

Are Ontario Midwives Prepared to Respond to Their Clients' Sexual Concerns? A Survey of Attitudes, Perceived Training, Knowledge, and Comfort

Ali McCallum, BHSc, MSc(HQ), RM; Alyssa Byers-Heinlein, HBSc, RM; E. Sandra Byers, PhD; and Caroline Pukall, PhD

The physical, hormonal, psychological, social, and cultural changes that accompany pregnancy and childbirth can and do influence sexual functioning.

ABSTRACT

Objective: Sexual health and well-being are vital components of overall health, quality of life, and relationship satisfaction and stability. Midwives have the potential to play an important role in addressing their clients' sexual health concerns and promoting their sexual health. The goal of this study was to assess the attitudes, perceptions of training, knowledge, and comfort of midwives registered in Ontario with respect to addressing their clients' sexual concerns.

Methods: We used a cross-sectional online survey [45 mins] of registered midwives in Ontario. An email containing information about the study and a link to the survey was sent to all midwives registered in Ontario in 2016 and members of the Association of Ontario Midwives [AOM] as part of the weekly "Midwife Memo" from the AOM, and was posted on a Canadian midwifery Facebook group. Participants were asked about their training and practice, attitudes toward their role in addressing their clients' sexual concerns, perception of quality of sexual health training, and sexual knowledge and comfort.

Results: Of the 740 midwives registered in Ontario at the time of the study, 100 submitted responses yielding a response rate of 14%. Results indicated that participants felt strongly that midwives have an important role to play in addressing their clients' sexual concerns and most participants reported that they would feel very or extremely comfortable addressing each of the 10 sexual health topics. Participants who rated themselves as more knowledgeable and comfortable addressing sexual topics had more positive attitudes toward doing so. However, the results also suggested that some midwives currently are not adequately prepared to take on this role. Many participants perceived gaps in how knowledgeable they would feel in addressing the sexual health topics. The topics that participants were most likely to feel knowledgeable about were postpartum issues, changes in sexuality over the lifespan, sexual health, sexual practices, and biological aspects of sexuality, whereas participants felt least knowledgeable about sex and disability, sexual problems/concerns/dysfunction, and experiences of sexual violence. Moreover, participants felt significantly less knowledgeable than comfortable talking about sexual issues.

Conclusion: These results suggest that midwives would benefit from training that provides them with information about sexual topics, translating this knowledge into practice, and strategies on how to be proactive on these topics in a way that is acceptable to their clients. Such training is likely to also increase midwives' comfort discussing sexual issues.

KEYWORDS

midwifery, sexual health, comfort, knowledge, attitudes, training

Volume 17. Number 1, 2018

21

A client likely expects her midwife to be knowledgeable about and willing to address a range of sexual issues with her.

INTRODUCTION

Sexual health and well-being are vital components of overall health, quality of life, and relationship satisfaction and stability.1 According to the World Health Organization (WHO), the term "sexual health" includes the prevention of negative outcomes (such as sexually transmitted infections, unwanted pregnancy, and pelvic pain) as well as the enhancement of positive outcomes (such as sexual satisfaction and optimal sexual functioning).² Sexual health is also a fundamental part of overall human rights.3 However, many people have questions about their sexuality or have sexually-related concerns that affect their sexual well-being.4-6 Midwives and other health care providers can play a crucial role in addressing their clients' sexual health concerns and promoting their sexual health through open communication and an acceptance of individual differences.^{7,8} Indeed, according to WHO, providing sexual health information and promoting sexual health should be integral parts of primary health care services.² Furthermore, Leonard and Rogers found that clients presenting for gynecological care felt it was important for their health care provider (physician or midwife) to ask specific questions about their sexual function and satisfaction.9

Given the nature of their relationships with their clients, midwives have the potential to positively affect their clients' sexuality and couple relationships by addressing their sexuality-related support needs.⁷ For example, an important aspect of midwifery care in Ontario is continuity of care

between clients and their midwives, which allows midwives and clients to form a trusting relationship throughout the pregnancy and postpartum period. This relationship often enables midwives to have conversations with their clients about sensitive topics such as their relationships with their partner and family, any history of abuse, physical and emotional changes related to pregnancy, mental health concerns, and sexual health. Furthermore, midwives are involved in the physical aspects of sexual health in that they may perform pelvic examinations in the prenatal or postpartum period and cervical checks on clients in labour. Therefore, midwives are perfectly suited to address their clients' sexual health concerns.

It is particularly important to address sexual issues in the context of midwifery care because the physical, hormonal, psychological, social, and cultural changes that accompany pregnancy and childbirth can and do influence the sexual functioning and subjective sexual experiences (e.g., sexual pleasure and satisfaction) of both members of the couple during the pregnancy as well as in the postpartum period. ^{8,10-14} If not addressed, some of these effects may persist over the longer term. ^{13,15} These problems may be exacerbated by pre-pregnancy sexual functioning; thus, it is important to discuss both current and previous functioning and experiences.

