

Current Alcohol Screening and Brief Intervention Practices among Canadian Midwives

Pratiques actuelles des sages-femmes canadiennes en matière de dépistage de l'alcool et d'interventions brèves

Rose A. Schmidt, MPH, Kyla Kaminsky, MA, Courtney R. Green, PhD, and Jocelynn L. Cook, PhD, MBA

ABSTRACT

Alcohol use during pregnancy is associated with multiple adverse health outcomes for the woman and fetus, including stillbirth, miscarriage, low birth weight, and risk of fetal alcohol spectrum disorder (FASD). Midwives are uniquely situated to routinely engage in conversations about alcohol use with women that are strength based, health promoting, and focused on empowerment. This report is a secondary analysis of the midwifery responses ($n = 196$) from a larger data set of health care providers collected by the Society of Obstetricians and Gynaecologists of Canada (SOGC) in an online survey in October and November 2017. The aim of the survey was to identify current knowledge, attitudes, practices, and beliefs among Canadian health care providers on screening, brief intervention, and referral (SBIR) for women's alcohol use. Most midwives (97%) ask women about alcohol use during pregnancy; however, only about half practice brief intervention (57%). Perceived confidence in conducting brief intervention was positively associated with its practice [$t [193] = 5.31, p < .0001$]. Improving skills and confidence to provide brief support about alcohol use during pregnancy using evidence-informed approaches will strengthen this practice in Canada.

KEYWORDS

alcohol consumption, alcohol-exposed pregnancies, brief intervention, fetal alcohol spectrum disorder, midwifery, SBIR

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RÉSUMÉ

La consommation d'alcool durant la grossesse est associée à de multiples effets indésirables sur la santé de la femme et du fœtus, y compris la mortinaissance, l'avortement spontané, l'insuffisance de poids à la naissance et le risque de trouble du spectre de l'alcoolisation fœtale (TSAF). Les sages-femmes sont particulièrement bien placées pour avoir régulièrement avec les femmes des conversations sur la consommation d'alcool qui reposent sur les forces, promeuvent la santé et sont axées sur l'autonomisation. Le présent rapport constitue une analyse secondaire des réponses des sages-femmes ($n = 196$) provenant d'un plus vaste ensemble de données sur les fournisseurs de soins que la Société des obstétriciens et gynécologues du Canada (SOGC) a recueilli lors d'un sondage en ligne effectué en octobre et novembre 2017. Ce dernier avait pour but de repérer les connaissances, les attitudes, les pratiques et les opinions actuelles des fournisseurs de soins canadiens relativement au dépistage, aux interventions brèves et à l'orientation (DIBO) entourant la consommation d'alcool par les femmes. La plupart des sages-femmes (97 p. 100) interrogent les femmes au sujet de la consommation d'alcool durant la grossesse. Cependant, seulement environ la moitié (57 p. 100) effectuent des interventions brèves. La confiance perçue à l'égard de l'intervention brève a été positivement associée à sa pratique [$t [193] = 5,31, p < 0,0001$]. Celle-ci sera renforcée au Canada par l'amélioration des compétences et de la confiance entourant la prestation d'un bref soutien au moyen d'approches fondées sur des données probantes.

MOTS-CLÉS

consommation d'alcool, grossesses exposées à l'alcool, intervention brève, trouble du spectre de l'alcoolisation fœtale, pratique sage-femme, DIBO

Cet article a été évalué par un comité de lecture.

INTRODUCTION

Girls and young women in Canada are using alcohol in increasingly risky ways. While the prevalence of alcohol use remains higher among boys and men than among women and girls, the gender gap is narrowing, particularly in regard to young Canadians.¹ In 2016, the overall rates of heavy drinking among Canadians older than 12 years were 14% for women and 24% for men. Among young women aged 18 to 24 years, however, rates of heavy drinking were higher than the average [23% of young women compared with 34% of young men].¹ This high prevalence of risky alcohol use among young women is concerning. Alcohol use during pregnancy is associated with multiple adverse health effects for the woman and her fetus, including stillbirth, miscarriage, low birth weight, and risk of fetal alcohol spectrum disorder [FASD].²⁻⁴ The current Canadian guidelines recommend abstinence from alcohol during pregnancy, as no safe amount of alcohol during pregnancy has been established.^{5,6}

