

Alcohol, Contraception and Preconception

Background and Evidence

Interventions that focus on the preconception period, or on contraception use by all women who consume alcohol in their childbearing years, address concerns about alcohol use prior to pregnancy awareness. Data from the 2009 Canadian Maternity Experiences Survey indicate that 62.4 per cent of women reported drinking alcohol during the three months prior to pregnancy. Binge drinking was reported by 11 per cent of women before the recognition of pregnancy^[1, 2]. Data from Healthy Child Manitoba's Families First Screen (2007-2013) shows that 14 per cent of women in Manitoba drank alcohol (any amount) during pregnancy. Nearly half (49 per cent) of those women reported drinking more than seven drinks per week or binge drinking (five or more drinks) before the recognition of pregnancy. Intervening pre-pregnancy also broadens the traditional focus of primary Fetal Alcohol Spectrum Disorder (FASD) prevention strategies by addressing women's health overall. It integrates emerging research on the links between alcohol use and fertility.

Unplanned Pregnancy

Approximately one half of all pregnancies are unintended, and almost one half of these occur in girls and women using a form of reversible contraception^[3-5]. The rate of unintended pregnancies varies by maternal age, with the highest rates being in young women aged 15 to 19 years (82 per cent of total pregnancies in this age group) and the lowest being in women aged 35 to 39 years (29 per cent of total pregnancies in this age group). The highest rate of unintended pregnancy occurs in the age group of women at highest risk of binge drinking (ages 15 to 19 years)^[4-6].

Planned Pregnancy

Women planning their pregnancies differ in significant ways from women whose pregnancies are unplanned: they have higher scores for physical and mental health status, higher scores for self-care behaviours such as the use of supplements, vaccination and nutrition, as well as lower rates of risky behaviours such as smoking, drinking alcohol and using other drugs during pregnancy^[7]. A survey in Ontario regarding preconception awareness and behaviours found that women planning their pregnancies in 2008 made more preconception changes, such as stopping drinking, taking folic acid and talking to a health-care provider, than in 2002. However, 55 per cent of women in 2008 did not make any changes to their health or lifestyle prior to conception. The majority (58 per cent) of respondents said their health-care provider had not brought up the topic of healthy pregnancy before conception, only a small number of respondents mentioned receiving print preconception information (two per cent), and very few recalled being advised to see a health-care provider before conception (0.4 per cent)^[8].

Preconception Interventions

While most FASD prevention efforts focus on girls' and women's alcohol use in the preconception period and during pregnancy, there are, in fact, several different routes to reducing the risk of an alcohol-exposed pregnancy:

1. Reducing alcohol use
2. Using effective contraception
3. Reducing alcohol use *and* using effective contraception at the same time


A number of randomized control trial studies have demonstrated the efficacy of dual focused interventions (alcohol and contraception) using a motivational interviewing approach tailored for a range of subgroups of girls and women. Settings in which these dual focused interventions have been applied include primary care, obstetrical/gynaecology practices, university health clinics, jails and substance abuse treatment settings. The interventions typically include one to four manual-guided and tailored sessions and one contraceptive counseling session. These studies have shown that having the choice of reducing alcohol use, increasing use of effective contraception or doing both is helpful for women^[9-14]. In Winnipeg, a program called Project CHOICES uses this dual focused intervention model (see referral section for more information).

Contraception

Contraception is most effective when the method used is acceptable to the individual in the context of their life, culture and relationships^[15, 16]. Other factors that contribute to effectiveness in real life are the degree to which the contraceptive method requires user actions (e.g., at the time of intercourse, daily, weekly or monthly), or is a method that works independently of user actions (the method is user-independent or forgettable), such as an intrauterine device- or IUD^[15]. In Canada, the IUD is the most effective form of reversible contraception available. IUD use is currently recommended for adolescents, first time contraception users and contraception users who have not previously had a pregnancy or birth^[17]. The IUD is available as a copper (non-hormone) or levonorgestrel (hormone)-releasing device that is inserted by a doctor or nurse practitioner. IUDs are associated with the lowest rates of unintended pregnancy, up to ten times fewer pregnancies than among women and girls on user-dependent methods such as birth control pills^[18, 19], as well as a rapid return to fertility once the IUD is removed^[20].