To some degree, a client likely expects her midwife to be knowledgeable about and willing to address a range of sexual issues with her. 9,16 However, little is known about midwives' attitudes toward taking an active role in addressing their clients' sexual concerns. In particular, it is not known whether midwives consider sexual health promotion generally to be a part of their role. Furthermore, many clients will not discuss sexual issues unless the midwife or other health care provider initiates the conversation and demonstrates an openness and comfort in addressing these issues.17 Indeed, sex-related attitudes, training, knowledge, and comfort have all been shown to be related to the extent of sexual communication in different contexts.7,17-19 Thus, it is important that midwives have the knowledge and comfort to routinely ask about and address clients' sexual concerns. 17,20 In this

study, we assessed the attitudes, knowledge, and comfort of registered midwives in Ontario in regard to answering their clients' questions about sexual health. We also assessed the perceived adequacy of midwifery training in this area. This information has implications for improving midwives' training in sexual health and their continuing education, as well as for improving their care of clients.

Attitudes

Little is known about midwives' attitudes toward discussing sexuality with their clients. However, Leonard and Rogers found that asking questions about patient's sexual lives was perceived as important to patient care by their sample of physicians and midwives (25% midwives) in the United States. Nonetheless, their participants identified a number of barriers to doing so, including a lack of training.⁹

A review of the literature revealed no studies that assessed midwives' overall attitudes toward addressing their clients' concerns in their practice. However, there have been a number of studies in various countries around the world assessing midwives' attitudes to addressing specific sexual topics, including attitudes toward virginity examination and hymen reconstruction; adolescent sexuality; abortion care; and the inclusion of sexual health information in the midwifery curriculum.²¹⁻²⁸ The results have been mixed, likely reflecting cultural differences. However, attitudes to specific issues may not generalize to attitudes toward being proactive in addressing clients' sexual concerns more generally. With this in mind, we chose to assess the overall attitudes of midwives towards addressing their clients' sexual concerns as a routine part of their practice.

Training, Knowledge, and Comfort Discussing Sexual Issues

Regardless of their attitudes, midwives are unlikely to promote their clients' sexual health unless they perceive they have the knowledge to do so and feel comfortable discussing these issues. 3,6,17,29,30 Professional programs have the potential to promote greater knowledge and comfort by including a range of sexual health topics in the curriculum; that is, given limited

communication about sexuality in general in our society, it is unlikely that midwives will feel knowledgeable and comfortable discussing sexual topics with their clients without specific knowledge and skills concerning sexuality.³ Therefore, we assessed participants' perceptions of the adequacy of their training in regards to discussing sexual issues with their clients.

Lack of sexuality-related knowledge and training have been shown to be barriers to addressing sexual health in practice for a range of health care providers, including physicians, psychologists, counsellors. marriage family therapists, nurses, social workers, and midwives.^{3,6,16,17,27,29,31-33} Furthermore, the depth and breadth of training offered in professional programs is often guite limited, focusing on biological aspects and the prevention of unwanted outcomes but providing little coverage of sexual health promotion. 6,16,19,34 As a consequence, according to both health care providers and their clients, most health care providers do not adequately discuss their clients' sexual concerns. 6,17,32,35-41 Research has shown that, among both psychologists and counsellors, greater perceived knowledge and comfort in addressing their clients' general sexual concerns and specific sexuality issues are associated with a greater willingness to engage in such discussions. 19,17,30 Therefore, we assessed the extent to which midwives would feel knowledgeable about and comfortable with discussing each of 10 sexual topics relevant to client care. It is likely that midwives would feel more knowledgeable and comfortable discussing some topics over others. Specifically, we expected that midwives would rate themselves as most knowledgeable about and comfortable with topics that are part of the curriculum of midwifery programs or are offered in continuing education workshops and that are required topics of discussion as per the Ontario Antenatal Record [http://www. fammedref.org/wp-content/uploads/2011/12/ Ontarioantenatalrecord2005.pdf and the AOM postpartum record.42 Family planning methods, pelvic floor functioning, and screening for sexually transmitted infections are examples of these topics. Conversely, we predicted that midwives would rate themselves as less knowledgeable about and comfortable with topics not covered by the midwifery curriculum (as remembered by the two midwife authors) and not typically included on any pre-printed forms used by midwives. Three of these topics are sexual enjoyment in pregnancy, sex and disability, and sexual dysfunction.

GOAL AND METHODOLOGY

The goal of this study was to assess the attitudes, perceptions of training, knowledge, and comfort level of midwives registered in Ontario with respect to addressing their clients' sexual concerns. We also examined the extent to which attitudes, perceptions of training, knowledge, and comfort were positively associated with one another. Finally, we examined whether length of practice and training program were related to these four variables.

Participants

The participants were 100 midwives who were registered in Ontario (12 were not practicing in Ontario) and who completed an online survey. Most [87%] completed an educational program in Ontario, Canada, 46% had attended McMaster University, 27% had attended Ryerson University, and 25% had studied at Laurentian University. Two percent had attended a program outside Ontario or had practiced pre-legislation and attended the Michener Institute. On average, those practicing in Ontario had been doing so for 7 years (a range of less than 1–22 years). The largest percentage [43%] were practicing in a small city, while 35% were practicing in a large metropolitan area, 19% in a rural area, and 2% in a remote area. Almost all [97%] were in a group practice of midwives only. Not all participants completed the demographic characteristics section that was presented last in the survey. Those that did ranged in age from 23 to 57 years [M = 37.5].

