



New Approaches to Brief Intervention on Substance Use during Pregnancy

*Nouvelles approches d'intervention brève
relativement à la consommation de
substances durant la grossesse*

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ABSTRACT

In Canada, the context for providing brief intervention on substance use during pregnancy is shifting with new opportunities for enhancing discussion of alcohol and other substances, due to the introduction of novel nicotine delivery products (e.g., vaping), the legalization of cannabis, and the crisis in the use of prescription pain medication. The midwifery model of care is very well suited for open, collaborative conversations about substance use, as there are opportunities for ongoing and supportive relationship building throughout pregnancy, labour, birth, and into the postpartum period. The purpose of this paper is to explore the ways in which brief intervention on substance use in the perinatal period can be a key component of midwifery care.

KEYWORDS

alcohol drinking, pregnancy, substance-related disorders, women

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RÉSUMÉ

Au Canada, le contexte de la réalisation d'interventions brèves relativement à la consommation de substances durant la grossesse évolue : de nouvelles occasions se présentent pour améliorer la discussion autour de l'alcool et d'autres substances en raison de l'introduction de nouveaux produits de libération de nicotine (p. ex., les vapoteuses), la légalisation du cannabis et la crise de la consommation d'analgésiques sur ordonnance. Le modèle de soins axé sur la pratique sage-femme se prête très bien à une conversation franche et collaborative sur la consommation de substances, étant donné les possibilités de nouer des relations continues et de soutien tout au long de la grossesse, du travail et de l'accouchement ainsi que durant la période postpartum. L'article a pour but d'examiner les moyens par lesquels une intervention brève durant la période prénatale au sujet de la consommation de substances peut constituer un élément essentiel de soins prodigués par les sages-femmes.

MOTS-CLÉS

Consommation d'alcool, grossesse, troubles liés aux substances, femmes

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INTRODUCTION

Brief interventions are short interactions between individuals and their health care or social service providers, often involving personalized feedback on a health concern and the discussion of possible strategies for health improvement. In practice, interventions can be formal or informal, structured or unstructured, one-time events, or a series of conversations over a period of time. Brief intervention on substance use is an effective strategy for supporting the reduction of harmful and risky substance use.¹⁻⁴ In Canada, brief alcohol intervention is one part of a comprehensive and integrated strategy to prevent fetal alcohol spectrum disorder and to help

individuals stop or reduce the use of alcohol when pregnant.⁵ Organizations such as the World Health Organization, the Substance Abuse and Mental Health Services Administration, and the Centers for Disease Control and Prevention support brief alcohol intervention as a routine element of health care in all primary care settings.¹⁻⁴

The midwifery model of care is well suited for open conversations about substance use, as there are opportunities for ongoing and supportive relationships initiated by midwives throughout pregnancy, labour, and birth, and into the postpartum period.^{6,7} Research has found that brief interventions performed by midwives in the primary care, hospital

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care, and prenatal care settings are cost-efficient and effective in addressing substance use concerns.⁷

Most midwifery research on brief intervention during pregnancy focuses on the use of tobacco and alcohol. Best practice guidelines for counselling on smoking cessation focus on the “five A’s” [Ask, Advise, Assess, Assist, Arrange] or on “ABC” [Ask, offer Brief intervention, and refer to Cessation supports].⁸ Some studies describe additional mechanisms to support brief interventions through home-, telephone-, or computer-based formats as a way of initiating or continuing a dialogue with parents on tobacco use and exposure to second-hand smoke.⁹⁻¹² Midwives are often encouraged to use a variety of screening tools (such as the T-ACE, TWEAK, and AUDIT-C) to facilitate discussions with pregnant women about alcohol and pregnancy.^{7,13,14}

In Canada, the context for providing brief intervention during pregnancy is shifting. New opportunities for enhancing the discussion of alcohol and other substances are emerging due to the introduction of novel nicotine delivery products (such as vaping), the legalization of cannabis, and the crisis in the use of prescription pain medication. Although the health effects of tobacco use during pregnancy are well established, the remaining ambiguity about low levels of alcohol use during pregnancy can create challenges for communication with pregnant women and their support networks. Research on cannabis and pregnancy is beginning to emerge in response to the legalization of cannabis in parts of the United States and Canada, but clear and strong evidence will take time to develop, given the many ways of using cannabis (e.g., smoking,

inhaling, ingesting), the differences among the various types of cannabis (e.g., differing amounts of tetrahydrocannabinol [THC] and cannabidiol [CBD]), and the need for long-term population-based studies to observe possible short- and long-term effects. Pain management and problematic opioid use before and during pregnancy are growing concerns. Thirteen percent of women used prescription opioids in 2017,¹⁵ and hospitalization rates for neonatal opiate withdrawal have been increasing in Canada since 2013.¹⁶