Discussing the Impacts of Alcohol Use

In addition to discussing alcohol or contraception use, many girls and women can benefit from understanding the short and long-term effects of alcohol use on their fertility. Alcohol can affect women's and men's reproductive systems, and damage fertility. For girls and women, alcohol causes imbalances in the hormonal system that controls reproduction. Even small amounts of alcohol can affect the menstrual cycle and reduce the chance of conceiving. The link between drinking and fertility is still being researched, but there have been studies showing that light drinking can have a negative effect on reproductive health. These include a Danish study that



showed drinking between one and five drinks a week can reduce a woman's chance of conceiving, and 10 or more drinks per week decreases the likelihood of conception even further ^[21]. A 2009 Harvard University study of couples undergoing in vitro fertilization (IVF) showed that women who drank more than six units per week were 18 per cent less likely to conceive ^[22]. Long-term heavy drinking can cause adult women to also have irregular periods or stop ovulating. Periods can stop altogether or they can have an early menopause. Heavy drinkers who do become pregnant are more likely to have a miscarriage ^[23].

Preconception and Partners


It is often asked if paternal alcohol use contributes to FASD. FASD is the result of alcohol exposure in utero. Paternal preconception alcohol use is not known to be a direct contributor to alcohol-exposed pregnancy. However, alcohol's effect on gene expression and epigenetics is an emerging area of study in the field of FASD. The effects of paternal preconception alcohol exposure are as yet poorly understood, but it has been documented that these effects can include reduced birth weight and impaired cognitive functioning ^[24-25].

Recent American research indicates that 75 to 80 per cent of men surveyed wanted male-oriented preconception information from their primary care physician, and suggests that involving men in preconception health supports their partner's preconception care ^[26]. This research suggests that we need to focus on preconception alcohol use in both women and men as a strategy to prevent FASD.

What You Can Do To Help

Service providers can address preconception health with individuals (regardless of gender) in many different ways, including discussing alcohol use, contraception use, or both.

- 1. Open a discussion of the effects of alcohol consumption on reproductive health and pregnancy with all individuals of reproductive age.**
- 2. Encourage all individuals to reduce at-risk drinking by discussing Canada's Low-Risk Drinking Guidelines.**
- 3. Share important preconception information with individuals and couples considering or planning a pregnancy. Some examples of decisions related to preconception include making changes to alcohol use or, for women, taking folic acid.**
- 4. Encourage women to consider reducing or stopping alcohol use upon deciding to become pregnant (i.e., as soon as they stop using their current form of contraception and start trying to conceive).**
- 5. Support the use of effective contraception that is acceptable to the individual in the context of their life, culture and relationships.** If an individual is using birth control, ensure that they are properly using the best method for them. Discuss how some sexual partners may not be willing to use condoms. Note that different types and methods of birth control may be more or less effective for different individuals, including those who have FASD themselves.
- 6. If an individual is not planning a pregnancy, encourage him or her to use contraception to prevent unintended pregnancy and sexually transmitted infections.**
- 7. If a woman is sexually active with a male partner and not using effective birth control, encourage her to consider avoiding alcohol use to reduce their risk of alcohol-exposed pregnancy.**
- 8. Encourage individuals of reproductive age to drink in ways consistent with low-risk drinking guidelines AND to increase their use of effective birth control.**
- 9. Support awareness of accessible, free pregnancy testing and contraceptives in your community.**

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10. **Use trauma-informed practice to create safe spaces for individuals to navigate decisions about contraception and drinking** (please see the Pregnancy, Alcohol and Trauma-informed Practice sheet in this series for further information).

