol misuse more generally can be reasons for alcohol use during pregnancy (Fond et al., 2017). Recognizing and addressing reasons for this use in a non-judgemental, supportive manner can help reduce the number of alcohol-exposed pregnancies. It can make it more likely that women will look for help with their alcohol use. Looking at support of pregnant women as a community responsibility and reducing the stigma around the prenatal use of alcohol can lead to more open discussions, understanding, and support for women.

Factors Contributing to Prenatal Alcohol Use

Commonly reported reasons for why women may drink during their pregnancy are:

- Unplanned pregnancy and alcohol used until pregnancy confirmed *(Finer & Zolna, 2016; Kost et al., 2008)*
- Use of alcohol until pregnancy confirmation (Green et al., 2016a)
- Partner's drinking behaviour (Skagerström et al., 2011)
- Drinking is normal in their community/family/friends (British Columbia Centre of Excellence for Women's Health [BCCEWH], n.d.)
- Social pressure from family and friends (Wolfe, 2016)
- Stigma (Green et al., 2016b)
- Abuse (Skagerström et al., 2011)
- Violence (Skagerström et al., 2011)
- To cope with trauma or difficult life situations (BCCEWH, n.d.)
- Confusing messages about alcohol and pregnancy (Raymond et al., 2009)
- Drinking habit, dependency, or addiction (BCCEWH, n.d.)
- Mental health challenges (Skagerström et al., 2011; Brown, 2019)
- Being afraid to talk about alcohol use because of shame and blame (Poole & Isaac, 2001; Poole, 2008)
- Fear of losing children (Poole & Isaac, 2001)
- Not knowing that alcohol can harm the baby (BCCEWH, n.d.)
- Some doctors say that it is okay to drink a little in pregnancy (Hrvatin, 2019)
- To relax or reduce stress (Wolfe, 2016)
- Pre-pregnancy alcohol use (Skagerström et al., 2011)
- Indifference or being unhappy/very unhappy in regard to their pregnancies (Walker et al., 2011)
- Smoking (Walker et al., 2011)
- Family history of alcohol abuse (Walker et al., 2011)
- Unhappy (Walker et al., 2011)
- Inadequate or no prenatal care (Singal et al., 2019)

Unintended Pregnancy

One of the top reasons for alcohol use in pregnancy is not knowing about the pregnancy. Women who are not planning to become pregnant are less likely to take precautions such as avoiding alcohol and other harmful substances. The Canadian Contraception Consensus (2015) indicated that women spend a major part of their lives at risk of an unintended pregnancy. It also noted that effective contraceptive methods are under used, particularly among vulnerable people (Black & Guilbert, 2015). In the United States, just over 7% of women reported drinking alcohol in the past month even though they had sex and did not use contraception (Green et al., 2016). Promoting greater use of contraception for women not planning to be pregnant may help reduce alcohol-exposed pregnancies (Schölin et al., 2018).

The rate of unintended pregnancy among women is approximately 50% (Finer & Zolna, 2016; Sedgh, Singh, & Hussain, 2014). Pregnancies that are unplanned are generally recognized later than those that are planned. Late pregnancy recognition is seven or more weeks into pregnancy (Branum & Ahrens, 2016). Prenatal care is often started later in unintended pregnancies. In the United States, 23% of women (15 to 44 years) reported late pregnancy awareness (Branum & Ahrens, 2016).

Understanding alcohol use patterns during childbearing years and pregnancy is important in assessing the level of risk in the population. It can also provide an idea of amounts of prenatal alcohol exposure that occurs before pregnancy is recognized.

Even planned pregnancies can be alcohol-exposed before confirmation. On average, in the United States, pregnancies are recognized at 5.5 weeks (Branum & Ahrens, 2016). Providing information to women (and their partners) who are planning pregnancy about the importance of not using alcohol during conception can be important in reducing this risk.

Early pregnancy is a time of rapid fetal development. Healthcare providers and others can provide women (and their partners) who are planning a pregnancy with information about the importance of avoiding alcohol while trying to conceive. For women and partners who do not wish to be pregnant, information on contraception can be provided.

Preconception Alcohol Use as Predictor

Research shows that alcohol use before pregnancy can predict use in pregnancy (Skagerström et al., 2011; Skagerström et al., 2013; Anderson et al., 2013). For example, women who binge drink before they are pregnant are more likely to continue risky alcohol use when pregnant than women who do not binge drink before pregnancy (CDC, 2019). The type of drinking (risky, minimal use, no drinking) before pregnancy can impact the first few weeks before pregnancy recognition. In addition, people with alcohol use disorder may find it difficult to reduce or stop drinking.

As mentioned earlier, many women continue alcohol use until the pregnancy is confirmed. This happens with either a planned or unintended pregnancy. A study in Sweden showed that most women who used alcohol in the 12 previous months continued using alcohol until the pregnancy was confirmed. Out of women who were considered hazardous users (more than nine drinks per week), 19% reduced their use when planning their pregnancy. Out of women who were moderate users, 33% of the women reduced their alcohol consumption when planning a pregnancy (Skagerström et al., 2013).

The same study showed pregnant women who continued to use alcohol after pregnancy confirmation did it because of stronger drinking habits from before pregnancy and stronger social drinking motives (to be social or celebrate) (Skagerström et al., 2013).

A study was conducted in the U.S. with a group of young women who were looking for emergency contraception and/or a pregnancy test at two clinics, one of which was a university clinic. It included a survey of their attitudes and use of alcohol and provided a brief FASD intervention. Most of the women surveyed were single (76%), college educated (94%), and received emergency contraception at the clinic visit (60%). The average age was 25 years. The following was found in this study:

- 52% drank beer at least once a week (one to six beers per time).
- Younger women were more tolerant about alcohol use.
- Younger women drank more per time.
- They knew little about FASD in a pre-test.
- The brief FASD intervention was effective in passing on knowledge about FASD.

(Walker et al., 2005).

This information shows the importance for healthcare providers to be aware of sexual activity, alcohol use, and lack of proactive contraception. It is also important to increase the knowledge of young women who do not know about the possible impact of prenatal drinking on a fetus.

Problematic Alcohol Use, Alcohol Use Disorder

Problem drinking that becomes severe is medically diagnosed as an "alcohol use disorder" (AUD) (National Institute on Alcohol Abuse and Alcoholism [NIAAA], n.d). "Alcohol use disorder is a chronic relapsing brain disease characterized by compulsive alcohol use, loss of control over alcohol intake, and a negative emotional state when not using" (NIAAA, n.d., p. 1).

Problematic substance use is not easy to overcome and can be challenging. Some see substance use as a form of self-harm and may occur at the same time as other self-injurious behaviours such as cutting (Dell & Beauchamp, 2006).

As mentioned earlier, drinking patterns before pregnancy are a predictor of alcohol use in pregnancy. The use of screening tools before and during pregnancy can identify risks for an alcohol-exposed pregnancy. Providing treatment that is non-stigmatizing helps support healthier pregnancies (Association of Women's Health Obstetric and Neonatal Nurses, 2019).

Use of Illegal and Prescription Drugs

Alcohol use in pregnancy can also occur with other substance use (polysubstance use). These drugs may be legal or illegal. Interviews with vulnerable women who used alcohol in pregnancy showed they often also used other drugs such as tobacco, crack cocaine, cannabis, and opioids (Latuskie et al., 2018). Use of multiple drugs was often continued throughout pregnancy. Relapse rates were also high for women who had tried to stop using drugs such as cocaine, crack cocaine, and heroin (Latuskie et al., 2018).

Illegal and/or prescription drugs are not just used recreationally. Many illicit and prescription medications are used to self-medicate. Self-medicating refers to the use of illicit or prescription drugs to relieve physical or emotional symptoms. An example of self-medication is that women were twice as likely as men to report that they were using cannabis to reduce the symptoms of depression in the Canadian Addiction Survey (Canadian Executive Council on Addiction, 2008). Use of cannabis was not legal when the survey was conducted.

According to the Centre for Behavioural Statistics and Quality (2017), 15.4% of females aged 18 or older reported using illicit drugs in the past year. Women have different reasons for using drugs, which may include:

- controlling weight
- fighting exhaustion
- coping with pain
- attempting to self-treat mental health problems

(National Institute on Drug Abuse, 2019).

Substance use disorder and mental illness can co-occur. Women who use certain substances are more likely to have:

- panic attacks
- anxiety
- depression
- bulimia (eating disorders)
- post-traumatic stress disorder
- borderline personality disorder

(Blum et al., 1998; National Institute on Drug Abuse, 2019).