Research has shown that health care providers are often reluctant to ask clients about their substance use, due to fears of jeopardizing their relationships with clients or being perceived as judging and shaming.¹⁷⁻²⁴ And while the majority of clients appreciate the opportunity to discuss their use of alcohol and other substances and to learn about ways to improve their health, there are numerous barriers to having open discussions with them about substance use during pregnancy. Many clients give “socially acceptable” answers or deny substance use because they do not feel comfortable with their health care provider or because they are concerned about becoming involved with the child welfare or justice systems.^{17,25-29}

Prenatal care providers are increasingly aware that substance use is often linked to issues such as mental wellness, gender-based violence and experiences of trauma, and lack of social support. As a result, new approaches to addressing substance use concerns require attention to the factors underlying substance use. To improve care and reduce stigma, health care providers are encouraged

to discuss these factors with all clients, not just those they believe are more likely to use or have problems with substances.^{30,31} The normalizing of substance use provides opportunities for regular and ongoing conversations about it. In midwifery practice, these conversations can include discussions about substance use related to reproductive and sexual health (including breastfeeding, fertility, and contraception), the use of cannabis for conditions such as dysmenorrhea and endometriosis, continued tobacco cessation and the prevention of relapse post partum, and the reduction of children's exposure to second-hand tobacco and cannabis smoke.

This article explores the ways in which midwifery practice and brief interventions on substance use effectively come together to support people in the perinatal period.

METHODS

The goal of the 2-year Dialogue + Action: Women and Substance Use project was improve the capacity of health care and social service providers to discuss the use of alcohol and other substances with clients and clients' support networks in the preconception and perinatal periods. This article is based on findings from two components of the project: [1] national consultations, and [2] a review of the literature, focusing on issues relevant to midwifery practice.

National Consultations

The National Dialogue Sessions (pan-Canadian consultations facilitated by the Centre of Excellence for Women's Health and the University of British Columbia Midwifery Program) were held in 12 provinces and territories over the autumn of 2017 and winter of 2018. Health care and social service providers from professional organizations of physicians, midwives, and nurses, as well as representatives from sexual health clinics and from violence prevention, pregnancy outreach, substance use, and Indigenous health services, were invited to participate in a 2-hour session on how they discuss the use of alcohol, cannabis, tobacco, and opioids with women of child-bearing years and their partners. The session highlighted what was known about existing brief intervention practices in different

regions of Canada and across the eight areas of professional practice identified for the project.

Literature Review

A literature review was conducted to identify [1] existing best practices and current clinical guidelines, [2] information on current professional practices, [3] gaps and barriers to screening and brief intervention, and [4] recommendations and opportunities for midwives, physicians, sexual health care providers, nurses, pregnancy outreach providers, substance use service providers, violence prevention workers, and providers of health care services to Indigenous people. Researchers located academic literature from 2004 and 2017 through EBSCOhost Research Databases and identified grey literature (including unpublished reports, practice guidelines, etc.) through targeted web searches. Three additional searches were done to summarize evidence from academic literature on polysubstance brief interventions, electronic screening, and brief interventions.

DISCUSSION

Aligning Brief Interventions with Midwifery Practice

During the national consultations, health care and social service providers identified principles and practices that they saw as important for supporting individuals with substance use concerns.³² Midwives, in particular, indicated that woman- or person-centred, strengths-based, harm-reducing, trauma-informed, culturally safe, and socially determined health approaches (approaches relevant to brief interventions) were already a part of their practice.

Midwives reported that substance use is routinely discussed with pregnant clients during their initial visit and that, due to longer appointment times and the holistic nature of midwifery practice, there are opportunities for lengthier interactions, for building trust, and for avoiding judgment when substance use is discussed. Midwives indicated that discussions can include conversations about substance use and about other related issues such as depression and anxiety, social support, and experiences of violence and trauma.