Measures

This study was part of a larger survey. Only the first four sections of the survey were used in the present study are described here. (A complete copy of the survey can be obtained from the authors.) A "Training and Practice Questionnaire" was developed for this study. It assessed location of registration, years practicing in Ontario, location and type of practice, and training program attended.

Seven items assessing attitudes toward midwives' role in addressing their clients' sexual concerns were made up for this study, based on a review of the literature and previous research by one of the authors; these items are listed in Table 1. Five of these items were positive statements (e.g., "It is important for midwives to talk to their clients about sexual issues"), and two items were negative statements (e.g., "Midwives should not ask their clients personal questions about their sexual functioning"). Responses were on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). We examined each item individually; in addition, we summed the seven items (after reverse coding the two negative items) to create a total score with scores ranging from 7 to 35. The internal consistency of this scale was high (=.81).

One reversed item ("Most midwives do not have enough training to talk to their clients about sexuality issues]" assessed perceptions of training. We assessed midwives' knowledge of and comfort with discussing each of the 10 sexual health topics, using the Sexual Knowledge and Comfort Scale. This scale was adapted from research by Byers and colleagues, who assessed the knowledge and comfort of teachers and parents in providing sexual health education using somewhat different topics. 43,44 Our team, consisting of two experienced midwives and two sexuality researchers, selected sexuality topics that were most relevant to midwifery practice-i.e., that reflected the specific context of midwifery practice. Participants indicated their perceived knowledge and comfort in discussing sexual issues with their clients according to two 5-point scales respectively ranging from not at all knowledgeable [1] to extremely knowledgeable [5] and from not at all comfortable (1) to extremely comfortable (5). We examined each item individually. Total scores for knowledge and for comfort were computed by summing the ratings for the 10 topics such that scores could range from 10 to 50 on each scale with the higher scores indicating more knowledge or more comfort. The scales had high internal consistency and construct validity in the study of teachers and parents. In this study, the internal consistency of theses scales was also high (= .88 for knowledge and = .86 for comfort).

Procedure

An e-mail containing information and a link to the survey was sent to all midwives who were members of the AOM in 2016 as part of their weekly "Midwife Memo." Reminders in the Midwife Memo were sent out multiple times over two months. In addition, a link to the survey was posted several times on a Canadian midwifery Facebook group. At the time of study, 740 midwives were registered in Ontario; thus,

the 100 participants represented 14% of registered midwives in Ontario in 2016. Participants took approximately 45 minutes to complete the survey. In thanks for their participation, a \$1 donation was made to each participant's charity of choice from a list of six women-focused charities. The study was approved by the research ethics boards at the two universities with which the researchers were affiliated.

STUDY RESULTS

Attitudes

The participants' responses to the seven attitude questions are reported in Table 1. In general, participants had very positive attitudes toward the midwife's role in addressing their clients' sexual

Table 1. Midwives' Attitudes Regarding Perceived Training and Addressing Clients' Sexual Concerns

Item	Strongly Disagree N* [%]	Disagree N* [%]	Neutral N* [%]	Agree N* [%]	Strongly Agree N* [%]	
Attitudes						
It is important for midwives to talk to their clients about sexual issues.	0 (0)	0 (0)	6 [6]	44 (44)	50 (50)	
Midwives should not ask their clients personal questions about their sexual functioning.	28 (28)	57 (57)	14 (14)	1 (1)	0 (0)	
Midwives can have a positive influence on their clients' sexual functioning during pregnancy and post partum.	0 (0)	1 (1)	3 (3)	47 (47)	48 (48)	
Asking clients about their sexual functioning is part of the midwife's role.	0 (0)	9 (9)	25 (25)	44 (44)	22 (22)	
Most clients would be upset if their midwife asked about their sexual functioning.	15 (15)	62 (63)	18 (18)	1 (1)	3 (3)	
Midwifery training should include information on how to assess sexuality issues.	0 (0)	0 (0)	4 [4]	33 (34)	61 (62)	
All midwifery practices should have sexuality resources that are available to clients.	0 (0)	0 (0)	3 (3)	34 (35)	60 (62)	
Training						
Most midwives do not have enough training to talk to their clients about sexuality issues.	0 (0)	28 (28)	25 (25)	31 (31)	15 (15)	

^{*}N = 97-100

concerns. For example, 94%-97% of participants agreed or strongly agreed that [1] it is important for midwives to talk to their clients about sexual issues, [2] midwives could have a positive influence on their clients' sexual functioning, (3) midwifery training should include information on how to assess sexual issues, and [4] all midwifery practices should have sexuality resources available for clients. A smaller percentage (but still a majority) felt that midwives should ask their clients questions about their sexual functioning [85%] and that asking about the client's sexual functioning is part of the midwife's role (66%). Participants who did not endorse these two views for the most part took a neutral stance (14%) and 25%, respectively). Only 1% had a negative stance on these items. Averaged across the seven questions, participants' responses corresponded to between "agree" and "strongly agree" [M = 29.85, SD = 3.25].