At times, it is difficult to tell which comes first, psychiatric illnesses or substance use. An example of this can be seen with depression. In 2012, women reported higher rates (5.8%) of depression in the past year compared with men (3.6%) (Statistics Canada, 2013). Co-existing depression and substance abuse is often seen. Depending on the individual, women who use substances may be more at risk of depression (Koehn, 2008). For instance, heavy drinking per occasion has been shown to increase the risk for major depression among women (Graham et al., 2007). On the other hand, those who have depression may be more likely to use substances as a form of self-medication (Koehn, 2008; Lukassen & Beaudet, 2005). Issues related to mental illness such as discrimination, life events, stress, and poverty can also increase substance abuse (Koehn, 2008).

At times, substances are used by women as a means of coping with past and/or present violence (Boyd & Mackey, 2000; Martino et al., 2005; Newmann & Sallman, 2004). In one study, 120 women using shelter services for domestic violence were asked about their use of substances. Approximately 60% of these women were alcohol dependent and 55% were dependent on one or more other drugs (Fowler, 2007). Unfortunately, for many, substance use may also place women at risk for further abuse (El-Bassel et al., 2000; Kilpatrick et al., 1997).

Smoking and Pregnancy

Smoking has been named as a significant predictor of alcohol use in pregnancy. Several studies and literature reviews have shown that many people using alcohol in pregnancy are smoking. One study which looked at Australia, New Zealand, Ireland, and the United Kingdom, listed smoking as the only regular predictor of alcohol use (O'Keeffe et al., 2015). The National Survey on Drug Use and Health (NSDUH) from 2015 to 2018 showed that tobacco use was the most common co-occurring drug used in pregnancy (England et al., 2020).

Rural Areas and Isolation

In rural and northern communities, there are factors that may play a role in lowering women's self-esteem and increasing the likelihood of substance use:

- lower status of women in a community
- isolation
- economic instability
- limited resources and services

(Vaillencourt & Keith, 2007).

Residents in rural areas often report higher alcohol, opiate, and stimulant use, compared with urban drug users (Substance Abuse and Mental Health Services Administration (SAMHSA), 2012). Other studies, focusing on pregnant women and mothers living in rural locations, have also reported higher rates of substance use and substance-use related admissions compared to a similar group of women residing in urban areas (Burns et al., 2011; Shannon et al., 2010; Shaw et al., 2015). In one study, women living in remote areas were 1.4 times more likely to be hospitalized for alcohol use during pregnancy than urban-dwelling participants (Burns et al., 2011).

Living in rural and northern communities can also present challenges in accessing services and supports. For example, the restructuring of social services from small local offices to larger, centralized offices created access problems for many women (Vaillencourt & Keith, 2007). At times, this can result in women having to rely on others for transportation or having to leave their communities for services. In 2009, the Canadian Maternal Health Survey identified the difficulty in hiring and keeping healthcare professionals for maternity in Canada, particularly in rural areas. Another challenge is the closing of many health centres (PHAC, 2009). Women in Nunavut received less information on pregnancy-related topics. They also had more issues with smoking, abuse, and postpartum depression than other women in the maternal health survey (PHAC, 2009). The Chief Public Health Officer of Canada identified being located far from health services as one of the challenges for many aboriginal people which impacts their "health and well-being" (PHAC, 2016, p. 34).

It is often more difficult to "hide" in small communities and anonymity and confidentiality are hard to ensure (Aston et al., 2008; Boyd, 2003). Expected and real consequences of stigma can cause women to hide their addiction, and avoid using services, which increases their isolation (Fingeld, 2002). Stigma can be particularly harmful to women in prominent positions within the community, and/or those who are experiencing a mental illness (Aston et al., 2008). Mothers may also be fearful of having others know about their addictions as there is a higher likelihood of children being removed from the home by Child Protection Services in rural areas than urban areas due to lack of staff for in-home follow-up services (Aston et al., 2008).

Knowledge and Attitudes About Alcohol and Pregnancy

Women learn about alcohol and pregnancy from many sources including healthcare professionals, the Internet, and family and friends. This information is not always the same or correct.

A search of the Internet provides information ranging from no alcohol is healthiest to other articles that inform the reader that alcohol use is fine. Not all sources are reliable and people looking for information may not be checking to see what the evidence is for the information.

The alcohol industry has a strong influence on information that can be found related to alcohol and health. Drinkwise (funded by alcohol industry) provided information that implied it was unknown if alcohol was safe in pregnancy to clinics in Australia. After complaints, the information was improved (Foundation for Alcohol Research and Education (FARE), 2019). In Canada, alcohol industry groups were able to stop the placement of labels about cancer and Canada's Low-Risk Alcohol Drinking Guidelines on alcohol in certain stores in the Yukon (Picard, 2019). In Australia, the alcohol industry opposed warning labels about alcohol and pregnancy on alcohol because there was a high awareness of harm of using alcohol in pregnancy (FARE, 2019). More recently, the industry was not successful. In July 2020, the alcohol industry was given three years to include red, black, and white warning labels with a heading reading "Pregnancy Warning" on containers (FARE, 2020).

Despite many health promotion campaigns, not everyone knows or believes alcohol use in pregnancy can impact the developing fetus. A 2010 national survey of Australian women (18 to 44) years showed that:

- 61.5% had heard about effects of alcohol on the fetus and 55.3% had heard about FASD
- 92.7% agreed alcohol can affect the unborn child
- 16.2% did not agree that the disabilities could be lifelong
- most women (80.2%) agreed that pregnant women should not drink alcohol
- women with higher education were more likely to know about the impact of alcohol use in pregnancy although this did not always lead to changes in behaviour

(Peadon et al., 2010).

In Canada, a similar survey completed in 2006 of women (18 to 44) and male partners of women, aged 18 to 40, showed that 76% of the participants knew that *any* alcohol use in pregnancy can be harmful to the baby. On the other hand, 36% of respondents believed the effect of alcohol on fetal development was unclear (Environics Research Group, 2006). Research shows that more women than men are aware of FASD (Choates et al., 2019; FARE 2019).

In 2018, results from focus groups in Australia showed alcohol use in pregnancy was perceived as somewhat acceptable. This view was influenced by:

- the belief that alcohol use in pregnancy was usual
- medical advice by health professionals seen as tolerating and allowing for some alcohol use
- the feeling that there are no clear guidelines on alcohol use in pregnancy, or that the evidence is conflicting
- older female family members and friends who used alcohol in pregnancy with no obvious harm to the child
- using alcohol in an earlier pregnancy at low or high amounts before pregnancy knowledge and there were no obvious impacts for the baby or themselves (or having seen other women do this)
- perception that wine or beer are less harmful than spirits (hard alcohol)
- conflicting messages about the risks of low to moderate alcohol use in pregnancy

(Stanesby et al., 2018).

Focus group interviews with women at *Breaking the Cycle* in Toronto showed that not understanding the scientific and medical information about the impacts of substance use was one of the reasons they used alcohol when pregnant (Latuskie et al., 2018).

Knowledge about the harms of alcohol use in pregnancy may not be enough to stop alcohol use (Chang et al., 2006). In one study with college women, the participants did not perceive the threat of an alcohol-exposed pregnancy as a possibility (Yu et al., 2010). In South Africa, interviews with women who used alcohol provided the following information. Although most women did not have “harmful attitudes” about alcohol use in pregnancy, about 60% had used alcohol in a pregnancy. This use was related to:

- unwanted or unplanned pregnancy
- coping
- socialization and social norms
- feeling it will not happen to me

(Fletcher et al., 2018).

To improve knowledge and understanding of alcohol use, it has been recommended that healthcare professionals use alcohol screening and brief interventions and advise women that there is no safe amount of alcohol use when they are pregnant or might be pregnant (Tan et al., 2015).

Advice From Medical Professionals

Women look to their doctors and other health professionals for information (Elek et al., 2013; FARE, 2019; PHAC, 2009). However, women do not always receive the information they need from their healthcare providers. Women's beliefs of what they need to know during their pregnancy can be different from what their healthcare providers believe they should know (PHAC, 2009). In addition, the way healthcare providers share information (e.g., communication style and skills) is very important in helping women use the information they receive (PHAC, 2009).

In the 2006 survey of Canadian women (18 to 40) and their partners, 50% of women reported they had not received advice from their doctor about alcohol use in pregnancy (Environics Research Group, 2006). Some of the women were pregnant at the time of the survey. In this group, 38% had received no advice, 44% say their doctor recommended abstaining, and 10% were told to reduce their use.