Many care providers commented on practice guidelines and approaches that depended on

screening or “case finding.” Some midwives did not feel comfortable using screening tools that used checklists, steps or stages, and flow charts, as those tools did not fit their practice approach or style and were perceived as affecting client-provider rapport; others did not use such tools because they were not validated or appropriate for the group with which they worked. Other midwives found these tools helpful for starting conversations but did not rely on them as the sole way of engaging their clients.

One main limitation of screening tools is their focus on identifying problematic substance use; they do not provide opportunities for discussion about the health effects of substance use in general. Midwives recognized that many people use substances in moderation and might be interested in learning about issues such as whether it is permissible to have a small glass of wine to celebrate an event or to use cannabis to treat nausea. Structured screening tools did not allow midwives to adapt their approach to discussing substance use to the concerns and needs of their clients.

Balancing Clinical and Client Concerns

Brief interventions in substance use can be formal or informal, structured or unstructured, a one-time event, or a series of conversations over a period of time. Asking questions about the type, frequency, and amount of substance use is often a routine part of prenatal care, especially during the first appointment. While some clinical guidelines encourage health care providers to ask questions about substance use at follow-up visits and on an ongoing basis, all health care providers should engage in ongoing discussions about substance use, as circumstances, the use of the substance, and trust in the provider-client relationship often change. Follow-up conversations with clients can be guided by their concerns and interests as well as by clinical concerns.

Emerging research shows that brief interventions can also be expanded to address multiple substances or multiple health outcomes.^{33,34} Because polysubstance use is common, discussing multiple substances at the same time rather than addressing only one substance at a time can lead to interventions that are more effective and engaging. For example, adding a discussion about tobacco

to conversations about alcohol and contraception has been shown to effectively improve outcomes in regard to the use of all three substances.³⁵ A study of preconception counselling found that addressing more than one substance at a time was particularly effective in reducing substance-exposed pregnancies.³⁶ Research has shown that the risks for multiple health outcomes overlap, and a combination approach takes into account how substance use can be connected to other health issues [e.g., sexual health] or other areas of people's lives [e.g., relationships with peers and partners].^{33,37} As well, some risks, such as depression or experiences of violence, may act as barriers to the changing of substance use and require interventions that consider many concerns simultaneously.³⁸

In addition to providing information about substance use, midwives can provide support that focuses on harm reduction and skill building and that draws on individual strengths and interests. Research has shown that many effective brief interventions include feedback about an individual's substance use, information and advice about changing the client's substance use, and assistance in developing strategies and setting goals for changing the client's substance use. As well, flexibility in approaches can help tailor information to specific groups of clients and issues and respond to trends in substance use [e.g., vaping and prescription opioid misuse].

Focusing on the Quality of Conversations

Many midwives worry that if they ask clients about their substance use, especially during pregnancy, the clients will perceive them as judgmental and shaming. Research is indicating that the quality of conversations during brief interventions is important. Approaches that are nonconfrontational, that recognize the social pressures and constraints that pregnant individuals may be experiencing, and that offer appropriate and practical support can actively reduce stigma and shame.^{24,39,40} However, such approaches are not always reflected in practice. A UK study examining midwives' interactions with pregnant women who smoke found that these interactions lack a dialogue and tend to be directive and monotonous.⁴¹ Similarly, a study of South African midwives who intervene with pregnant women who smoke identified three styles of communication:

authoritarian, paternalistic, and client centred. The authors noted that client-centred approaches are preferable, are viewed more positively by women, and encourage the development of a trusting relationship that supports smoking cessation.⁴² Overall, an accepting, nonjudgmental approach greatly contributes to how clients respond to an intervention and removes concerns about labels and stigma.^{9,43}

Researchers are increasingly paying attention to how issues of consent and confidentiality, privacy and comfort during interventions, and flexibility in delivery, amongst other factors, can influence the success of brief interventions.^{9,18,44-46} Many brief interventions are based on the use of motivational interviewing skills; these skills can be learned and applied by midwives. Successful motivational-style interventions include the following elements:

- Requesting permission to discuss the topic
- Summarizing a client's substance use in an accepting, nonjudgmental way
- Asking clients what they like or dislike about using substances
- Discussing clients' life goals
- Discussing how clients might make changes by using their own style, working contexts, skills, and existing relationships and supports⁴⁷⁻⁵¹

Motivational interviewing and other client-centred approaches have been shown to be effective in reducing the harms associated with substance use in a range of populations, including midwifery clients.^{42,52-54}

Recommendations for discussing research evidence with women, using the issue of alcohol and pregnancy as an example, can be found in Table 1.