Training, Knowledge, and Comfort Discussing Sexual Issues

We asked one question about the paticipants' perceptions of midwifery training with respect to sexuality [see Table 1]. Only about a quarter of participants felt that midwives have enough training for talking to their clients about sex-related issues. On average, participants' responses were between "neutral" and "agree" in regard to the statement that midwives do not have sufficient training in this respect [M = 3.33, SD = 1.1].

Table 2. Participants' Perceptions of How Knowledgeable They Would Feel Discussing Ten Sexual Topics

Item	Not at All N* [%]	A Little N* [%]	Somewhat N* [%]	Very N* [%]	Extremely N* [%]
Sexual problems/concerns/dysfunction (low sexual desire, differing sex drive than partner, painful sex, etc.)	4 [4]	19 (19)	42 (43)	29 (30)	4 [4]
Pelvic floor functioning (incontinence, hypertonia, hypotonia)	0 (0)	15 (16)	31 (32)	39 (39)	11 (12)
Changes in sexuality across the lifespan (e.g., pregnancy, postpartum issues, breastfeeding period)	1 (1)	13 (14)	30 (31)	32 (33)	20 (21)
Sexual health (STIs, contraception, etc.)	9 (0)	2 (2)	20 (22)	40 (44)	29 (32)
Experiences of sexual violence	4 (4)	22 (24)	35 (38)	21 (23)	11 (12)
Sexual and gender diversity and inclusivity (sexual orientation, sexual identity, gender identity)	5 (5)	13 (14)	30 (33)	32 (35)	12 (13)
Sexual practices (masturbation, sexual activities/frequency, etc.)	6 (7)	6 [7]	30 (32)	36 (39)	15 (16)
Postpartum issues (e.g., male infant circumcision, breastfeeding, co-sleeping, resumption of sexual activity)	0 (0)	0 (0)	7 (8)	28 (31)	55 (61)
Sex and disability/chronic illness	17 (18)	37 (39)	22 (23)	12 (13)	6 [6]
Biological aspects of sexuality (anatomy, physiology, sex hormones)	1 (1)	4 [4]	18 (19)	43 (46)	27 (29)

STIs, sexually transmitted infections

*N = 90-98

We were interested in perceptions of how knowledgeable participants were in addressing 10 different sexual issues with their clients. As shown in Table 2, a majority of participants (61%) indicated they were only extremely knowledgeable about postpartum issues. However, when the very and the extremely knowledgeable categories were combined, most participants responses were positive about five other issues: pelvic floor functioning [53%], changes in sexuality over the lifespan (54%), sexual health (76%), sexual practices (55%), and biological aspects of sexuality [75%]. A substantial minority of midwives felt not at all knowledgeable or only a little knowledgeable about several of the sexual issues listed: sexual problems/concerns/dysfunction [23%],

floor functioning (16%), changes in sexuality across the lifespan (15%), experiences of sexual violence (28%), sexual and gender diversity and inclusivity (19%), and sexual practices (14%). The one topic that the majority of participants (57%) did not feel knowledgeable about was that of sexuality and disability.

We were also interested in the comfort levels of midwives addressing five of the topics: pelvic floor functioning (63%), changes in sexuality over the lifespan (54%), sexual health (68%), postpartum issues (88%), and biological aspects of sexuality (59%). As shown in Table 3, most participants felt either very or extremely comfortable addressing all the other topics. Of note, only a small number of participants reported feeling not at all comfortable

Table 3. Participants' Perceptions of How Comfortable They Would Feel Discussing Ten Sexual Topics

Item	Not at All N* [%]	A Little N* [%]	Somewhat N* [%]	Very N* [%]	Extremely N* [%]
Sexual problems/concerns/dysfunction (low sexual desire, differing sex drive than partner, painful sex, etc.)	0 (0)	3 [4]	18 (25)	20 (28)	30 (42)
Pelvic floor functioning (incontinence, hypertonia, hypotonia)	0 (0)	2 (3)	8 (11)	16 (23)	44 (63)
Changes in sexuality across the lifespan (e.g., pregnancy, postpartum issues, and breastfeeding period)	0 (0)	2 (3)	10 (14)	20 (29)	38 (54)
Sexual health [STIs, contraception, etc.]	0 (0)	1 (1)	1 (1)	20 (29)	47 (68)
Experiences of sexual violence	1 (1)	6 [9]	18 (26)	24 (35)	20 (29)
Sexual and gender diversity and inclusivity (sexual orientation, sexual identity, gender identity)	2 (3)	2 (3)	5 (7)	30 [44]	29 (43)
Sexual practices (masturbation, sexual activities/frequency, etc.)	2 (3)	5 (7)	15 (21)	21 (30)	28 (39)
Postpartum issues (e.g., male infant circumcision, breastfeeding, co-sleeping, resumption of sexual activity)	0 (0)	0 (0)	0 (0)	8 (12)	61 (88)
Sex and disability/chronic illness	0 (0)	8 (11)	21 (29)	23 (32)	20 (28)

STIs, sexually transmitted infections

^{*}N = 69-71

or a little comfortable discussing each of the sexual issues (range 0%-11%, median = 3.5%).