Table 6.1 Advice Women* Received from Doctors Regarding Alcohol and Pregnancy

None	50 %
Not drink alcohol at all/don't drink	30 %
Reduce consumption/moderation	8 %
It can harm the baby/not good for the baby	4 %
Glass of wine is okay	2 %
Gave me pamphlets	2 %
Informed me of the effects of alcohol on fetus/FAS	1 %
Other	2 %
DN/NA	7 %

*Included both women who were pregnant and not pregnant.

Source: Environics Research Group, 2006

A survey of healthcare providers in Canada looked at their use of the "Alcohol Use and Pregnancy Consensus Clinical Guidelines" published by the Society of Obstetricians and Gynaecologists of Canada in 2010 (Sword et al., 2020). There were 588 participants in the online survey. Over 50% were knowledgeable about the guidelines and used them. Most providers asked women about alcohol use but did not use a screening tool. Two out of three answered that they provided a brief intervention and referred women to services. As a result of this survey, Sword et al. recommended education and training on the use of screening tools and brief interventions.

In Australia, 46% of women had been advised by a health professional that there is no safe amount of alcohol use during pregnancy. Some women were advised to cut back their alcohol use instead of stopping. Women also understood the messages according to their understanding of the risks of low amounts of prenatal alcohol use, particularly if they thought some alcohol use was all right (FARE, 2019). Some women wondered if they received limited or no information because the health professional assumed they were not drinking (FARE, 2019).

Reasons that health professionals did not necessarily discuss alcohol and pregnancy included:

- a lack of knowledge of risk and consequences of alcohol consumption during pregnancy
- lack of skills and tools to intervene
- fear of negative reaction
- perceived lack of self-efficacy
- preconceived ideas about who is at risk
- competing priorities
- time
- under-reporting or none/false disclosure
- difficulty talking about alcohol if there were pregnancy complications
- an assumption that another health professional would talk about alcohol use if the woman had more than one health professional, such as a midwife
- relationship between provider and pregnant women
- belief there is inconclusive evidence on the risks of alcohol
- concerns about guilt and anxiety

(FARE, 2019; Oni et al., 2019).

Income, Education, and Social Status

It may surprise many people that there is an association between higher socio-economic status (or higher income) and drinking during pregnancy (Alvik et al., 2006; Palma et al., 2007; Zammit et al., 2008; Layte & McCrory, 2014). Women with higher SES were less likely to reduce their use when they learned they were pregnant than young, less highly educated women (FARE, 2019; Layte et al.). The Canadian Maternal Health Survey (2009) showed that 92.3% of women who lived in, at, or below the low-income cutoff did not use alcohol when pregnant. Women with high incomes may continue to drink during pregnancy because they believe that small amounts of alcohol will not harm the fetus. They may also be unable to quit drinking without assistance (AADAC, 2005; Miharaite et al., 1997).

Other predictors for alcohol use during pregnancy include screening positive for alcohol problems, and screening positive for psychiatric symptoms. Two consistent predictors were:

- abuse/violence
- higher pre-pregnancy alcohol consumption

(Skagerström, et al., 2011).

Determinants of Health and Their Contribution to Health and Alcohol Use in Pregnancy

As previously mentioned, women who use alcohol when pregnant come from all walks of life and have a variety of life circumstances. Many co-existing factors influence alcohol use during pregnancy. A woman's life circumstances play an important role in her level of health and well-being, and the choices she makes regarding her health. These circumstances are not suddenly changed with pregnancy. These life circumstances are often referred to as determinants of health. Each individual determinant is important, but they also interact with each other. For example, "individuals turn to alcohol, drugs, and tobacco and suffer from their use, but use is influenced by the wider social setting" (Wilkinson & Marmot, 2003, p. 24).

According to the Government of Canada (2019) the determinants of health include:

- Income and social status
- Employment and working conditions
- Education and literacy
- Childhood experiences
- Physical environments
- Social supports and coping skills
- Healthy behaviours
- Access to health services
- Biology and genetics
- Gender
- Culture
- Race/Racism

Discrimination, racism, and historical trauma are also important determinants of health for certain groups, such as Indigenous Peoples, LGBTQ, and African American Canadians (Government of Canada, 2019). Intersectionality is a term for the view that each individual needs to be considered in the context of her particular intersection of determinants, which determines her unique experience (Tarkovsky & Christoffersen, 2008). This perspective reminds us that people are never just impacted by one issue, but by the many factors that intersect and interact to create the unique reality each individual experiences (Ontario Human Rights Commission, 2001).

Partners

Partners (male or female) can play an important role in planning and supporting healthy, alcohol-free pregnancies. Knowledge about healthy pregnancy behaviours may have more impact when both a pregnant woman and her partner have the information (Chang et al., 2006). This may help to reduce the risk of an unintended pregnancy and the possible use of alcohol before the woman knows she is pregnant. There may also be benefits if the woman's partner stops using alcohol while they are trying to conceive and during the pregnancy. The evidence for this is discussed below.

Partners tend to have similar drinking patterns (Bakhireva et al., 2011; Chang et al., 2006) except during pregnancy. Many women reduce their use of alcohol when they are pregnant (Waterson et al., 1990). One study showed the prevalence of binge drinking declined among women during pregnancy (Bailey et al., 2008). While most women reduce their use of alcohol during pregnancy, this is not necessarily the case for their male partners. The few studies that have been done on expectant fathers' drinking patterns have found that men do not, or are unlikely to, change their patterns of substance use during their partner's pregnancy. Waterson and colleagues (1990) found that although most women reduced their use of alcohol during pregnancy, only about one-fifth of fathers decreased their consumption. A study looking at binge drinking among couples found that while the prevalence of binge drinking went down among pregnant women, fathers appeared to be unaffected by their partners' pregnancies (Bailey et al., 2008). An American study found that 30% of expectant fathers engaged in recent hazardous drinking (i.e., having five or more drinks on one occasion; Everett et al., 2006). The social pressure for men to stop drinking during pregnancy is not as strong as with women so one cannot assume that men will reduce their intake of alcohol during pregnancy (Mellingen et al., 2013).

However, some research suggests that a father's alcohol use is a risk factor for prenatal alcohol exposure (Leonhardon & Loudenburg, 2003). It has been found that men can have an influence on a partner's health habits (Chang, et al., 2006). One study in Australia found that more than 75% of women who used alcohol in pregnancy drank with their partners, and in many cases, the partner initiated the drinking (McBride et al., 2012). Because partners display similar drinking patterns, it has been suggested that if men limit their use of alcohol, women may be more likely to do the same (Bakhireva et al., 2011). This is supported by the finding that a husband's drinking pattern is more influential on his wife than vice versa (Chang et al., 2006).

Pregnant women have reported it was more difficult to quit drinking or reduce their use if their partner continued to drink (May 1980, as cited in Bailey et al., 2008). Teitler (2001) found that if the father had drug- and alcohol-related problems, the expectant mother was almost four times more likely to have used alcohol, and over twice as likely to have used drugs during pregnancy. In addition, women have more difficulty reducing their drinking when their partner opposes the decision (Astley et al., 2000; Bakhireva et al., 2011; McBride & Johnson, 2016).

With research showing the partners' alcohol use impacts women's alcohol use, it would be wise to encourage men to adopt behaviours that support a healthy pregnancy. Public health efforts have not included the reduction of substance use among expectant fathers (with the possible exception of cigarette smoking; Bailey et al., 2008). Many health practitioners do not ask either parent about their substance use, even though most parents believe such questions are appropriate (Bailey et al., 2008). Healthcare practitioners could:

- screen both fathers and mothers for substance use
- educate parents about the negative effects of prenatal and postnatal parental substance use on child health
- connect parents with appropriate resources to decrease destructive substance use

(Bailey et al., 2008).

A brief intervention intended for men and/or including men in prenatal cessation efforts could increase the number of men taking action to change problem drinking during pregnancy (Everett et al., 2007).

Partners can support women by:

- asking what will help
- making sure non-alcoholic drinks are available
- choosing activities that do not always include alcohol
- cutting back on the amount they drink or quitting with her
- trying to reduce her stress
- helping her get treatment and support if she is having challenges in stopping

The quality of the relationship may contribute to a woman's decision to use or stop using alcohol during pregnancy (Bakhireva et al., 2011). As mentioned earlier, women have more difficulty reducing their drinking when their partner opposes the decision. If women are in an abusive relationship, to cope with the violence and abuse, they are more likely to use alcohol than women who are in a non-abusive relationship (Leonardson & Loudenburg, 2003). Living in a stable home, and being in a stable, nurturing relationship are protective factors against using alcohol in pregnancy (Burd et al., 2003).