 11. **Discuss the importance of the role of a woman's partner, family members, friends and their larger social network to support preconception health** (please see the Alcohol, Pregnancy, and Partner Support sheet in this series for further information on partner and social network engagement).

Resources and Tools for Service Providers

Alcohol Use and Pregnancy Consensus Clinical Guidelines

<http://sogc.org/wpcontent/uploads/2013/01/gui245CPG1008E.pdf>

This Clinical Practice Guideline (2010) by the Society of Obstetricians and Gynecologists of Canada (SOGC) provides the national standards of care for the screening and recording of alcohol use, and counseling on alcohol use for women of child-bearing age and pregnant women, based on the most up-to-date evidence. Key recommendations are provided along with helpful strategies for communication, screening and brief interventions.

Canada's Low-Risk Drinking Guidelines

<http://www.ccsa.ca/Eng/topics/alcohol/drinking-guidelines/Pages/default.aspx>

This website, hosted by the Canadian Centre on Substance Abuse, provides information about Canada's Low-Risk Drinking Guidelines (LRDG). The guidelines describe drinking practices that balance the health benefits, while minimizing risks, including identifying sex-specific consumption levels for women. The website includes resources for service providers, to support promotion and implementation of the LRDG's, such as:

Guidelines for Healthcare Providers to Promote Low-Risk Drinking among Patients

<http://www.ccsa.ca/Resource%20Library/2012-Guidelines-For-Healthcare-Providers-to-Promote-Low-Risk-Drinking-Among-Patients-en.pdf>

Supporting pregnant women who use alcohol or other drugs- A guide for Primary Health Care Professionals

<https://ndarc.med.unsw.edu.au/resource/supporting-pregnant-women-who-use-alcohol-or-other-drugs-guide-primary-health-care>

Alcohol Screening: Brief Intervention and Referral Website

<http://www.sbir-diba.ca/>

This website, by The College of Family Physicians of Canada and Canadian Centre on Substance Abuse, provides a Clinical Guide, Screening and Assessment, Brief Intervention and Follow-up and Support Protocol, as well as information and resources on patient sub-populations, including women, alcohol and pregnancy, and alcohol and breastfeeding.

Resources and Tools to Share with Women and Partners

Girls, Women and Alcohol: Making Informed Choices

http://www.gov.mb.ca/healthychild/fasd/alcohol_women.pdf

This website contains information on low-risk drinking, risks of heavy drinking, individual responses to alcohol, considerations for women, supporting someone close to you and Manitoba-specific resources.

Sexuality Education Resource Centre Manitoba

www.sexc.mb.ca

This website offers sexual health information, including birth control options and information on safer sex practices.

Teen Talk

www.teentalk.ca

Teen Talk is a Youth Health Education Program that is part of Klinik Community Health Centre. The Teen Talk website provides information on sexuality, reproductive health, body image, substance use awareness, mental health, and issues regarding diversity and anti-violence.

Women's Health Clinic

<http://womenshealthclinic.org/>

This website provides resources, including fact sheets, on several common women's health concerns.

Health Before Pregnancy Workbook

http://www.beststart.org/resources/rep_health/Health_Before_pregnancy_2011_FULL.pdf

This interactive workbook for young adults and couples raises issues that can affect both women and men and the health of their future children. It also provides answers to commonly asked questions people think about as they consider parenting.

Alberta Health Services: Ready or Not

www.readyornotalberta.ca

This interactive website allows users to click on **Ready** for information on health for men and women ready to start trying to conceive, or **Not Ready** for information on birth control, sexual health, and overall health. Both options offer information on the risks of alcohol, drug and tobacco use.

Canada's Low-Risk Drinking Guidelines

<http://www.ccsa.ca/Resource%20Library/2012-Canada-Low-Risk-Alcohol-Drinking-Guidelines-Brochure-en.pdf>

This brochure provides low-risk alcohol drinking guidelines for men and women, including guidelines for women who are pregnant, planning to become pregnant or about to breastfeed.