Averaged across the 10 topics, participants felt between somewhat knowledgeable and very knowledgeable about sexual health issues, and between very comfortable and extremely comfortable [M = 35.05, SD = 6.5] with discussing sexual health topics with their clients. We examined whether there were differences in reported knowledge and comfort for the 68 participants who completed both scales. A repeated measures analysis of variance [ANOVA] was statistically significant [F[1, 67] = 78.90, p < .001, p2 = .54]. Participants rated their comfort in discussing sexual topics as significantly higher than their knowledge about these topics.

Relationships among Attitudes, Knowledge, Comfort, Perceptions of Training, and Length of Practice

Using Pearson product-moment correlations, we examined the relationships between attitudes, knowledge, comfort, perceptions of training, and length of practice (Table 4). Participants with more positive attitudes rated themselves as significantly more knowledgeable about sexual health and more comfortable discussing sexual health topics with clients; the relationships between attitudes and perceptions of training and length of practice were not significant. Participants who reported that they would feel more knowledgeable addressing sexual issues with their clients reported feeling more comfortable doing so, rated midwives'

training about these issues more positively, and had been practicing longer. The relationships between comfort, perceptions of training, and length of practice were not significant.

Finally, we examined whether the location of the participants' training (McMaster University, Rverson University, Laurentian University, or "Other") affected their differing attitudes, knowledge, comfort, or perceptions of training. There was a statistically significant difference in group knowledge scores [F[3, 85] = 2.93, p]= .038, p2 = 094). Participants who graduated from McMaster University and Ryerson University reported feeling significantly less knowledgeable than did participants in the "Other" group [M = 23.47, 24.36, and 29.77, respectively). The mean score for participants who graduated from Laurentian University (m=26.19) fell between those of the other groups but the differences were not statistically significant. Of note, only 12 participants were in the "Other" group, and they had been practicing in Ontario for significantly longer than participants from the other groups [M = 5.8 years for McMaster University, 6.0 years for Ryerson University, 3.9 years for Laurentian University, and 11.1 years for the "Other" group) [F[3, 94] = 4.73, p = .004, p2 = 13]. The groups did not differ significantly in their reported attitudes, comfort, or perceptions of training (F[3, 93] = 1.25,p = .294; F[3, 62] = 0.39, p = .990; and F[3, 93] = .9900.47, p = .703, respectively).

Table 4. Correlations among Key Variables in the Study

Variables	Attitudes	Knowledge	Comfort	Perceptions of Training
Attitudes				
Knowledge	.32**			
Comfort	.48***	.39***		
Perceptions of training [†]	19	29**	05	
Length of practice in Ontario	.20	.24*	.26*	03

N = 67-99

†For perceptions of training, higher scores indicate more-negative perceptions.

^{*} p < .05, **p < .01, ***p < .001

DISCUSSION

The goal of this study was to assess registered midwives' attitudes, knowledge, and comfort in addressing their clients' sexual concerns. The Ontario midwives we assessed felt strongly that midwives have an important role to play in addressing their clients' sexual concerns. Virtually all participants agreed that (1) it is important for midwives to talk to their clients about sexual issues, (2) midwives can have a positive influence on their clients' sexual functioning, (3) addressing clients' sexual issues should be part of midwifery training, and (4) midwifery practices should have sexuality-related resources available for their clients. Similarly, Walker and Davis found that all of the midwifery students they surveyed in the United Kingdom agreed that the midwifery curriculum should include contraception and sexual health.²⁷

Most participants reported that they would feel very or extremely comfortable addressing each of the 10 sexual health topics; conversely, only a few participants reported low comfort addressing them. Only midwives who are comfortable talking about sexual topics are likely to actually do so in practice.²⁹

Participants who rated themselves as more knowledgeable and comfortable addressing sexual topics had more-positive attitudes toward doing so. Miller and Byers found that most of the clinical psychologists they surveyed had engaged in continuing education opportunities related to sexuality. 41 Thus, perhaps because of issues raised by their clients, midwives with more-positive attitudes toward addressing sexual issues in their practice may have sought opportunities to enhance their knowledge and skills in this areawhether through reading, in-services with local experts for midwifery practice groups, webinars, conference presentations, or workshops such as the pelvic floor workshop presented by the AOM. However, it is also possible that individuals who began their midwifery training with greater knowledge and comfort-perhaps as a result of undergraduate training in sexuality in a prior degree program-also came to their practice with more positive attitudes toward addressing sexual concerns as part of the midwife's role. Consistent with this view, psychologists who have had more sexuality education at the undergraduate level are more likely to talk with their clients about sexuality issues.^{7,17}

However, the study results also indicate that midwives currently are not adequately prepared to take on this role. For example, although most of our participants felt that midwives should ask their clients questions about their sexual functioning, a substantial minority were neutral in regard to asking such questions or had concerns about doing so. This suggests that some midwives are more comfortable with the idea of being responsive to questions and concerns raised by clients than with being proactive by asking questions. Yet, due to societal proscriptions about talking about one's own sexuality, many clients will not raise sexual issues with health care providers (including midwives) unless the providers have demonstrated an openness and a willingness to engage in such discussions.7 Thus, it is important that midwives be proactive in discussions about their clients' sexual well-being.