When a partner can be involved in a woman's treatment for alcohol use, it may help reduce alcohol use and improve relationships (Wolfson et al., 2019). However, it is important to make sure the woman feels safe and comfortable with this involvement (Wolfson et al., 2019).

The father's alcohol consumption alone cannot cause FASD, even though it may predispose the fetus to the effects of prenatal alcohol exposure (see **Module 3: Fetal Development** for more information). More research is needed in this area. Researchers have found that a father's alcohol use can cause changes to:

- his sperm (e.g., how they look, how many, and ability to penetrate the egg)
- the genes (DNA) he passes on to his baby
- epigenetics (which genes are turned on or off)

(Liyanage et al., 2017; Liyanage-Zachariah & Harding, 2019; McBride & Johnson, 2016; Wolfson et al., 2019).

Violence

Violence is one of the major predictors of alcohol use in pregnancy (Skagerström et al., 2011). Women who are pregnant may experience higher levels of violence than women who are not pregnant (Wolfson et al., 2019).

When in a violent relationship, women may have difficulty:

- getting or using contraception
- gaining access to substance treatment
- stopping alcohol use because of stress or self medication
- with being forced to continue alcohol/substance use

(Wolfson et al., 2019).

Family and Other Support People

As mentioned earlier, women are more likely to drink at their home or at the home of a friend. When a woman is planning a pregnancy or once a woman is pregnant, families and other support people can encourage and support the woman to not drink alcohol and can help her get help and/or treatment if necessary. Women who have a strong support network are less likely to drink during pregnancy (Astley et al., 2000).

Another way that families and other support people can help to reduce the incidence of FASD is by educating children and youth about FASD and the responsible use of alcohol and birth control. This is a method of **primary prevention** (Gearing et al., 2005).

Community

FASD can be addressed more effectively if whole communities are ready to support prevention efforts and interventions (Wemigwans, 2008). Community members can play a part in helping to address the larger factors or social determinants of health (e.g., economic status or social support) that can influence a woman's drinking. FARE (2019) recommended that prevention strategies should adopt a whole population approach to raise awareness of the risks of using alcohol in pregnancy. If a community helps to educate its members on both the causes and the potential results of maternal drinking, it can help to reduce negative outcomes.

Barriers to Getting Help

Even if a woman wants to get help for problematic alcohol use or an alcohol use disorder, it is not always easy. Many factors can prevent or influence a woman seeking help. Woman who have used alcohol during pregnancy report that some of the biggest barriers to seeking help are:

- shame
- fear of having their child(ren) removed by child protection services
- fear of prejudicial treatment
- feelings of depression and low self-esteem
- belief that they can change on their own, without assistance or support
- lack of information about accessible services and programs
- long waiting lists for treatment services

(Poole & Isaac, 2001)

> "Many women may feel unsafe disclosing their alcohol use because of stigma, fear of judgement from health and social service providers, and fear of child protection involvement."
>
> Morrison et al., (2020)

FARE (2019) recommends that services working with women who are pregnant or who may become pregnant should be trauma-informed. These services should also understand why some women use alcohol in pregnancy. It was also noted that news media that is negative and blaming about FASD might keep women from talking about alcohol use with their health professionals (FARE, 2019).

Shame and Blame Do Not Work

Many people know that it is healthiest for both mother and baby when alcohol is not used in pregnancy. However, many people do not know that shame and blame do not change the many reasons alcohol might be used during pregnancy. In fact, shame and blame (stigma) are often reasons people do not ask for help, talk about alcohol use, or go for prenatal care. When we make it easier to talk about prenatal alcohol use, we make it easier for people to get help, be as healthy as possible, and have healthier pregnancies. Removing stigma will make it easier for people to ask for help (Corrigan et al., 2014; Green et al., 2016b; Jacobs & Jacobs, 2014). If a woman has a problem with alcohol use or dependence, positive support can help. There are many ways to help a woman reduce her drinking during pregnancy.

Part 2 - Prevention of FASD and Adverse Impacts

When working towards preventing and reducing the impact of prenatal alcohol exposure, five guiding principles can make a difference: hope, respect, understanding, compassion, and cooperation. These principles help prepare people for working with women who may have difficulties with alcohol, and to help these women to reduce or stop their alcohol consumption during pregnancy. The guiding principles are especially important when looking at the prevention of FASD.

Fundamental Components of FASD Prevention

In 2009, the National Action Team on FASD prevention (Canada Northwest FASD Research Network, now CanFASD) developed a consensus document on FASD prevention. This document used sources such as women's experiences, peer-reviewed research, and expert opinion. The document looks at prevention from a perspective of women's health determinants (Canada Northwest FASD Research Network (CanFASD), 2010). The following information is taken from this document.

Ten fundamental components of FASD prevention were identified as key to the success of FASD prevention and treatment. FASD prevention approaches should be:

1. **Respectful** - This helps to eliminate stigma and discrimination, creates a safe space where women can freely discuss their experiences, and helps them identify coping strategies and ways of healing.

2. **Relational** - It is important to address the social isolation women at risk of having a child with FASD often experience. This may be in the form of social disconnection, such as from friends, family, the larger community, or other sources. It is believed that focusing on the dynamics of interpersonal connections in day-to-day life, as well as in comprehensive treatment settings, can improve the successes of FASD prevention initiatives.

3. **Self-Determining** - This is based on the belief that women are the experts about their own health and have the right to determine and lead their own paths of growth and change. Therefore, healthcare providers and other support personnel should support women's autonomy, decision-making, and control of resources, to facilitate self-determined care. To achieve this, women should be involved in designing interventions and be part of the process of care.

4. **Women-Centred Care** - This approach recognizes that women's health is important and linked to fetal and child health, family health, and community health. Women-centred prevention and care involves women as informed participants in their own health care and focuses on women's overall health and safety. It also acknowledges women's autonomy in relation to their reproductive health, avoids unnecessary medicalization, and takes into consideration their roles as caregivers. Empowerment, safety, and social justice are all key considerations in this approach.

5. **Harm-Reduction Oriented** - Harm-reduction strategies help to minimize known harms associated with substance use and help connect women who use substances and support services. A harm-reduction approach focuses not only on the substance use itself, but on reducing the range of harms that are more broadly associated with use. An understanding of substance use and addictions is essential to the success of FASD prevention. This includes understanding:
   - the patterns of alcohol and other substance use
   - influences on use
   - consequences of use
   - pathways to and from use
   - readiness to change

6. **Trauma-Informed** - There are many complex interrelationships between experiences of violence and trauma, substance use and addictions, and mental health. Evidence shows that research initiatives, policy approaches, interventions, and general interactions with service providers may retraumatize women. Trauma-informed systems and services:
   - consider the impact of trauma and violence on women's health
   - understand that trauma-related symptoms are a way of coping
   - include this knowledge in all parts of service delivery, policy, and service organization

   (Trauma and trauma-informed approaches are discussed later in this module.)

7. **Health Promoting** - This involves paying attention to how a person's overall health is affected by the social determinants of health such as:
   - poverty
   - experience of violence
   - stigma
   - racial discrimination
   - nutrition
   - access to prenatal care
   - physical environment
   - experiences of loss or stress
   - social context
   - isolation
   - housing

   (CanFASD Northwest, 2010)

   This takes into consideration the broader context of alcohol use and FASD. It recognizes that the social determinants of health come together to influence FASD risk factors, prevention, and care. Holistic, multidisciplinary, cross-sectoral, and health-promoting responses to these complex and interconnected issues are important to successful FASD prevention.

8. **Culturally Safe** - Women who seek help from service providers need to feel respected, safe, and accepted for who they are, with respect to both their cultural identity and personal behaviours. Service providers should be aware of their own cultural identity, biases, and history in relation to the people with whom they are working. As well, service providers should be conscious of pre-formed biases/beliefs and ways of thinking about health, wellness, and parenting. Respect and accommodation for a woman's cultural identity, values, and interest in cultural/traditional healing methods in any service encounter is extremely important.

9. **Supportive of Mothering** - This approach recognizes and supports women's choices and roles as mothers, as well as the possible short- and long-term impact that a loss of child custody may have on a woman. Prevention and care approaches need to support different models for mothering, such as:
   - part-time parenting
   - open adoption

- kinship and elder support
- shared parenting
- inclusive fostering
- extended and created family

In addition, successful FASD prevention should take into consideration the importance of pacing (speed) and support as women transition between mothering roles.

10. **Uses a Disability Lens** - Women with alcohol and substance use problems may have other mental health problems and disabilities, including FASD. Prevention strategies and care that fit with the spectrum of disabilities associated with FASD should, therefore, be offered to such women.