Midwifery's holistic approach, rooted in trust and relationship building, is well suited for open conversations about substance use. In Canada, discussing alcohol use with women is part of a comprehensive strategy to prevent FASD and to help women reduce or quit alcohol use during pregnancy. In the Public Health Agency of Canada's FASD Four-part Model of Prevention, the second level of prevention recommends discussing alcohol use and overlapping issues such as mental wellness and contraception with all women of reproductive age.³ One way to have these conversations is to use structured brief interventions [BI], short counselling interventions that have been shown to be low-cost alternatives to longer alcohol treatment.² Brief interventions typically include personal feedback, goal setting, and behaviour modification, and sessions can be as brief as five minutes.⁸

There is evidence that supports the effectiveness of BI in reducing alcohol use among pregnant women.⁸⁻¹¹ In a randomized controlled trial with pregnant women, those who received BIs were five times more likely to abstain from alcohol by the third trimester than women in the control group were.¹¹ Best practice guidelines encourage midwives to engage in BIs to increase clients' self-efficacy and

knowledge of the effects and benefits of reducing substance use.¹² The practicing of a BI is often preceded by the identifying of the client's alcohol use. Alcohol use in pregnancy can be identified with formal screening tools, but can also be identified through informal brief supportive discussions with women.⁶ Midwives are uniquely situated not only to identify alcohol-use problems, but also to routinely engage women and girls in strength-based, health-promoting, and empowerment-focused conversations about alcohol use.

We explored midwives' current knowledge, attitudes, practices, and beliefs about alcohol screening and BI for alcohol use during pregnancy, and investigated which beliefs were related to practicing BIs with women. For this survey, BI was defined as time-limited motivational counselling strategies aimed at helping pregnant women reduce at-risk alcohol use.

METHODS

This report is a secondary analysis of midwife responses from a larger data set of health care providers that was collected through a survey by the Society of Obstetricians and Gynaecologists of Canada [SOGC]. The online survey, comprised of 166 questions, was developed and finalized by an expert committee, and was informed by a comprehensive literature review. The aim of the survey was to identify current knowledge, attitudes, practices, and beliefs among Canadian health care providers regarding SBIR [screening, brief intervention, and referral] for women's alcohol use. The survey was disseminated to Canadian midwives in both English and French in October and November 2017 through the Canadian Association of Midwives and SOGC membership electronic mailing lists. Two email reminders were sent after the initial recruitment email. The study received ethics approval from the Ottawa Health Science Network Research Ethics Board based at the Ottawa Hospital.

A frequency analysis was conducted. Most of the knowledge, attitudes, practices, and beliefs were measured with a 5-point Likert-type scale [5 = strongly agree, 1 = strongly disagree, etc.], and mean scores were calculated. Independent sample t-tests were used to compare mean ratings of perceptions

Most midwives did not believe that asking clients about alcohol use would negatively affect their relationship with them.

about, and confidence in, practicing BI, between midwives who reported that they conducted BIs and by those who did not. An alpha level of .05 was used for all statistical tests. The sample size did not allow for comparison of knowledge and behaviour across demographic variables, and as all but one [99.5%] of the respondents reported their gender as “female,” no gender-disaggregated data are reported. Statistical analyses were conducted with IBM SPSS Statistics version 25.

RESULTS

Participants

In total, 196 survey responses were received from midwives [n = 196]. In 2017, 1,690 midwives were registered with the Canadian Association of Midwives,¹³ and 12% of midwives in Canada responded to the survey. The majority of respondents were between 25 and 44 years old, and almost half [n = 82 [42%]] had been practicing for fewer than 5 years [Table 1]. Half of the respondents [n = 99 [51%]] practiced in Ontario; an additional quarter [n = 47 [24%]] practiced in British Columbia. Table 2 shows response rates by province.

Current Practice

The majority of midwives responding to the survey said that they asked every client [n = 190 [97%]] about alcohol use during pregnancy. Eighty-seven percent [n = 107] of midwives said they asked women about alcohol use during their first visit, and 73% [n = 143] said they would bring up the subject again if they were concerned that alcohol was being consumed by the client. Although most midwives [n = 185 [95%]] recommended complete abstinence from alcohol during pregnancy, 15% [n = 28] of the

sample agreed with the statement, “A glass of beer or wine in moderation is okay,” which is inconsistent with Canada’s Low Risk Drinking Guidelines and the SOGC’s Alcohol Use and Pregnancy Consensus Clinical Guidelines.^{5,6} Just over half of the respondents [n = 108 [55%]] reported ever referring pregnant women to treatment or harm reduction services. Over half of the midwives [n = 107 [55%]] said they used SOGC’s Clinical Guidelines; 36% [n = 71] said they were familiar with them but did not currently follow them.

