



Motherisk Update

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Preventing fetal alcohol spectrum disorders *Preconception counseling and diagnosis help*

ABSTRACT

QUESTION By the time women find out they are pregnant and see a family physician, they might have already consumed alcohol during the pregnancy and affected the development of their fetuses. How can family physicians better prevent exposure to alcohol during pregnancy?

ANSWER Women of childbearing age should be counseled about the risks associated with alcohol consumption during pregnancy *before* they become pregnant. Diagnosing children who have fetal alcohol spectrum disorders can help identify birth mothers who are at risk of other alcohol-exposed pregnancies and who need support to change their behaviour.

RÉSUMÉ

QUESTION Avant que les femmes apprennent qu'elles sont enceintes et qu'elles voient leur médecin de famille, elles peuvent avoir déjà consommé de l'alcool durant leur grossesse et affecté le développement de leur fœtus. Comment les médecins de famille peuvent-ils mieux prévenir l'exposition à l'alcool durant la grossesse?

RÉPONSE Les femmes en âge de procréer devraient recevoir des conseils sur les risques associés à la consommation d'alcool durant la grossesse *avant* qu'elles deviennent enceintes. Le diagnostic d'enfants souffrant de troubles liés à l'alcoolisme fœtal peut aider à identifier les mères naturelles qui sont à risque de vivre d'autres grossesses où le fœtus sera exposé à l'alcool et qui ont besoin de soutien pour modifier leur comportement.

Fetal alcohol spectrum disorder (FASD) is the most common preventable cause of mental disability in the western world with an estimated incidence in North America of 9.1 per 1000 live births.^{1,2} Fetal alcohol spectrum disorder refers to a group of conditions that can include abnormalities in facial features, growth deficiency, and central nervous system dysfunction in children whose mothers consumed alcohol during pregnancy. Children with all these characteristics are described as having fetal alcohol syndrome. In Canada, estimated lifetime costs for one person with FASD for additional education, disability payments, and health care are

\$844 066.³ Studies of alcohol-consumption trends in pregnant women and women of childbearing age and a recent Canadian survey of the attitudes and approaches of health care providers to FASD highlight opportunities for prevention.⁴⁻⁷

Prevention through preconception counseling

Women can negatively affect the development of their fetuses before they even realize they are pregnant by consuming alcohol after conception. Thus, women of childbearing age should be made aware of the risks of alcohol consumption during pregnancy

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before they become pregnant. Less than half of the family physicians in one study frequently discussed the risks of alcohol use, drug use, or smoking during pregnancy with women of childbearing age (ie, before conception).⁶ Since most family physicians (85%) discussed birth control with these women, they could also discuss other aspects of reproductive health, including the way behaviour can affect pregnancy and birth outcomes.⁶ They can use discussions about birth control and sexual activity to ensure women are aware that alcohol and drug use and smoking during pregnancy can affect the development of their babies' physical and central nervous systems and increase the risk of lifelong disabilities.^{8,9} Women should also be made aware that very early pregnancy is a particularly critical time for fetal development.¹⁰

In assessing risk of alcohol exposure during pregnancy, family physicians should obtain a detailed history of alcohol and drug use and of sexual and emotional abuse, as well as a family history of addictions, all of which are important determinants of alcohol abuse.¹¹ These questions will help physicians probe for information about current alcohol use and allow them to define low-risk drinking for non-pregnant women. When physicians identify women who are consuming too much alcohol (ie, more than two drinks per occasion or more than nine standard drinks per week),¹² they can take action to prevent future alcohol-exposed pregnancies by discussing the risks of alcohol consumption during pregnancy and by referring women to resources where necessary.

Prevention through diagnosis of FASD

Another approach to prevention is through diagnosis of FASD. Children with FASD have birth mothers who could be at risk of having other children with FASD.¹³ Awareness of the diagnostic criteria for FASD will help physicians identify both children with FASD and mothers at risk

of alcohol consumption during pregnancy. Women at risk could be referred to resources that support lifestyle change to prevent future alcohol-exposed pregnancies.

In one study, almost 70% of family physicians identified a need for additional training in diagnosis of FASD.⁵ Although 94% of family physicians in the study agreed that fetal alcohol syndrome was identifiable, and 77% agreed that making a diagnosis of fetal alcohol syndrome was within their scope of practice, only about 60% were aware that a combination of growth, brain, and facial abnormalities provide the most accurate diagnosis of fetal alcohol syndrome.⁵ The release of Canadian guidelines for diagnosing FASD could help family physicians identify children with the diagnostic features of FASD.¹⁴ If children under their care have such features, these children should be referred to multidisciplinary diagnostic teams, where possible, for more comprehensive diagnostic examination.

According to the guidelines, children should be referred for diagnosis if family physicians observe:

- the three characteristic facial features: short palpebral fissures, a smooth or flattened philtrum, and a thin vermilion border; or
- any of the characteristic facial features plus prenatal or postnatal growth deficits, or central nervous system deficits plus known or probable substantial prenatal exposure to alcohol.¹⁴

Family physicians should also be aware of the secondary outcomes associated with FASD, including long-term emotional disorders, disrupted schooling, addictions, legal problems, and inappropriate sexual behaviour. A better understanding of secondary disabilities might prompt family physicians to inquire about prenatal alcohol exposure in cases where a diagnosis of FASD was missed in infancy.

Identifying a missed diagnosis of FASD presents an opportunity to prevent future alcohol-exposed pregnancies because about one third of those with FASD experience drug

and alcohol problems during their lives.¹⁵ Affected women can be referred to resources that can help them develop and maintain a healthy lifestyle, thus preventing FASD.

Conclusion

Greater efforts at preventing FASD, including preconception counseling, improved diagnosis of children with FASD, and identification of patients at risk, could reduce the incidence of FASD. These efforts require the support and involvement of family physicians who need to routinely and thoroughly assess alcohol use and risky behaviour among women of childbearing age, particularly among those who might become pregnant.

When women become pregnant, they should be screened at the first prenatal visit using a standard screening tool, such as the T-ACE (tolerance, annoyed, cut down, eye-opener).¹⁶ A screening tool paired with a discussion about alcohol consumption might assist family physicians in determining whether women were drinking heavily at any time during pregnancy and whether there is risk of continued alcohol consumption. ❁

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Do you have questions about the safety of drugs, chemicals, radiation, or infections in women who are pregnant or breastfeeding? We invite you to submit them to the Motherisk Program by fax at (416) 813-7562; they will be addressed in future Motherisk Updates.

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