Four-Part Model of FASD Prevention

Preventing alcohol-exposed pregnancies is complicated. There is more to FASD prevention than providing information about the risks of alcohol use in pregnancy. Other prevention measures are important in meeting the needs of women who may be at higher risk to use alcohol and/or use other substances during pregnancy.

In 2007, Nancy Poole identified that the three-part model of disease prevention did not work for FASD prevention. Poole worked with prevention specialists from a variety of backgrounds to develop a four-part model of FASD prevention: *Fetal Alcohol Spectrum Disorder (FASD) Prevention: Canadian Perspectives* (Poole, 2008). The four parts, or levels, addressed the many contributing factors to FASD and alcohol use in pregnancy (Poole, 2008; Canada FASD Research Network (CanFASD), 2013). The four levels built on each other to deliver broader prevention of FASD. Health promotion efforts started with a focus on the public and narrowed to the specific group of women who use alcohol during pregnancy.

This prevention model has evolved and has positively guided FASD prevention efforts in Canada, New Zealand, Australia, and the United Kingdom (CanFASD, 2019). The model now includes policy involvement at each level. The model also shows that FASD prevention involves work in all four levels in ways that reinforce each other. It also involves many agencies and approaches (CanFASD, 2019).

Supportive alcohol policy is at the centre of these levels of prevention. Policies that are evidence-based and broadly put into action can be successful in reducing the health and social harms from alcohol. Alcohol policies are important because they control the availability of alcohol and other decisions regarding alcohol use (CanFASD, 2019). An example is Ontario where earlier municipal alcohol policies had:

- reduced underage access to alcohol
- reduced community disruption due to drinking
- fewer injuries and hospital visits
- reduced impaired driving
- enhanced safety and reduced demand on security and police resources

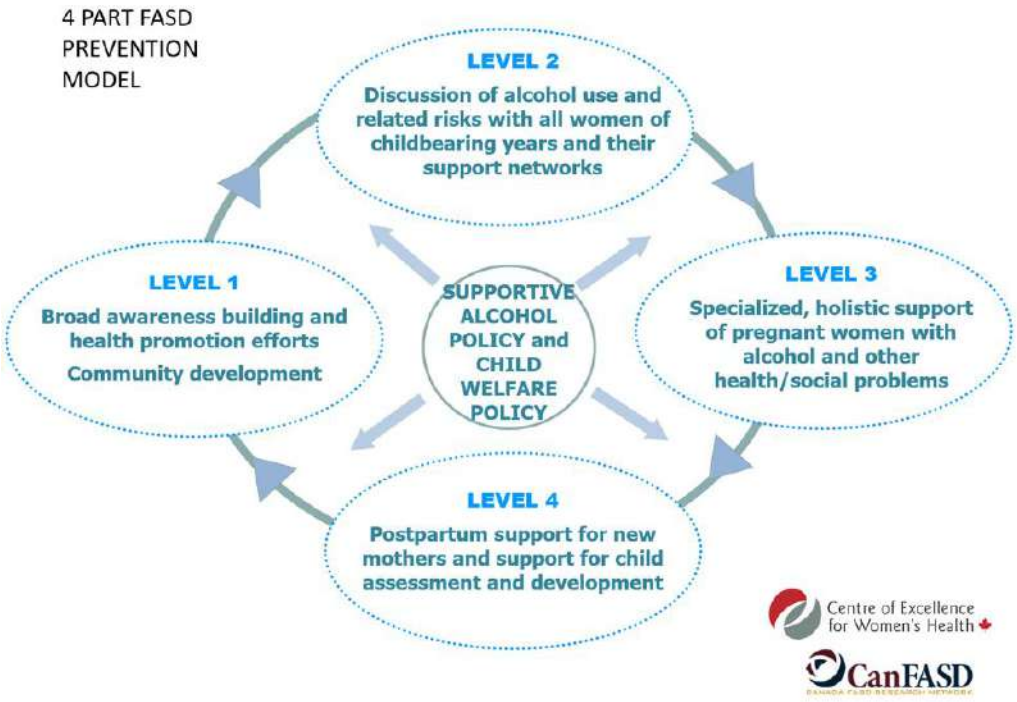
(Canadian Centre on Substance Use and Addiction, 2017)

A recent example of supportive alcohol policy occurred in Australia. The alcohol industry opposed warning labels about alcohol and pregnancy on alcohol stating there was a high awareness of harm of using alcohol in pregnancy (Foundation for Alcohol Research and Education (FARE), 2019). The industry was not successful. In July 2020, the Food Ministers of Australia and New Zealand instructed the alcohol industry to place red, black, and white warning labels with a heading reading "Pregnancy Warning" on containers (FARE, 2020).

In 2014, the Government of Saskatchewan, in cooperation with other organizations, created an FASD prevention framework which uses this four-level model of prevention. The document can be found at Government of Saskatchewan website.

Figure 6.1 provides a visual model of the four-part model of prevention and includes supportive alcohol policy and child welfare policy.

Figure 6.1: Four-Part Model of FASD Prevention



Source: Canada FASD Research Network, 20

Level One of FASD Prevention

Level one is about raising public awareness about FASD and the risks of drinking alcohol during pregnancy. This information is usually shared through primary prevention campaigns or through public education (e.g., in school system, health clinic, or community). The messages may be adapted to the audience to account for age, income, ethnicity, and other differences (Poole, 2008). Messaging may provide:

- referral to available services and supports for people with substance abuse issues
- alternatives to drinking alcohol
- referral for more information

Level one can also include creation of materials for people who facilitate health-focused youth groups (e.g., girls' groups or boys' groups), or community strategies that promote health promotion. It can include sharing information about Canada's Low-Risk Alcohol Drinking Guidelines.

Gender transformative

Addresses the causes of gender-based health inequities by including ways to transform harmful gender norms, roles, and relations. The objective of such programmes is often to promote gender equality and foster progressive changes in power relationships between women and men.

World Health Organization (2015)

Methods of creating broad-based FASD awareness and prevention can include media campaigns (e.g., public service announcements, videos, and commercials), community presentations, and print materials, such as brochures, booklets, information cards, or newspaper articles.

Information about alcohol use and FASD prevention can be provided by working upstream with young people. Methods of creating FASD awareness are especially effective if they involve peer education (education where the participants become involved in their own learning and the education of others) (Ennett et al., 2003; Gottfredson & Wilson, 2003).

When working in Level 1, certain principles are important:

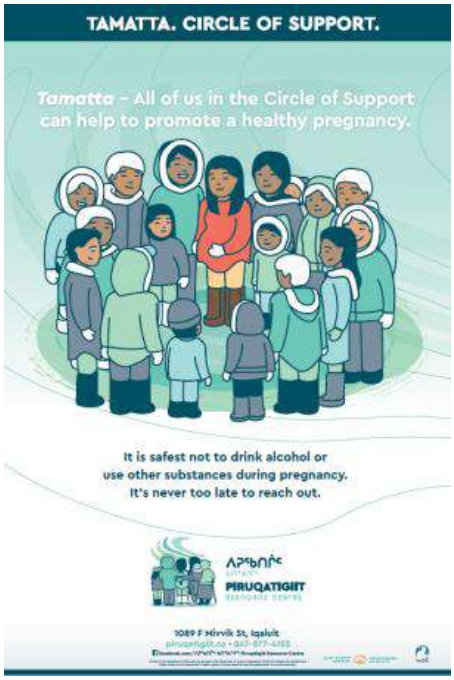
- Do no harm
- Take a gender transformative approach
- Tailor initiatives to the audience
- Aspire to quality practice

(Ourwatch as cited by Poole, 2019)

Level one raises awareness but does not necessarily lead to behaviour and attitude change (LaChausse, 2008, as cited in Poole et al., 2016).