Engaging Partners and Support Networks

During the pan-Canadian consultations, it was widely noted that clients' partners need to be intentionally brought into conversations about substance use. This aligns with current research, which shows that partners and social networks (e.g., friends, colleagues, and family) are strong influences on substance use during pregnancy. In studies of pregnant women and their male partners, the women report that it is more difficult to reduce or

stop their use of alcohol and other substances when their partners disagree with the situation.⁵⁵⁻⁶¹ Other research shows that male partners feel ignored during prenatal and postpartum discussions about substance use and are not given access to existing health information and resources.^{24,55,62-70}

Research evidence on partner involvement in brief interventions is still emerging, but it is clear that partners can have a significant impact and that many partners would like to help their pregnant partners change their substance use or are interested in making changes themselves. Education, support groups, or spaces for partners (male, female, and gender diverse) to learn more about substance use (for themselves or for their partners) could help build support, promote healthy relationships, and keep work in substance use and prevention from focusing only on women's use.

In practice, strategies for involving partners in brief interventions and support will vary. Sometimes it might be best to work with partners separately, as they will have their own needs and concerns. For the most part, decisions about whether or how to engage partners will depend on the pregnant client and on whether the client feels the partner's involvement to be supportive or whether the client prefers that the partner access services or make changes on their own.

CONCLUSION

This article is based on the Dialogue + Action: Women and Substance Use project (a 2-year initiative that included national consultations and a literature review) and explores the potential of brief interventions in substance use in the perinatal period to be a key component of midwifery care. Brief intervention in substance use is an effective strategy for reducing harmful and risky substance use. Respectful, context-aware, and trust-based relationships allow open and collaborative conversations about how substances fit into daily life. Due to ongoing opportunities for building relationships, the midwifery model of care is well suited for brief interventions in substance use. During the national consultation component of this project, midwives stated that many approaches to brief interventions (such as woman- or person-centred, strengths-based, harm-reducing, trauma-

Table 1: Alcohol and Pregnancy: Discussing Research Evidence with Women

Research Evidence	What to Tell Women
<p>No Safe Time. Exposure to alcohol at any time in a pregnancy can affect fetal brain development. Even from the very start of pregnancy, alcohol can have serious and permanent consequences</p>	<p>There is no safe time to drink alcohol during pregnancy. The baby’s brain is developing throughout pregnancy. In fact, it is best to stop drinking before the pregnancy.</p> <p>(If a client has questions about substance use prior to becoming aware of her pregnancy, talk to her frankly about possible effects as well as protective factors such as nutrition. Reassure her that to help her baby, it is never too late to reduce or stop alcohol or drug use.)</p>
<p>No Safe Kind. Any type of alcohol (beer, coolers, wine, or spirits) can harm the fetus. Some of these drinks have a higher alcohol content per volume than others; what matters is the amount and frequency of alcohol consumed, not the type of drink. Binge drinking and heavy drinking are very harmful to a fetus.</p>	<p>All types of alcohol (beer, coolers, wine, or spirits) can harm the baby. Binge drinking (more than three drinks on a single occasion) and heavy drinking are very harmful.</p>
<p>No Safe Amount. While some studies have shown that there is minimal risk of harm at lower levels of consumption (e.g., 1–2 drinks a week), the potential for misunderstanding standard drink sizes and the impossibility of incorporating other individual risks (e.g., genetics, the effects of nutrition and stress, and other substance use) mean that the safest course of action is to avoid alcohol completely. Animal studies have found a clear dose-response relationship between alcohol use and harmful effects.</p>	<p>It is best not to drink any alcohol during pregnancy. There is no known safe level of alcohol use during pregnancy.</p>

Note: Alcohol use during pregnancy remains controversial in the media, in academic discourse, and amongst women. Although the public is told that it is safest not to drink during pregnancy and that no amount of alcohol is known to be safe to drink during pregnancy, research evidence on the effects of low amounts of alcohol is ambiguous. Health care providers should provide a balanced response to the debate, encourage caution in the absence of clear evidence, and allow women to make their own decisions. “What do you already know about alcohol and pregnancy?” can be an excellent question for starting a discussion of this topic.

informed, culturally safe, and social-determinants-of health approaches] were already part of their practices, which created a ready context for new approaches to brief interventions in substance use in pregnancy. Brief interventions and midwifery care are well paired and aligned to enable ongoing, inclusive, and respectful conversations about substance use, while exploring practical support and strategies that can reduce stigma and improve health and well-being.