Another observation was that many of our participants perceived gaps in how knowledgeable they would feel in addressing sexual health topics: on average, participants felt between somewhat knowledgeable and very knowledgeable about the 10 listed sexual health topics, even though these topics were all related to the midwife's scope of practice. The topics that participants were most likely to feel knowledgeable about were postpartum issues, changes in sexuality over the lifespan, sexual health, sexual practices, and biological aspects of sexuality. The topics that participants were least likely to feel knowledgeable about were sex and disability; sexual problems, concerns, and dysfunction; and the experience of sexual violence. Moreover, a substantial number of participants felt that they had little knowledge about seven of the ten topics, including sexual problems, concerns, and dysfunction; pelvic floor functioning; changes in sexuality across the lifespan; experiences of sexual violence; sexual and gender diversity and inclusivity; sexual practices; and sex and disability. This is in line with our predictions, in that sexual health issues (e.g., sexually transmitted infections and contraception) and the biological aspects of sexuality are covered in most midwifery curricula. In addition, many of the topics that midwives felt more knowledgeable about are addressed on the AOM postpartum clinical record forms, prompting midwives to address those topics routinely with clients.

A further finding was that participants felt significantly less knowledgeable than comfortable talking about sexual issues. If midwives are to be competent and helpful in addressing their clients' sexual concerns, it is important that they provide accurate information. To do so, they need to be both knowledgeable and comfortable discussing sexual topics. 19,17,45

Finally, consistent with their perceived lack of knowledge, only about a quarter of our participants felt that midwives receive enough training to enable them to talk to their clients about sexuality issues. Participants who identified more knowledge gaps rated midwives' training related to sexuality significantly more negatively. Together these results suggest that to be proactive in addressing their clients sexual concerns, midwives need training that provides them with information about sexual topics, about translating this knowledge into practice, and about strategies for being proactive in discussing these topics in a way that is acceptable to their clients.²⁷ Such training also is likely to increase midwives' comfort discussing sexual issues or addressing specific aspects of such discussions (e.g., how to initiate the discussion), even though comfort was not perceived as a problem by our participants. Indeed, consistent with past research with other professionals, participants who felt they had more knowledge of the 10 sexual health topics were also significantly more comfortable addressing sexual health topics.^{30,45}

IMPLICATIONS AND CONCLUSIONS

These results should be interpreted in light of some of the limitations of the study. First, only 14% of Ontario midwives completed the survey. The extent to which the results can be generalized to all midwives in Ontario is not known. However, in keeping with previous research on selection bias in sexuality studies, it is likely that participants

who were more uncomfortable with sexuality did not volunteer for the study. 46 If so, the results may paint an overly positive picture of the sexual attitudes, knowledge, and comfort of Ontario midwives with regard to discussing sexuality issues. Second, we assessed only midwives' perceptions of their knowledge and comfort. Research is needed to determine their actual level of clinical knowledge about these topics as well as whether clients' perceptions of their midwives' comfort discussing sexual issues are as positive as midwives' perceptions of themselves.

Nonetheless, the results have a number of important implications for midwifery practice and training. Our participants reported that their comfort discussing topics related to sexual health was greater than their actual knowledge about many of these topics. In addition, midwives who had been in practice longer did not report a greater knowledge of these topics. This suggests that training that is focused on increasing knowledge about specific topics related to sexual health would be beneficial for all midwives. The three topics that midwives reported having the least knowledge about and comfort should be addressed first: sex and disability, sexual violence, and sexual problems, concerns, and dysfunction. Furthermore, participants who reported feeling more knowledgeable were less likely to identify training gaps or, conversely, were more positive about training. This suggests that training can be successful in providing midwives with the knowledge they need to address clients' sexual concerns. Research with other professions shows that training is related to knowledge, comfort, and a willingness to address sexual issues. However, our results indicate that current training models have little effect on attitudes, knowledge, or comfort, suggesting that training needs to target these important aspects of midwifery practice directly.

It is important to note that the AOM has started to provide training on a few topics related to sexual health (e.g., the LGBT Inclusivity in Midwifery Care webinar and the pelvic floor workshop). However, the results of our study indicate that these resources do not sufficiently address all of Ontario midwives' learning needs with respect

to addressing the sexual concerns of their clients. Thus, it is important to develop additional resources to better meet these learning needs. Resources for specific topics could be targeted webinars and conference presentations as well as written resource material such as tipsheets for midwives and resources for clients. In addition, midwifery practices could address specific gaps in knowledge by arranging in-service workshops with local resource persons or practitioners such as pelvic floor physiotherapists, mental health workers who specialize in sexual health, sexuality researchers, and community health organizations. Individual midwives can seek specific training or continuing education with various organizations and in turn disseminate their learning among their colleagues. Midwives in Ontario have access to funding for continuing education; sexual health learning would likely be an approved use of this funding.