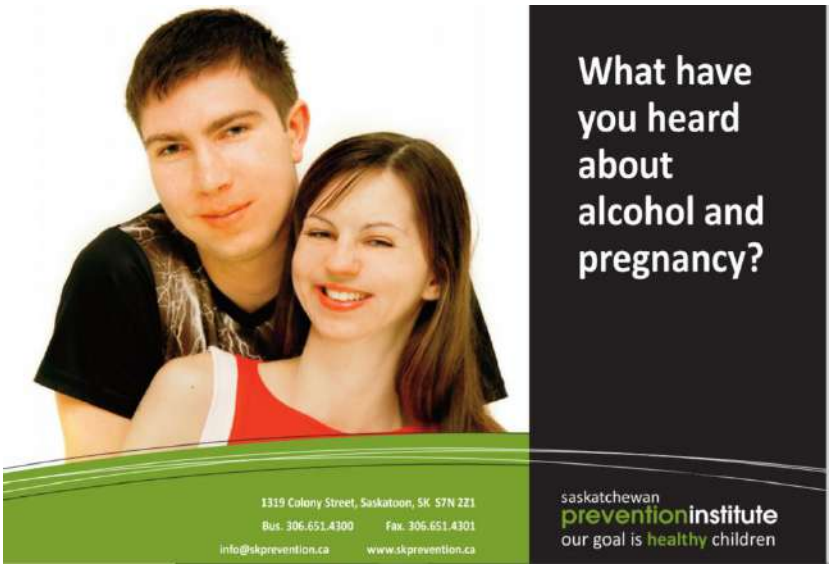
Examples of Level 1

Posters

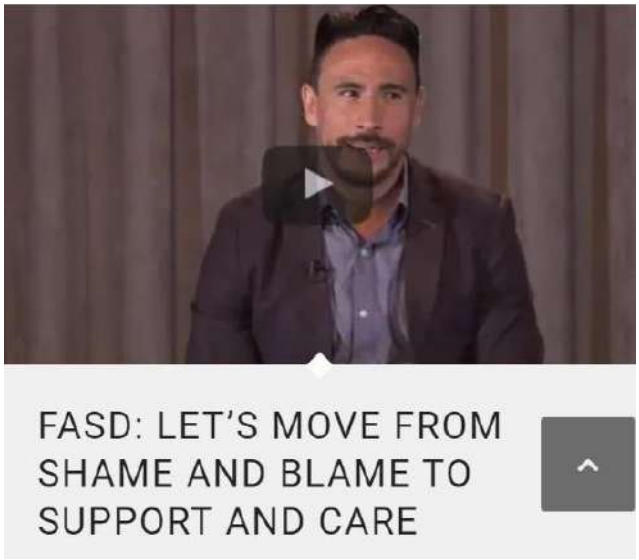

TAMATTA. CIRCLE OF SUPPORT.
Tamatta – All of us in the Circle of Support can help to promote a healthy pregnancy.
It is safest not to drink alcohol or use other substances during pregnancy. It's never too late to reach out.
PIRUQATIGIIT
RESOURCE CENTRE
1089 F Mivvik St, Iqaluit


coffee
Let's meet at the bar.
Alcohol-free is supportive.

Resources



Videos



Level Two of FASD Prevention

This level includes providing the opportunity for women of childbearing age to have safe discussions about reproductive health, contraception, pregnancy, alcohol use, and other topics, with their support networks and healthcare providers (CanFASD, n.d.). This is important because it:

- may help women prepare for pregnancy
- offers opportunities for health professionals to educate women about the risks of using alcohol during pregnancy
- may help at-risk women or women struggling with alcohol use disorders to address addictions issues and make positive changes in their lives

Screening

The Society of Obstetricians and Gynaecologists of Canada recommends asking all women about their alcohol use (screening). This can be done by asking a question in a non-judgemental way (Graves et al., 2020). Often there are no obvious signs of alcohol use. Research has shown that by asking about alcohol use, healthcare providers can have a major impact on women's behaviour and improve health outcomes for them and their babies.

To avoid women feeling they are being singled out or judged by being screened, it is recommended that women are told this screening is a part of standard healthcare for all women. Using a non-judgemental and respectful way, healthcare providers can ask one or two questions about alcohol use. This has been shown to be an effective approach to identifying women who are using alcohol and in need of intervention (Carson et al., 2017).

Asking about alcohol use can provide a setting for:

- identifying a woman's use of alcohol early
- educating women about alcohol use during pregnancy
- discussing the possibility of change if a woman is drinking
- referring the woman to appropriate programs or treatments if necessary and desired

(Carson et al., 2010; Graves et al., 2020)

Unfortunately, as indicated in the first part of this section, healthcare providers do not always ask about alcohol use.

Screening can be followed by a brief intervention (BI) if there is confirmation of alcohol use. This is called a screening and brief intervention (SBI; Schölin & Fitzgerald, 2019). One SBI program that has been used in Canada is Project Choices which educates women about alcohol, sex, and pregnancy (Manitoba Government, n.d.; Klinik Community Health, 2020). A harm reduction approach is respectful and effective. Positive statements will increase comfort level and encourage a woman to be open about her alcohol use. A woman's guilt and self-criticism may lead to feelings of inadequacy and greater alcohol use as a way of coping. She may be struggling with quitting or reducing her drinking and needs to be supported in whatever she is able to do (Saskatchewan Prevention Institute, 2007).

An understanding of trauma and using a trauma-informed approach creates an atmosphere of safety and avoids re-traumatizing someone (Poole et al., 2013).

Treating all women with respect, care, and dignity is important. This can be done by using a non-threatening, sensitive style. This type of approach is best for all communication. The Society of Obstetricians and Gynaecologists of Canada (SOGC) recommends that women take part in brief interventions and treatment without fear of losing children, while also recognizing that attention must still be given to safety of children (Graves et al., 2020). Providing screening, brief intervention, and referral to treatment is referred to as SBIRT.

> Trauma informed practice is an approach to service delivery where an understanding of the prevalence and effects of trauma is taken into account in all aspects of service delivery, and priority is placed on the individual's safety, choice collaboration, connection, and empowerment.
>
> Schmidt et al. (2019)

For women who are in the low-risk category, providing them with clear information in a non-judgemental manner can be effective in motivating them to stop drinking alcohol while pregnant (Saskatchewan Prevention Institute, 2007). Women who are more involved with alcohol use may need more intensive counselling, support, or other forms of interventions to reduce or stop their use.

It is not just doctors who can screen and have conversations. Other workers who could do this include:

- Midwives
- Nurses
- Anti-violence workers
- Pregnancy outreach workers
- Sexual health service providers
- Substance use workers

(Nathoo et al., 2019).

Brief Interventions

Research has shown that brief interventions can be a useful tool in helping women reduce their alcohol use in pregnancy (Nathoo et al., 2018; O'Connor & Whaley, 2007). Brief interventions are a collection of quick motivational counselling strategies aimed at helping patients reduce or eliminate at-risk alcohol use. Brief interventions are cost effective and can be used in many settings. They usually include three parts:

- Raising awareness and identifying readiness for change
- Providing advice (including resources) and talking about strategies for reducing or stopping problematic alcohol use
- Helping by drawing out ways of making changes, supporting readiness, setting goals, giving positive reinforcement, and/or giving referrals to services

(Graves et al., 2020).

Brief interventions can be done before pregnancy, during pregnancy, or after pregnancy (Graves et al., 2020).

Many service providers worry that asking girls and women about their substance use, especially when pregnant, will be misunderstood as judging and shaming women. The quality of the conversations during brief intervention and support is important (Nathoo et al., 2018). Another concern that practitioners may have is not knowing where to refer women for support. The SOGC has created a listing of resources to help reduce this concern.

Figure 6.2: Alcohol use disorder referral programs in Canada

Type	Names	Description	For more information
Community-based outreach	Pregnancy outreach programs	Many communities have drop-in programming for pregnant women, funded through the Canada Prenatal Nutrition Program	A directory of all the programs by province and territory can be found at cpnp-pcnp.phac-aspc.gc.ca/en
	Parent–child assistance programs and "one-stop" programs	Many communities offer mentoring and holistic programming that uses a harm-reduction approach for women at higher risk	These programs have many different program names (e.g., Healthiest Babies Possible) Many are also listed at cpnp-pcnp.phac-aspc.gc.ca/en
Substance use treatment	Outpatient counselling, day treatment, and live-in treatment	Each province and territory has an addictions treatment system of care	Online listings are available from ministries of health and regional health authorities