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REFERENCES

- Center for Substance Abuse Treatment. Substance Abuse Treatment: Addressing the specific needs of women. Rockville, MD: The Center ; 2009.
- Substance Abuse and Mental Health Services Administration. Systems-level implementation of screening, brief intervention, and referral to treatment. Rockville, MD: The Administration; 2013.
- World Health Organization. Guidelines for the identification and management of substance use and substance use disorders in pregnancy. Geneva, Switzerland: World Health Organization; 2014.
- Centers for Disease Control and Prevention. Planning and implementing screening and brief intervention for risky alcohol use: a step-by-step guide for primary care practices. Atlanta: Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities; 2014.
- Poole N. Fetal alcohol spectrum disorder (FASD) prevention: Canadian perspectives. Ottawa: Public Health Agency of Canada; 2008.
- Reid N, Gamble J, Creedy DK, Finlay-Jones A. Benefits of caseload midwifery to prevent fetal alcohol spectrum disorder: A discussion paper. *Women and Birth*. 2018 .
- Watson HM, Alison , Wilson M, Kerr S, Godwin J. The involvement of nurses and midwives in screening and brief interventions for hazardous and harmful use of alcohol and other psychoactive substances. Geneva, Switzerland; 2009. Contract No.: WHO/HRH/HPN/10-6.
- Eddy A, Prieszky G, Nicoll K, Barker R, Anisy J. ABC by LMC midwives: an innovative intervention to support women to become smoke-free in pregnancy. *New Zealand College of Midwives Journal*. 2015;[51]:37-43.
- Bryce A, Butler C, Gnich W, Sheehy C, Tappin DM. CATCH: development of a home-based midwifery intervention to support young pregnant smokers to quit. *Midwifery*. 2009;25(5):473-82.
- Tappin DM, Lumsden MA, Gilmour WH, Crawford F, McIntyre D, Stone DH, et al. Randomised controlled trial of home based motivational interviewing by midwives to help pregnant smokers quit or cut down. *BMJ (International Edition)*. 2005;331(7513):373-5.
- Mauriello L, Dymont S, Prochaska J, Gagliardi A, Weingrad Smith J. Acceptability and feasibility of a multiple behavior, computer tailored intervention for underserved pregnant women. *J Midwifery Women's Health*. 2011;56(1):75-80.
- Chertok IRA, Archer SH. Evaluation of a midwife and nurse delivered 5 A's prenatal smoking cessation program. *Journal of Midwifery & Women's Health*. 2015;60(2):175-81.
- Burns E, Gray R, Smith LA. Brief screening questionnaires to identify problem drinking during pregnancy: a systematic review. *Addiction*. 2010;105(4):601-14.
- Payne JM, Watkins RE, Jones HM, Reibel T, Mutch R, Wilkins A, et al. Midwives' knowledge, attitudes and practice about alcohol exposure and the risk of fetal alcohol spectrum disorder. *BMC Pregnancy Childbirth*. 2014;14(1):1-26.
- Canadian Centre on Substance Use and Addiction. Prescription opioids. Ottawa, ON: The Centre; 2017.
- Canadian Institute for Health Information. Opioid-related harms in Canada. Ottawa, ON: The Institute; 2017.
- Poole N, Schmidt RA, Green C, Hemsing N. Prevention of fetal alcohol spectrum disorder: current Canadian efforts and analysis of gaps. *Subst Abuse*. 2016 May 5;10 [Suppl 1]:1-11.
- Derges J, Kidger J, Fox F, Campbell R, Kaner E, Hickman M. Alcohol screening and brief interventions for adults and young people in health and community-based settings: a qualitative systematic literature review. *BMC Public Health*. 2017;17:1-12.
- Johansson K, Åkerlind I, Bendtsen P. Under what circumstances are nurses willing to engage in brief alcohol interventions? A qualitative study from primary care in Sweden. *Addict Behav*. 2005;30(5):1049-53.