Most midwives responding to the survey did not use structured screening questionnaires with pregnant women. Only one respondent [0.5%] said they “always” used a screening questionnaire with pregnant women, 9% [n = 24] said they “frequently” used them, and 8% [n = 24] said they “sometimes” used them. Only 30% [n = 24] of respondents said they had enough time in their practice to use a structured screening alcohol questionnaire. Those who did use structured tools most frequently used the TWEAK [Tolerance, Worry, Eye-opener, Amnesia, Cut down] [n = 34 [17%]] or T-ACE [Tolerance, Annoy, Cut down, Eye-opener] [n = 24 [12%]] screening tools.

Midwives were asked an open-ended question about why they did not use structured screening tools. Of those who responded, almost a quarter [n = 28 [22%]] said they had conversations with women or used their own questions to talk to women about alcohol use. For example, one midwife stated, “I find talking with my clients is a more useful way of screening.” Many responding midwives also stated that screening tools were inconsistent with their practice or inappropriate for the population they work with. [“I work with Inuit women, and I find it more culturally appropriate to screen by casual

Table 1. Characteristics of Midwives Responding to the Online Survey

Characteristic		n [%]
Gender	Female	194 [99.5%]
	Male	1 [0.5%]
Age in years	< 25	2 [1%]
	25-34	69 [35%]
	35-44	75 [39%]
	45-54	34 [17%]
	55-64	14 [7%]
	> 65	1 [1%]
Years practicing	<5	82 [42%]
	6-10	55 [28%]
	11-20	41 [21%]
	>20	16 [8%]
Type of practice	Group	130 [67%]
	Partnered	55 [28%]
	Solo	19 [10%]
Setting	Community	54 [28%]
	Hospital	37 [19%]
	Academic	1 [1%]
	Public Health	1 [1%]

conversation.”] Other midwives said they did not use a screening tool because [1] they were unaware of screening tools [n = 27 [21%]], [2] they thought screening tools were inconvenient to use [n = 10 [8%]], or [3] they felt screening was unnecessary with the population they worked with [n = 38 [30%]], most often because of low alcohol use or a feeling that women would deny use .

Although most midwives asked clients about alcohol use, BI was practiced by only a small proportion. Only 57% [n = 111] said they ever conducted BIs with pregnant women. Of those who did, 62% [n = 69] said they conducted BIs when any alcohol use was reported, 23% [n = 26] when at-risk drinking was suspected, and 14% [n = 16] when at-risk drinking was identified. Midwives’ belief in the effectiveness of BI, their belief that it was their responsibility to address alcohol use among pregnant women, and the belief that they could

motivate women to decrease their alcohol use were not significantly associated with the provision of BIs. However, midwives’ confidence in their ability to provide BI was significantly associated with its provision, and those midwives who reported ever conducting BIs had a higher mean self-reported confidence than those who did not conduct BIs [t [193] = 5.31, p < .0001] (Table 3).

Participants’ Beliefs and Opinions

Most midwives believed that it was their responsibility to identify alcohol use among pregnant women [M = 4.21 [out of 5], SD = .77] and to address alcohol use during pregnancy [M = 4.34, SD = .77]. Most did not believe that asking clients about alcohol use would negatively affect their relationship with them; 87% of midwives either disagreed or strongly disagreed that it might jeopardize the relationship [M = 1.91, SD = .80]. The

Table 2. Response Rate by Province and Territory

Province	Responses	Total Registered Midwives	Response Rate
Ontario	99	877	11%
British Columbia	47	361	13%
Quebec	29	217	13%
Alberta	12	115	10%
Manitoba	4	82	5%
Nunavut	2	5	40%
Nova Scotia	1	9	11%
Saskatchewan	0	15	0%
Northwest Territories	0	5	0%
New Brunswick	0	3	0%

Table 3. Factors Associated with Providing Brief Intervention

	Provide Brief Intervention			
	No (n = 84)	Yes (n = 111)		
	M (SD)	M (SD)	t	p Value
It is my responsibility to address alcohol use in pregnant women.	4.36 [0.86]	4.33 [0.71]	-.21	0.832
Brief interventions are effective in decreasing alcohol consumption.	3.30 [0.62]	3.46 [0.70]	1.69	0.094
I can motivate women to decrease their alcohol use.	3.87 [0.63]	3.71 [0.75]	1.58	0.115
I am confident in my ability to provide brief intervention.	2.81 [0.91]	3.46 [0.80]	5.31*	< .0001

M, mean ; SD, standard deviation; t, t-value

*Statistically significant at $p < .05$

respondents believed that women knew the risks of alcohol use during pregnancy [M = 3.80, SD = .80] and that women were motivated to reduce alcohol use during pregnancy [M = 4.32, SD = .64].