Once midwives gain more knowledge about these topics, the addressing of best practices in the implementation of these changes into practice will be important. For example, it would be useful to develop specific screening questions, identify needed additions to antenatal and postpartum checklists, and develop resources for clients. However, specific recommendations are beyond the scope of this article. We plan to write a follow-up article that addresses the practical challenges of including sexual health in midwives' clinical practice.

ACKNOWLEDGMENTS

The authors would like to thank Shannon Coyle for her technical expertise in survey development, the Association of Ontario Midwives for distributing recruitment notices in its "Midwife Memo," and all of the midwives who completed our survey.

REFERENCES

- Byers ES, Rehman U. Sexual well-being. In: Tolman D, Diamond L (editors). APA handbook of sexuality and psychology. Vol 1. Washington, DC: American Psychological Association; 2013. p. 317-37.
- 2. World Health Organization (WHO). Sexual and reproductive health: defining sexual health. Available from: http://www.who.int/reproductivehealth/topics/sexual_health/sh_definitions/en/[Accessed 2017 Oct 23].
- 3. Dermer S, Bachenberg M. The importance of training marital, couple, and family therapists in sexual health. Aust NZ J Fam Ther. 2015;36(4):492-503.
- Mercer CH, Fenton KA, Johnson AM, Wellings K, Macdowall W, McManus S, et al. Sexual function problems and help seeking behaviour in Britain: national probability sample survey. BMJ. 2003;327(7412):426-7.
- Cherner R, Reissing ED. The prevalence rate of sexual dysfunction and client comfort in sexuality in a clinical psychology practice. Poster presented at: Canadian Psychological Association meeting; 2005 Jun; Montreal, Canada.
- 6. Reissing ED, Di Giulio G. Practicing clinical psychologists' provision of sexual health care services. Prof Psychol Res P. 2010;41[1]:57-63.
- 7. Byers ES. Beyond the birds and the bees and was it good for you?: Thirty years of research on sexual communication. Can Psychol. 2011;52[1]:20-8.
- 8. Kim HM, Geraghty S. "Yummy Mummies": exploring sexuality in the antenatal and postnatal period. Pract Midwife. 2016;19[6]:24.
- 9. Leonard C, Rogers RG. Opinions and practices among providers regarding sexual function. Prim Care Update Ob Gyns. 2002;9(6):218-21.
- 10. Erenel AS, Eroglu K, Vural G, Dilbaz B. A pilot study: in what ways do women in Turkey experience a change in their sexuality during pregnancy? Sex Disabil. 2011;29(3):207-16.
- 11. Vannier S, Rosen N. Sexual distress and sexual problems during pregnancy: associations with sexual and relationship satisfaction. J Sex Med. 2017;14(3):387-95.
- 12. Serati M, Salvatore S, Siesto G, Cattoni E, Zanirato M, Khullar V, et al. Female sexual function during pregnancy and after childbirth. J Sex Med. 2010;7(8):2782-90.
- 13. Woolhouse H, McDonald E, Brown S. Changes to sexual and intimate relationships in the postnatal period: women's experiences with

- health professionals. Aust J Prim Health. 2014;20(3):298-304.
- 14. Yeniel AO, Petri E. Pregnancy, childbirth, and sexual function: perceptions and facts. Int Urogynecol J. 2014;25(1):5-14.
- 15. Rosen NO, Pukall CP. Comparing the prevalence, risk factors, and repercussions of postpartum genito-pelvic pain and dyspareunia. Sex Med Rev. 2016;4:126-35.
- Shindel AW, Parish SJ. Sexuality education in North American medical schools: current status and future directions. J Sex Med. 2013;10:3-18.
- 17. Miller SA, Byers ES. Practicing psychologists' sexual intervention self-efficacy and willingness to treat sexual issues. Arch Sex Behav. 2012;41[4]:1041-50.
- 18. Byers ES, Sears HA, Hughes K. Predicting mother-adolescent sexual communication using the integrative model of behavioural prediction. J Fam Issues. 2017:1-23.
- 19. Miller SA, Byers ES. An exploratory examination of the sexual intervention self-efficacy of clinical psychology graduate students. Training Educ Prof Psychol. 2008;2(3):137-44.
- 20. Downey JI, Friedman RC. Taking a sexual history: the adult psychiatric patient. Focus. 2009;7[4]:435-40.
- 21. Christianson M, Eriksson C. Acts of violence: virginity control and hymen (re)construction. Br J Midwifery. 2014;22(5):344-52.
- 22. Ege E, Akin B, Altuntug K. Opinions of midwifery students on adolescent sexuality and reproductive health in Turkey. J Soc Behav Pers. 2008;36:965-72.
- 23. Klingberg-Allvin M, Van Tam V, Nga N, Ransjo-Arvidson A, Johansson A, Omvårdnad, et al. Ethics of justice and ethics of care values and attitudes among midwifery students on adolescent sexuality and abortion in Vietnam and their implications for midwifery education: a survey by questionnaire and interview. Int J Nurs Stud. 2007;44[1]:37-46.
- 24. Warenius LU, Faxelid EA, Chishimba PN, Musandu JO, Ong'any AA, Nissen EB, et al. Nurse-midwives' attitudes towards adolescent sexual and reproductive health needs in Kenya and Zambia. Reprod Health Matters. 2006;14[27]:119-28.
- 25. Handa M, Rosenberg S. Ontario midwives' attitudes about abortion and abortion provision. Can J Midwifery Res Pract. 2016;15:8-35.
- 26. Klingberg-Allvin M, Thu Nga N, Ransjo-Arvidson A, Johansson A. Perspectives of