20. Lock CA. Alcohol and brief intervention in primary health care: What do patients think? *Prim Health Care Res Dev.* 2004;5[2]:162-78.
21. Pilnick A, Coleman T. Death, depression and “defensive expansion”: closing down smoking as an issue for discussion in GP consultations. *Soc Sci Med.* 2006;62[10]:2500-12.
22. Flemming K, Graham H, McCaughan D, Angus K, Sinclair L, Bauld L. Health professionals' perceptions of the barriers and facilitators to providing smoking cessation advice to women in pregnancy and during the post-partum period: a systematic review of qualitative research. *BMC Public Health.* 2016;16[1]:1-13.
23. Stead M, Parkes T, Nicoll A, Wilson S, Burgess C, Eadie D, et al. Delivery of alcohol brief interventions in community-based youth work settings: exploring feasibility and acceptability in a qualitative study. *BMC Public Health.* 2017;17:1-13.
24. Kennedy J. Barriers to success: smoking cessation conversations. *Brit J Midwifery.* 2017;25[8]:498-504.
25. Eichler A, Grunitz J, Grimm J, Walz L, Raabe E, Goecke TW, et al. Did you drink alcohol during pregnancy? Inaccuracy and discontinuity of women's self-reports: on the way to establish meconium ethyl glucuronide [EtG] as a biomarker for alcohol consumption during pregnancy. *Alcohol.* 2016;54:39-44.
26. Muggli E, Cook B, O'Leary C, Forster D, Halliday J. Increasing accurate self-report in surveys of pregnancy alcohol use. *Midwifery.* 2015;31[3]:e23-8.
27. Jacobs L, Jacobs J. “Bad” mothers have alcohol use disorder: moral panic or brief intervention? *Gender Behav.* 2014;12[3]:5971-9.
28. Poole N, Isaac B. *Apprehensions: barriers to treatment for substance-using mothers.* Vancouver, BC: Centre of Excellence for Women's Health; 2001.
29. Boyd SC, Marcellus L, editors. *With child: substance use during pregnancy: a woman-centred approach.* Winnipeg, MB: Fernwood Publishing; 2007.
30. Substance Abuse and Mental Health Services Administration. *Substance abuse treatment: addressing the specific needs of women.* Rockville, Maryland: US Department of Health and Human Services; 2009.
31. Wright TE, Terplan M, Ondersma SJ, Boyce C, Yonkers K, Chang G, et al. The role of screening, brief intervention, and referral to treatment in the perinatal period. *American Journal of Obstetrics & Gynecology.* 2016;215[5]:539-47.
32. Nathoo T, Poole N, Wolfson L, Schmidt R, Hemsing N, Gelb K. *Doorways to conversation: brief intervention on substance use with girls and women.* Vancouver, BC: Centre of Excellence for Women's Health; 2018.
33. Coups EJ, Gaba A, Orleans CT. Physician screening for multiple behavioral health risk factors. *American Journal of Preventive Medicine.* 2004;27[2,Suppl]:34-41.
34. Tanner-Smith EE, Steinka-Fry KT, Hennessy EA, Lipsey MW, Winters KC. Can brief alcohol interventions for youth also address concurrent illicit drug use? Results from a meta-analysis. *Journal of Youth and Adolescence.* 2015;44[5]:1011-23.
35. Velasquez MM, Ingersoll KS, Sobell MB, Floyd RL, Sobell LC, von Sternberg K. A dual-focus motivational intervention to reduce the risk of alcohol-exposed pregnancy. *Cognitive and Behavioral Practice.* 2010;17[2]:203-12.
36. Parrish D, Sternberg K, Velasquez M, Cochran J, Sampson M, Mullen P. Characteristics and factors associated with the risk of a nicotine exposed pregnancy: Expanding the CHOICES preconception counseling model to tobacco. *Maternal & Child Health Journal.* 2012;16[6]:1224-31.
37. Funderburk JS, Maisto SA, Sugarman DE. Brief alcohol interventions and multiple risk factors in primary care. *Substance Abuse.* 2007;28[4]:93-105.
38. Katz KS, Blake SM, Milligan RA, Sharps PW, White DB, Rodan MF, et al. The design, implementation and acceptability of an integrated intervention to address multiple behavioral and psychosocial risk factors among pregnant African American women. *BMC Pregnancy & Childbirth.* 2008;8:22-.
39. Reardon R, Grogan S. Talking about smoking cessation with pregnant women: Exploring midwives' accounts. *British Journal of Midwifery.* 2016;24[1]:38-42.
40. Abrahamsson A, Springett J, Karlsson L, Håkansson A, Ottosson T. Some lessons from Swedish midwives' experiences of approaching women smokers in antenatal care. *Midwifery.* 2005;21[4]:335-45.
41. Ebert LM, Freeman L, Fahy K, van der Riet P. Midwives' interactions with women who smoke in pregnancy. *British Journal of Midwifery.* 2009;17[1]:24-9.
42. Everett-Murphy K, Pajmans J, Steyn K, Matthews C, Emmelin M, Peterson Z. Solders, carers or friends: South African midwives' contrasting styles of communication when discussing smoking cessation with pregnant women. *Midwifery.* 2011;27[4]:517-24.
43. World Health Organization. *The ASSIST linked brief intervention for hazardous and harmful substance use.* Geneva, Switzerland: World Health Organization; 2010.
44. Stead M, Parkes T, Nicoll A, Wilson S, Burgess C, Eadie D, et al. Delivery of alcohol brief interventions in community-based youth work settings: exploring feasibility and acceptability in a qualitative study. *BMC Public Health.* 2017;17[1]:357.
45. Khadjesari Z, Freemantle N, Linke S, Hunter R, Murray E. Health on the web: randomised controlled trial of online screening and brief alcohol intervention