A similar proportion of midwives agreed and disagreed that women will be honest about the frequency of alcohol use when asked about it [M = 2.95, SD = .86], and slightly more disagreed that women would be honest about the amount of alcohol they used [M = 2.91, SD = .84]. Fifty-four percent of

midwives did not think that structured screening questionnaires were effective at identifying problematic drinking [M = 3.13, SD = .69]. Only 30% (n = 58) agreed that screening questionnaires were effective in identifying problematic drinking; no respondents strongly agreed. Midwives did not feel as if there were significant treatment resources they could offer to pregnant women [M = 2.96, SD = .90]. Table 4 details midwives' beliefs about screening and BI.

Midwifery's holistic approach, rooted in trust and relationship building, is well suited for open conversations about substance use.

DISCUSSION

The results of the survey indicate that nearly all Canadian midwives ask pregnant women about alcohol use during pregnancy, but fewer Canadian midwives conduct BIs and make referrals to treatment and harm reduction services. Previous studies in Norway,¹⁴ Australia,¹⁵ Sweden,¹⁶ and the Netherlands Holland¹⁷ have similarly found that most midwives ask pregnant women about alcohol use during initial consultation; however, follow-up and ongoing consultation is not universally practiced.^{14,15,17} The results of the survey also support previous research findings indicating that women are typically asked about alcohol use at the beginning of pregnancy.^{16,18} In a Norwegian study, many midwives indicated that they routinely held conversations with pregnant women about alcohol use instead of using a structured questionnaire.¹⁴ Similarly, midwives in our study did not report using structured screening tools, and only a small percentage agreed that screening questionnaires were effective in identifying problematic drinking. There is some evidence that midwives in our sample may have conversations with women about alcohol use instead of using structured screening tools, but further studies are needed to make a conclusive statement. For many women, BIs and support for alcohol use do not need to be lengthy to be effective, and the simple act of asking women about their alcohol use may lead to a reduction in that use.^{19,20} While the majority of studies on BI report improvements in the intervention group [i.e., those having BIs], several studies report a similar decrease in alcohol use in both the intervention and control groups.² Even in studies in which there was a significant difference in the intervention group, the control group often

also had a considerable reduction in alcohol use as well,²¹ which may indicate that structured screening tools and formal BIs in this clinical scenario are unnecessary and that discussing alcohol use with pregnant women is sufficient to elicit changes in behaviour related to alcohol use.

The administering of BIs (e.g., BIs based on motivational interviewing) is associated with reduced alcohol use among pregnant women.^{7,22} The results of this survey—similar to the results of previous studies—confirm that midwives' perceived confidence in their ability to conduct BIs is positively associated with the midwives' BI practice.^{12,14,23} Increased education and knowledge about BIs is associated with an increased likelihood of midwives' delivering BIs.^{8,12} As perceived confidence is an important factor in practicing BIs, training to support communication skills and to increase self-efficacy in conducting BI brief education could strengthen this practice among Canadian midwives. Ongoing education to disseminate information on best practices and the benefits and effectiveness of BIs may increase their use.^{12,14}

Although most midwives who answered the survey indicated that they recommend complete abstinence from alcohol during pregnancy, 15% agreed that “a glass of beer or wine in moderation is okay.” This is inconsistent with current Canadian guidelines, including Canada's Low Risk Drinking Guidelines and the SOGC's Alcohol Use and Pregnancy Consensus Clinical Guidelines, which recommend complete abstinence during pregnancy.^{5,6} As there is no established safe amount of alcohol use during pregnancy, incorporating the current guidelines of abstinence into professional development activities for midwives is important.^{5,6}