- midwives and doctors on adolescent sexuality and abortion care in Vietnam. Scand J Public Health. 2006;34[4]:414-21.
- 27. Walker SH, Davis G. Knowledge and reported confidence of final year midwifery students regarding giving advice on contraception and sexual health. Midwifery. 2014;30:e169-76.
- 28. Yazici S, Zengin N, Karanisoğlu H. Reinforcing sexual and reproductive health education prior to graduation of health school in Turkey. Sex Disabil. 2011;29:43-53.
- 29. Bloom ZD, Gutierrez D, Lambie GW, Ali S. Counselors' comfort with sexuality, attitudes towards pornography, and propensity to assess and treat client issues related to pornography use. J Ment Health Couns. 2016;38[4]:327-45.
- 30. Harris SM, Hays KW. Family therapist comfort with and willingness to discuss client sexuality. J Marital Fam Ther. 2008;34:239-50.
- 31. Sobecki JN, Curlin FA, Rasinki KA, Lindau ST. What we don't talk about when we don't talk about sex: results of a national survey of US obstetrician/gynecologists. J Sex Med. 2012;9:1285-94.
- 32. Gott M, Galena E, Hinchliff S, Elford H. Opening a can of worms: GP and practice nurse barriers to talking about sexual health in primary care. Fam Pract. 2004;21:528-36.
- 33. Sloane HM. Tales of a reluctant sex radical: barriers to teaching the importance of pleasure for wellbeing. Sex Disabil. 2014;32:453-67.
- 34. Miller SA, Byers ES. Psychologists' sexual education and training in graduate school. Can J Behav Sci. 2010;42:93-100.
- 35. Archibald SA, Lemieux S, Byers ES, Tamlyn K, Worth J. Chemically-induced menopause and the sexual functioning of breast cancer survivors. Women Ther. 2006;29:83-106.
- 36. Goyal MK, Witt R, Hayes KL, Zaoutis TE, Gerber JS. Clinician adherence to recommendations for screening adolescents for sexual activity and sexually transmitted infection/human immunodeficiency virus. J. Pediatr. 2014;165:343-7.
- 37. Wimberly Y, Hogben M, Moore-Ruffin J, Moore S, Fry-Johnson Y. Sexual history-taking among primary care physicians. J Natl Med Assoc. 2006;98[12]:1924-9.
- 38. Hegarty K, Brown S, Gunn J, Forster D, Nagle C, Grant B, et al. Womens' views and outcomes of an educational intervention designed to enhance psychosocial support for women during pregnancy. Birth. 2007;34[2]:155-63.
- 39. Letts C, Tamlyn K, Byers ES. Exploring the

- impact of prostate cancer on men's sexual well-being. J Psychosoc Oncol. 2010;28(5):490-510.
- 40. McCance KL, Moser R Jr, Smith KR. A survey of physicians' knowledge and application of AIDS prevention capabilities. Am J Prev Med. 1991;7:141-5.
- 41. Miller SA, Byers ES. Psychologists' continuing education and training in sexuality. J Sex Marital Ther. 2009;35:206-219.
- 42. Ontario Antenatal Record. Available from: http://www.fammedref.org/wp-content/uploads/2011/12/Ontarioantenatalrecord2005. pdf
- 43. Cohen JN, Byers ES, Sears HA. Factors affecting Canadian teachers' willingness to teach sexual health education. Sex Educ. 2011;12:299-316.
- 44. Byers ES, Sears HA. Mothers who do and do not intend to discuss sexual health with their young adolescents. Fam Relat. 2012;61:851-63.
- 45. Kazukauska KA, Lam CS. Disability and sexuality: knowledge, attitudes, and level of comfort among certified rehabilitation counselors. Rehabil Couns Bull. 2010;54:15-25.
- 46. Wiederman MW. Volunteer bias in sexuality research using college student participants. J Sex Res. 1999;36:59-66.

AUTHOR BIOGRAPHIES

Ali McCallum is a registered midwife associated with Queen's University, Kingston, Ontario.

Alyssa Byers-Heinlein is a registered midwife affiliated with Community Midwives of Kingston, in Kingston, Ontario.

E. Sandra Byers is a licensed psychologist in the Department of Psychology at the University of New Brunswick, Fredericton, New Brunswick.

Caroline Pukall is a certified psychologist in the Department of Psychology at Queen's University, Kingston, Ontario.