- delivered in a workplace setting. *PLoS One*. 2014;9(11):1-9.
46. Fahy SJ, Cooper S, Coleman T, Naughton F, Bauld L. Provision of smoking cessation support for pregnant women in England: results from an online survey of NHS Stop Smoking Services for Pregnant Women. *BMC Health Services Research*. 2014;14(1):107-.
 47. Grossberg P, Halperin A, Mackenzie S, Gisslow M, Brown D, Fleming M. Inside the physician's black bag: Critical ingredients of brief alcohol interventions. *Substance Abuse*. 2010;31(4):240-50.
 48. Humeniuk R, Henry-Edwards S, Ali R, Poznyak V, Monteiro M. The ASSIST-linked brief intervention for hazardous and harmful substance use: manual for use in primary care. Geneva: World Health Organization; 2010.
 49. Urquhart C, Jasiura F. Liberation! Helping women quit smoking: a brief tobacco intervention guide. Vancouver, BC: Centre of Excellence for Women's Health; 2012.
 50. Werner JJ, Lawson PJ, Panaite V, Step MM, Flocke SA. Comparing primary care physicians' smoking cessation counseling techniques to motivational interviewing. *Journal of Addiction Medicine*. 2013;7(2):139-42.
 51. Barnett E, Moyers TB, Sussman S, Smith C, Rohrbach LA, Sun P, et al. From counselor skill to decreased marijuana use: Does change talk matter? *Journal of Substance Abuse Treatment*. 2014;46(4):498-505.
 52. Raymond J, Clements V. Motivational interviewing for midwives: creating 'enabling' conversations with women. *MIDIRS Midwifery Digest*. 2013;23(4):435-40.
 53. Jimenez-Muro A, Nerin I, Samper P, Marqueta A, Beamonte A, Gargallo P, et al. A proactive smoking cessation intervention in postpartum women. *Midwifery*. 2013;29(3):240-5.
 54. Hassel H, von Rahden O. Training for midwives in motivational interviewing. *Journal of Public Health*. 2007;15(6):441-5.
 55. McBride N. Paternal involvement in alcohol exposure during pre-conception and pregnancy. *Australian Nursing & Midwifery Journal*. 2015;22(10):51-.
 56. Ortega G, Castellà C, Martín-Cantera C, Ballvé JL, Díaz E, Saez M, et al. Passive smoking in babies: The BIBE study [Brief Intervention in babies. Effectiveness]. *BMC Public Health*. 2010;10(1):772-81.
 57. Wulp NY, Hoving C, Vries H. Correlates of partner support to abstain from prenatal alcohol use: a cross-sectional survey among Dutch partners of pregnant women. *Health & Social Care in the Community*. 2016;24(5):614-22.
 58. Pollak KI, Baucom DH, Peterson BL, Stanton S, McBride CM. Rated helpfulness and partner-reported smoking cessation support across the pregnancy-postpartum continuum. *Health Psychology*. 2006;25(6):762-70.
 59. Koshy P, Mackenzie M, Tappin D, Bauld L. Smoking cessation during pregnancy: The influence of partners, family and friends on quitters and non-quitters. *Health & Social Care in the Community*. 2010;18(5):500-10.
 60. Astley SJ, Bailey D, Talbot C, Clarren SK. Fetal alcohol syndrome (FAS) primary prevention through fas diagnosis: II. A comprehensive profile of 80 birth mothers of children with FAS. *Alcohol Alcohol*. 2000;35(5):509-19.
 61. Sahebi Z, Kazemi A, Loripoor Parizi M. The relationship between husbands' health belief and environment tobacco smoke exposure among their pregnant wife. *Journal of Maternal-Fetal & Neonatal Medicine*. 2017;30(7):830-3.
 62. van der Wulp NY, Hoving C, de Vries H. A qualitative investigation of alcohol use advice during pregnancy: experiences of Dutch midwives, pregnant women and their partners. *Midwifery*. 2013;29(11):e89-e98.
 63. Lagan BM, Casson K. Support needs of women who continue to smoke in pregnancy. *British Journal of Midwifery*. 2010;18(4):229-35.
 64. McBride N, Johnson S. Fathers' role in alcohol-exposed pregnancies: systematic review of human studies. *American Journal of Preventive Medicine*. 2016;51(2):240-8.
 65. Winickoff JP, Healey EA, Regan S, Park ER, Cole C, Friebely J, et al. Using the postpartum hospital stay to address mothers' and fathers' smoking: the NEWS Study. *Pediatrics*. 2010;125(3):518-25.
 66. Yang I, Hall L. Smoking cessation and relapse challenges reported by postpartum women. *MCN Am J Matern Child Nurs*. 2014;39(6):375-80.
 67. Czeizel AE, Czeizel B, Vereczkey A. The participation of prospective fathers in preconception care. *Clin Med Insights Reprod Health*. 2013;7:1-9.
 68. Bottorff JL, Oliffe JL, Kelly MT, Greaves L, Johnson JL, Ponik P, et al. Men's business, women's work: gender influences and fathers' smoking. *Social Health Illn*. 2010;32(4):583-96.
 69. Oliffe JL, Bottorff JL, Sarbit G. Supporting fathers' efforts to be smoke-free: program principles. *Can J Nurs Res*. 2012;44(3):64-82.
 70. Benoit C, Magnus S. "Depends on the father": defining problematic substance use during pregnancy and early parenthood. *Can J Sociol*. 2017;42(4):379-402.