Table 4. Beliefs Related to Screening and Brief Intervention

Belief Statement	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)	
	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	<i>M (SD)</i>
Women know about the risks of alcohol use in pregnancy.	1 [1%]	17 [9%]	29 [15%]	121 [62%]	27 [14%]	3.8 [0.80]
Women are motivated to reduce their use of alcohol during pregnancy.	0 [0%]	0 [0%]	19 [10%]	95 [49%]	81 [42%]	4.32 [0.64]
I am confident in my ability to recommend abstaining from alcohol use during pregnancy.	1 [1%]	6 [2%]	28 [14%]	110 [56%]	50 [26%]	4.04 [0.76]
There are often more pressing issues than alcohol use for me to deal with when caring for pregnant women.	31 [16%]	79 [41%]	64 [33%]	17 [9%]	4 [2%]	2.41 [0.93]
I might jeopardize my relationship with women if I ask about alcohol.	57 [29%]	112 [57%]	15 [8%]	9 [5%]	2 [1%]	1.91 [0.80]
Women will be honest about their frequency of alcohol use.	5 [3%]	59 [30%]	74 [38%]	54 [28%]	3 [2%]	2.95 [0.86]
Women will be honest about the amount of alcohol they consume.	4 [2%]	64 [33%]	76 [39%]	48 [25%]	3 [2%]	2.91 [0.84]
Screening questionnaires are effective in identifying problematic drinking.	2 [1%]	29 [15%]	106 [54%]	58 [30%]	0 [0%]	3.13 [0.69]
I am confident in my ability to use alcohol screening questionnaires.	3 [2%]	34 [17%]	65 [33%]	89 [46%]	4 [2%]	3.29 [0.83]
Guidelines on screening and counselling for alcohol use are difficult to incorporate in practice.	5 [3%]	88 [45%]	75 [39%]	25 [13%]	2 [1%]	2.65 [0.78]
There are sufficient educational resources related to alcohol use I can provide to women.	0 [0%]	20 [10%]	51 [26%]	104 [53%]	20 [10%]	3.64 [0.80]
There are sufficient treatment resources related to alcohol use or dependency I can provide to women.	9 [5%]	50 [26%]	82 [42%]	48 [25%]	6 [3%]	2.96 [0.90]

M, mean; SD, standard deviation

LIMITATIONS

A limitation of this survey is its low response rate, which may affect the generalizability of the results. In 2017, there were 1,690 registered midwives in Canada,¹³ and the survey's responses represented approximately 12% of all midwives in Canada. The response rates of similar survey studies in Norway, Australia, and Sweden were 52%, 68%, and 55%, respectively.¹⁴⁻¹⁶ The survey's sample may overrepresent those midwives who are already using BI and are knowledgeable about alcohol use in pregnancy, as their interest and awareness may have motivated them to respond. Also, the low response rate did not allow for any comparison of behaviours or beliefs by demographic characteristics [such as region].

CONCLUSION

Most midwives who responded to the survey speak with their clients about alcohol use during pregnancy; however, only about half of them practice brief intervention. Evidence-informed approaches, greater confidence, and improved necessary skills would strengthen the practice in Canada of brief interventions about alcohol use during pregnancy.

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AUTHOR BIOGRAPHIES

Rose A. Schmidt is the Research Manager at the Centre of Excellence for Women's Health in Vancouver, BC (Hosted by BC Women's Hospital + Health Centre), and is a member of the Canada FASD Research Network.

Kyla Kaminsky is a Research Assistant at the Society of Obstetricians and Gynaecology of Canada.

Courtney R. Green is the Manager of Medical Research and Guidelines at the Society of Obstetricians and Gynaecology of Canada.

Jocelynn L. Cook is Chief Scientific Officer of the Society of Obstetricians and Gynaecology Canada, a Research Lead with the Canada FASD Research Network, and is affiliated with the University of Ottawa.

BIOGRAPHIES DES AUTEURS

Rose A. Schmidt est gestionnaire de la recherche du centre d'excellence pour la santé des femmes, de Vancouver, en Colombie-Britannique (hébergé par le centre de santé et l'hôpital pour les femmes de la Colombie-Britannique) et est membre du Réseau de recherche CanFASD.

Kyla Kaminsky est adjointe de recherche de la Société des obstétriciens et gynécologues du Canada.

Courtney R. Green est gestionnaire de la recherche médicale et des directives cliniques de la Société des obstétriciens et gynécologues du Canada.

Jocelynn L. Cook est affiliée à l'Université d'Ottawa, directrice des affaires scientifiques de la Société des obstétriciens et gynécologues du Canada et chef de la recherche du Réseau de recherche CanFASD.