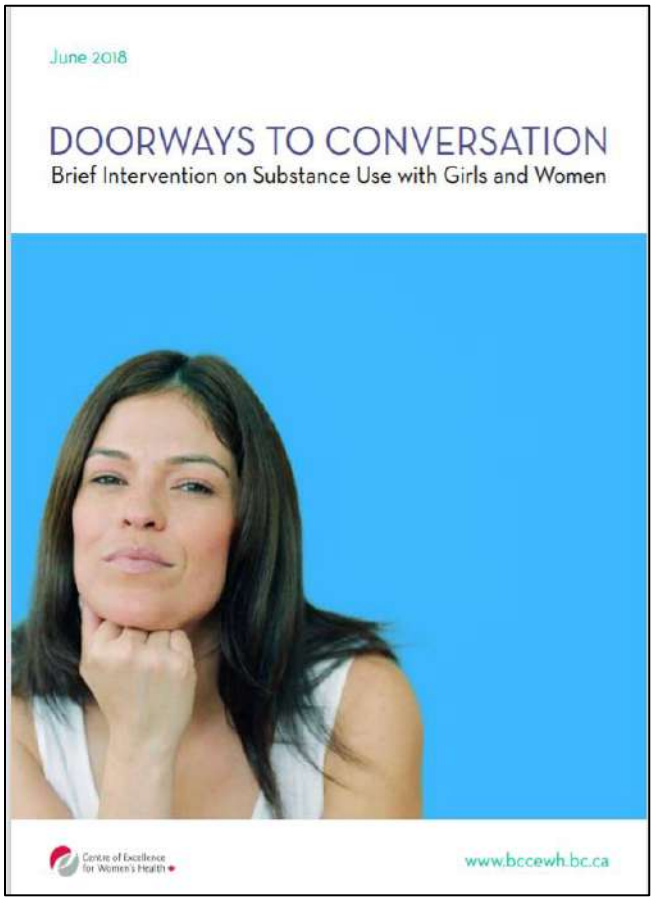
Source: SOGC Clinical Practice Guideline No. 405: Screening and Counselling for Alcohol Consumption During Pregnancy (Graves et al., 2020).

In research literature, the most common type of brief intervention reported on across the studies related to pregnant women and alcohol, as well as women of childbearing age and alcohol, is Motivational Interviewing (Parkes et al., 2008). Evidence shows that service providers who use MI approaches and are non-judgemental have success in helping women to reduce use of alcohol during pregnancy (Rubak et al., 2005).

Nathoo et al. (2018) provided a summary and ways of conducting brief substance use interventions. They do not require extensive time or resources, and they all have a goal to "reduce stigma, support further engagement in treatment and care, and improve women's overall health and well-being" (p. 58). Brief intervention and support to address substance can involve:

- having regular and ongoing conversations about substance use
- addressing multiple substances or multiple health issues
- having quality conversations which can influence success
- including women's partners and social networks, in synchronous ways
- ensuring the conversation is culturally grounded when working with Indigenous girls and women and in Indigenous contexts
- using collaborative, non-judgmental approaches that recognize girls and women as experts on their own lives
- having child welfare practices and policies that reduce barriers to success (e.g., family-centred treatment services, uniformity in response to substance use, placing substance use workers and child welfare workers in same location, host families for mentoring, early engagement and planning)

(Nathoo et al., 2018)



Doorways to Conversation can be found at https://bccewh.bc.ca/wp-content/uploads/2018/06/Doorways_ENGLISH_July-18-2018_online-version.pdf

Tools for Screening and Brief Interventions

Screening Questionnaires

There are several questionnaires that can be used for screening. The SOGC suggests that AUDIT-C (Alcohol Use Disorders Identification Test -Consumption) and the T-ACE (Tolerance, Annoyed, Cut down, Eye-opener) are good questionnaires to use (Graves et, 2020). The SOGC also suggests using the CRAFFT questionnaire with young people (12 to 18) (Graves et, 2020). The letters stand for Car, Relax, Alone, Forget, Friends, Trouble. The CRAFFT website (2018) indicates the questionnaire is well-studied and is "valid for adolescents from diverse socioeconomic and racial/ethnic backgrounds" (e.g., Shenoi et al., 2019).

Figure 6.3: Questionnaires that can be used to screen for alcohol consumption and/or problematic alcohol use in pregnancy

Tool	Components	Positive screening score
AUDIT-C	How often have you had a drink containing alcohol in the past year? • Never • Monthly or less • 2 to 4 times a month • 2 or 3 times a week • 4 times a week How many drinks did you have on a typical day when you were drinking in the past year? • 1 or 2 • 3 or 4 • 5 or 6 • 7 to 9 • 10+ How often did you have six or more drinks on one occasion during the past year? • Never • < monthly • Monthly • Weekly • Daily or almost daily **NOTE:** The AUDIT time frame for recall has been adapted by some to be 3 months instead of a year, and the binge consumption threshold has been adapted to be 3 or 4 drinks instead of 6 in order to be sex-specific. Both these adaptations are useful in the case of pregnant women.[40] The full AUDIT has 10 questions, including the above 3 questions and further questions to identify problem use.	3 or higher
T-ACE	**T**: **T**olerance: How many drinks does it take to make you feel high? (>2 indicates tolerance) **A**: Have people **Annoyed** you by criticizing your drinking? **C**: Have you ever felt you should **Cut** down on your drinking? **E**: **Eye-opener**: Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover?	2 or higher
CRAFFT	**C**: Have you ever ridden in a **Car** driven by someone (including yourself) who was high or had been using alcohol or drugs? **R**: Have you ever used alcohol or drugs to **Relax**, feel better about yourself, or fit in? **A**: Do you ever use alcohol or drugs while you are by yourself (**Alone**)? **F**: Do you ever **Forget** things you did while using alcohol or drugs? **F**: Do your **Family** or **Friends** ever tell you that you should cut down on your drinking or drug use? **T**: Have you ever gotten into **Trouble** while you were using alcohol or drugs?	2 or higher

Source: SOGC Clinical Practice Guideline No. 405: Screening and Counselling for Alcohol Consumption During Pregnancy (Graves et al., 2020).

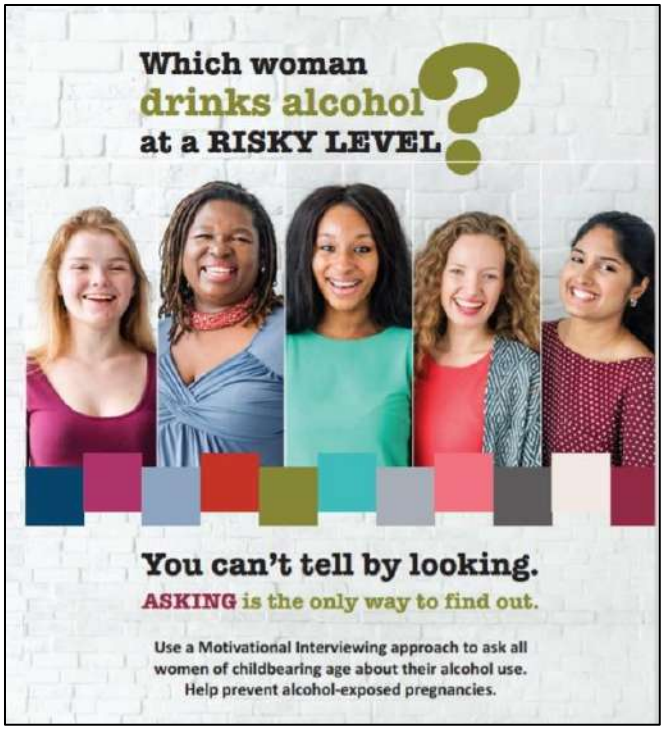
Motivational Interviewing (MI)

Motivational Interviewing is a highly recommended approach for when helping someone consider making a change. MI is a communication approach that is client-centred and directional. It is aimed at changing something specific. The goal of the conversation is to help clients explore and resolve their ambivalence to change in an atmosphere of acceptance and compassion.

Information about Motivational Interviewing can be found at the Motivational Interviewing Network of Trainer website https://motivationalinterviewing.org/.

For more information on Motivational Interviewing or training in Motivational Interviewing, contact the Saskatchewan Prevention Institute (306-651-4306).

The communication skills in MI include asking open-ended questions, providing affirmations, listening reflectively, summarizing, and sharing information.



The spirit of MI is a very important part of this approach. The spirit includes:

- Compassion
- Acceptance
- Partnership
- Evocation

Someone who uses an MI approach recognizes that people make their own decisions about change. The practitioner does not work to convince someone else to change. An MI approach naturally decreases the normal and automatic resistance a person feels when someone tries to change his or her behaviour. MI is designed to strengthen a person's own motivation and movement toward a specific goal by eliciting (drawing out) and exploring the person's own arguments for change.

Bill Miller first described MI in 1983 as a brief intervention for problem drinkers. MI is an evidence-based approach, and Miller and Rollnick have changed and updated specific aspects of MI based on efficacy research. The current edition of their book, "Motivational Interviewing: Helping People Change, 3rd Edition" (2013) describes the latest best-evidence approach.

MI is not the only approach that works; however, it is a commonly used approach. There are more than 1,000 publications, dozens of books, and many DVDs and YouTube videos demonstrating the approach. It is also a well-researched approach with hundreds of individual research studies and numerous systematic reviews and meta-analyses completed on the topic.