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Resources for Practice

Brief Intervention on Substance Use with Girls and Women: 50 Ideas for Dialogue, Skill Building, and Empowerment

[Ideas for health care providers who work with girls and women in the preconception and perinatal periods]
Available from: www.bccewh.bc.ca

Which Woman Drinks Alcohol at a Risky Level?

[A two-page brochure for medical staff that provides practical motivational interviewing strategies for talking with women about their alcohol use]
Available from: <http://skprevention.ca>

Alcohol and Pregnancy

[A “Share with Women” resource from the Journal of Midwifery & Women’s Health]
Available from: <https://doi.org/10.1111/jmwh.12286>

Alcohol Use and Pregnancy Consensus Clinical Guidelines

[National standards of care on alcohol brief interventions and counselling for pregnant women and women of childbearing age]
Available from: <http://sogc.org>

Risks of Cannabis on Fertility, Pregnancy, Breastfeeding and Parenting

[A summary of current knowledge about the effects of cannabis on health, learning, relationships, fertility, pregnancy, and children]
Available from: www.beststart.org

The Right Time. The Right Reasons: Dads Talk about Reducing and Quitting Smoking

[A booklet about fathers’ experiences of reducing and quitting smoking]
Available from: <http://facet.ubc.ca>

Clinical Management of Opioid Use Disorder in Pregnant Women

[An overview of care principles and treatment options specifically pertaining to pregnant women]
Available from: www.perinatalservicesbc.ca

Opioids and neonatal abstinence syndrome infographics

[Infographics to promote discussion about perinatal substance use]
Available from: <http://www.nationalperinatal.org/Infographics>