Aboriginal Sexual Health

http://www.aboriginalsexualhealth.ca/aboriginal-womens-health_e.aspx

Administered by the Society of Obstetricians and Gynecologists of Canada, this site provides information about sexual and reproductive health specific to Aboriginal populations.

BC Partners for Mental Health and Addictions Information, Alcohol and Pregnancy Sheet

http://www.heretohelp.bc.ca/sites/default/files/LRDG_Pregnancy.pdf

This one-page alcohol pregnancy sheet highlights Canada's Low-Risk Alcohol Drinking Guidelines for women during pregnancy, when planning to become pregnant and before, and while breastfeeding. It also highlights research on the effects of drinking during pregnancy, breastfeeding, and the percentage of women who drink during pregnancy.

Sexuality and U

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

Administered by the Society of Obstetricians and Gynaecologists of Canada, this award-winning website provides accurate, credible and up-to-date information and education on sexual health, birth control and STIs.

Motherisk

www.motherisk.org or 1-877-FAS-INFO (1-877-327-4636)

Includes up-to-date information for professionals and mothers about alcohol, drugs and pregnancy. A toll-free helpline is available 9 a.m. to 5 p.m., with information in English and French, based on continuing research and study by Motherisk's specialized team of physicians, psychologists, pharmacologists and counsellors.



From Evidence-to-Practice: Self-Assessment and Discussion Questions

These questions can be used for self-assessment or as a tool for group discussion and collective reflective practice:

1. Are we opening a discussion of the effects of alcohol consumption on reproductive health and pregnancy with all individuals of reproductive age (regardless of gender)?
2. What important preconception information, if any, is being shared with women? (Preparing to stop drinking, taking folic acid, etc.)
3. Are we educating individuals (regardless of gender) about Canada's Low-Risk Drinking Guidelines?
4. How is the effective use of contraception being supported, if at all? Are we providing information about all methods of contraception (including user-independent contraception such as IUDs), and supporting individuals to make decisions about the method of contraception that best fits the context of their life, culture and relationships?

Referrals

Project CHOICES

www.projectchoices.ca

A Winnipeg-based program for girls and women using a Motivational Interviewing approach to support healthy choices around alcohol use, pregnancy and birth control. Participants are offered up to four sessions with a counsellor and one visit with a nurse to get information about birth control options. For more information, contact NorWest Community Health Centre- (204) 940-8611, or Klinik Community Health Centre- (204) 784-4072.

Sexuality Education Resource Centre Manitoba (SERC)

www.serc.mb.ca

SERC offers education on reproductive and sexual health topics to the public, and provides training and consultation for service providers. SERC has locations in Winnipeg and Brandon.

Women's Health Clinic

<http://womenshealthclinic.org/>

The Women's Health Clinic is an inclusive, feminist community health clinic in Winnipeg. It offers health services, including reproductive and sexual health care, education and advocacy.

Teen Talk

www.teentalk.ca

Teen Talk is a Youth Health Education Program that is part of Klinik Community Health Centre. Teen Talk services include workshops and information on sexuality, reproductive health, body image, substance use awareness, mental health, issues of diversity and anti-violence issues.

Teen Clinics

www.teenclinic.ca

Teen Clinics offer free and confidential health and medical services for youth at schools and community health centres throughout Manitoba. Visit the website for a list of locations.

Directory of Adult Addictions Services

<http://www.gov.mb.ca/healthyliving/addictions/adult.html>

All provincially-funded addictions agencies are listed on this website. Information provided includes contact information, purpose and eligibility criteria.

Directory of Youth Addictions Services

<http://www.gov.mb.ca/healthyliving/addictions/youth.html>

All provincially-funded addictions agencies are listed on this website. Information provided includes contact information, purpose and eligibility criteria.

Provincial Central Intake – Youth Addictions Service 1-877-710-3999

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