Research shows:

- MI has been found to be effective in as little as one 15- to 20-minute session by an individual with minimal training in MI techniques.
- MI has also been found to be effective when delivered entirely over the phone, or when boosted by intermittent phone calls after in-person meetings.
- MI is a lower intensity method and can work quickly, so it can be cost effective and have positive outcomes. MI, when compared to other active treatments such as 12-step and cognitive behaviour therapy (CBT), produced equal effects sooner (over 100 fewer minutes of treatment).

- MI has been found to be effective for preventing or reducing unhealthy behaviours (e.g., drinking, including binge drinking, smoking and substance abuse), and promoting healthy behaviours (e.g., physical activity). In a medical care setting, most research found that MI offers a moderate advantage over other interventions (e.g., similar information in a brochure, or behavioural therapy) for a wide range of behavioural issues and groups. This includes helping patients exercise more, lose weight, adhere to medication regimes (i.e., lowering HIV viral loads, and reduce blood pressure and cholesterol levels), reduce problematic substance use, and boost individuals' confidence in their ability to make health-related behavioural changes. It is important to note that although many studies have found benefits from MI, not all studies have found statistically significant results. Research continues to explore the context in which MI is effective.
- There is some evidence that with increasing level of service provider qualifications, the effects increased for clients trying to quit using substances.
- MI can be delivered by a range of professionals with a minimum investment of time in a variety of formats and time frames for patients of different ages, genders, and ethnicities.
- MI outcomes appear to last. Some studies suggest the outcome remains one year after the MI conversation.
- MI can be learned by a wide variety of service providers.

(Saskatchewan Prevention Institute, 2019)

Level Three of FASD Prevention

This level of prevention helps pregnant women who are using alcohol and are looking for support. Services are specialized and culturally safe. Women may have experienced violence, trauma, and health issues associated with these challenges. Services should be trauma-informed, focus on harm reduction, and available in the childbearing years, before pregnancy, and during pregnancy (CanFASD, n.d.).

Women with substance use issues are often dealing with many other challenges and can face many barriers when trying to find help. Women who are looking for services want to deal with their substance use, receive prenatal care, and keep their babies. They may need help with housing. Evidence shows outcomes are better when services are accessible, women-centred, and provided along with prenatal care (Hubberstey et al., 2019).

Some programs for women are "one-stop", where women can access a variety of services at one location. Other programs may coordinate services and supports for women to help reduce barriers. An examination of eight Canadian multi-service programs showed they provided services such as:

- childcare on site
- basic needs support
- housing
- mental health/trauma
- food/nutrition
- cultural programming
- outreach
- prenatal and postnatal support
- substance use counselling
- child welfare support

(Rutman et al., 2019).

Women prefer programs that have an environment of “hope, acceptance, and support” (Hubberstey et al., 2019, p. 15). A study of 12 integrated treatment programs in Ontario showed that women were more positive about their care than people who took part in traditional programs (Tarasoff et al., 2018). They highlighted non-judgemental attitudes and women-centred programming.

The eight previously mentioned programs which supported women at risk of having a child with FASD were: relationship-based; trauma-informed; women-centered; culturally-informed; and used harm reduction that was non stigmatizing (Rutman et al., 2019). Women using these programs liked the:

- staff and their style
- friendships, social and peer support, feeling of community
- “one-stop”
- comfortable, safe, healthy environment
- help with child protection
- positive impacts for the child such as making friends and developing socialization skills

(Rutman & Hubberstey, 2019).

As a result of taking part in the programs, women indicated they:

- quit or reduced substance use
- strengthened mother-child connection
- kept/regained custody of child(ren)
- improved wellness/mental health
- increased support
- had safer, improved housing

(Hubberstey et al., 2019).

Level Four of FASD Prevention

Many programs that provide support to women fit in both the level three and level four categories.

The **fourth** level of prevention is about providing postpartum treatment and support for new mothers and support for child assessment and development (CanFASD, n.d.). In this level, the programs help new mothers to continue the healthy changes they have made during pregnancy. Many programs that support women offer services that are considered both level three and level four of prevention. Providing support after birth is important even if a mother was not able to make significant changes in substance use during pregnancy. This support can help her continue to improve her health and social support, and the health of her children (CanFASD, n.d.). Services can include access to early childhood supports and looking at diagnosis for children who may have been impacted by prenatal alcohol exposure. Programs may also offer support with breastfeeding, parenting, and continual improvement of their own health, including help with substance use issues.

Typically, women receive services for six weeks after the birth of their child. Research shows that women and their babies benefit from long-term support (CanFASD, 2013). This allows them to continue making changes, build skills, and build relationships. It also can help with early identification of FASD. Longer-term services can also provide help if women do not have custody of their babies (CanFASD, 2013). A challenge is that women can only receive help if they know about the services and are able to access them.

Level four programs may not always be thought of as FASD prevention programs, but they can potentially reduce substance use in future pregnancies. They provide supports and services that help reduce current substance use. This can contribute to healthier parenting. The programs can provide supports such as infant development, traditional parenting, and early childhood intervention programs.

Raising Hope in Regina was one of eight programs examined by Rutman and colleagues. It is a residential program, and women and their children can stay for up to 18 months. Raising Hope offers supports and programming such as:

- health/medical
- social/cultural supports and programming
- child care
- daily programming

(Rutman et al., 2019; Rutman et al., 2020; Hubberstey et al., 2019).

Another Saskatchewan program is Sanctum 1.5, a 10-bed home in Saskatoon. This supports high-risk and HIV positive pregnant women who may be at risk of having their babies apprehended (Sanctum, 2018). Sanctum 1.5 provides support from pregnancy to three months after birth. Women also receive help with transitional planning and can receive housing and support for a year after leaving Sanctum 1.5.

Supports include:

- Physician support (prenatal and pediatrics)
- EAT SLEEP CONSOLE (non-pharmacological approach to treating Neonatal Abstinence Syndrome in infants)
- Intensive family support
- Intensive HIV Case Management
- Medication management
- Connection with detox services
- Methadone assisted recovery
- Healthy Mother Healthy Baby
- Elder support
- Parenting skills and mentorship
- Peer support

> "Given the impact of trauma on relational capacity, agencies working with mothers and children have found that perceived support from service providers, and children's and mothers' ability to feel secure with others, is related to improved outcomes for mothers and children."
>
> Nancy Poole, 2015

- Life skills
- Access to housing supports
- Spiritual care
- Mental health and addiction outreach services
- Family planning

(Sanctum, 2018).

There are other Canadian programs that work with pregnant women, mothers with children, and their families. They can provide supports and services that help reduce current substance use, which can contribute to healthier parenting and help to reduce the impacts of FASD children. They may assist with obtaining a diagnosis of FASD, and with the time before and after diagnosis. They can provide the support that is needed to accept a diagnosis, and to provide the healthiest and most supportive environment possible for all involved.

Some other Canadian models of level four services are:

- The Mothering Project
  https://www.mountcarmel.ca/ways-to-give/the-mothering-project/
- Mothercraft
  http://www.mothercraft.ca/
- Families in Recovery Combined Care Service (FIR)
  http://www.bcwomens.ca/our-services/pregnancy-prenatal-care/pregnancy-drugs-alcohol
- Sheway
  http://www.vnhs.net/programs/sheway
- Community Action Program for Children (CAPC) in Alberta

Conclusion

FASD prevention is not always as simple as telling women to avoid alcohol during pregnancy. There are many factors associated with drinking while pregnant and, therefore, many different levels of prevention are necessary.

In the first level, broad awareness of FASD and the risks of alcohol consumption must be delivered to the community. Without addressing this broad level, misinformation and lack of knowledge can continue to be factors in why women use alcohol in pregnancy and community understanding of FASD prevention.

In the second level, all women of childbearing age, pregnant or not, should be asked about their alcohol use, advised on the risks of alcohol use during pregnancy, and provided the supports necessary to stop drinking. All women deserve to be treated with respect. Techniques, such as brief interventions and the use of Motivational Interviewing can be effective.

The third level of prevention supports women at risk of alcohol-exposed pregnancies before and during pregnancy. Services that are trauma-informed, use harm reduction, and are accessible are key in the childbearing years, before pregnancy, and during pregnancy.

The fourth level of prevention helps to support the woman even after her baby is born, whether there is a diagnosis of FASD or not. It is important to provide services and support for each woman in her community, make them known to her, and easily accessible.

Lastly, supportive alcohol policies and child welfare policies are central to reinforcing all the four levels of prevention and reducing rates of FASD.

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