Knowledge change associated with participation in prenatal education programs in Ontario: A cohort study

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ABSTRACT

OBJECTIVES: The primary objective was to examine how participation in prenatal programs delivered by Ontario public health units influences pregnant women's pregnancy-related knowledge. Secondary objectives were to examine the socio-demographic characteristics of women participating in these programs and assess program satisfaction.

METHODS: A cohort study was conducted of 511 adult pregnant women who were registered for a prenatal program within one of seven Ontario public health units. Participants completed a pre-program survey, which examined socio-demographic and pregnancy characteristics, and baseline pregnancy-related knowledge. After finishing the program, participants completed a post-program survey investigating pregnancy-related knowledge and program satisfaction. Pregnancy-related knowledge was assessed using the Healthy Pregnancies Knowledge Survey, which captures knowledge within three subtopic areas: healthy pregnancies, healthy lifestyles and breastfeeding.

RESULTS: Participants demonstrated a significant increase in mean knowledge scores, both overall and across each subtopic area. Most participants reported that their program satisfied their questions either mostly or very well across all content areas examined.

CONCLUSION: This study is the first large-scale effort to examine the ability of prenatal programs offered through Ontario public health units to influence clients' pregnancy-related knowledge. These findings contribute to the evidence base for prenatal education program planning.

KEY WORDS: Prenatal education; health knowledge; attitudes; practice; parents; program evaluation; nursing evaluation research

La traduction du résumé se trouve à la fin de l'article.

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Prenatal programs are widely available and popular resources for pregnant women in Canada.¹ One third of pregnant Canadian women overall and two thirds of women pregnant for the first time attend programs.¹ Their popularity suggests that pregnant women, particularly those expecting their first baby, consider them to be important in preparing for a healthy pregnancy and parenting. A British study reported that 93% of women who attended prenatal programs found them useful.² Furthermore, recommendations and policies from public health professionals and organizations, such as Health Canada and the World Health Organization, emphasize their importance and recommend providing programs to women and their families.^{3,4}

In Ontario, prenatal programs are offered through public health units (PHUs). The Ontario Public Health Standards, governed by the Ontario Ministry of Health and Long-Term Care, stipulate that PHUs provide key public health programs and services, including prenatal programs and supports.⁵ Specifically, Ontario PHUs are required to provide pregnant women and their partners with programs, support and information to achieve a healthy pregnancy and be prepared for parenting and breastfeeding.⁵ Additionally, PHUs are expected to “routinely monitor program activities and outcomes to assess and improve the implementation and effectiveness of programs and services”.⁵ Accordingly, PHUs are encouraged to evaluate the

outcomes of prenatal programs, including participants' knowledge of pregnancy-related content.

The literature examining the effect that prenatal programs have on knowledge regarding healthy pregnancies is scarce.⁶

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Additionally, there is a lack of knowledge on the reach, quality and effectiveness of community-based prenatal and parenting programs in Canada.⁷ Numerous reports have highlighted the need for large-scale, comprehensive evaluations of prenatal programs.^{8,9} Ontario PHUs have also indicated that gaining an understanding of the effectiveness of prenatal programs is a significant research priority area.¹⁰ Overall, although prenatal programs are recommended and popular among pregnant women, there is little evidence in the literature to support their effectiveness.

The Prenatal Education Research Study (PERS) examined the effectiveness of prenatal programs in Ontario at increasing participants' pregnancy-related knowledge. The objectives of the study were to: 1) examine the knowledge change associated with participation in prenatal programs delivered by Ontario PHUs; 2) examine the socio-demographic characteristics of women participating in these programs; 3) assess women's program satisfaction.

METHODS

Study design

A cohort study with a pre-post test design was used to implement the PERS with PHUs in Ontario. The study sample comprised pregnant women who were at least 20 years old. Seven PHUs were selected as recruitment sites, with a minimum target sample size of 400 pregnant women. The sample size was calculated using a 5% level of significance ($\alpha = 0.05$) and 80% power. As there was no previous research to assess the difference in scores before and after participating in a prenatal program, a reasonable estimate of a 10% change, with a standard deviation of 15, was used. The calculated sample size was then inflated by 40% to account for loss to follow-up. Knowledge change was measured by means of the Healthy Pregnancies Knowledge Survey (HPKS), described below. Ethics approval was granted by Institutional Review Board Services and participating PHUs' internal ethical review boards.

Recruiting sites

To be eligible as a recruitment site, PHUs had to meet the following inclusion criteria. First, they had to include specific topics within their curriculum in the areas of healthy pregnancies, healthy lifestyles and breastfeeding (Appendix A). These topics represent health-related content that supports a healthy pregnancy and preparation for parenthood, and are common in prenatal programs offered through Ontario PHUs.¹¹ Second, PHUs had to apply adult learning principles within their prenatal program. Seven PHUs were deemed eligible and selected as recruitment sites. Prenatal program staff from the participating PHUs received training on recruiting and screening pregnant women for the study.

Recruitment and data collection

Recruitment began in September 2013 as women registered for either an online or in-person prenatal program. Women were informed about the study by a trained facilitator when registering in person or by online information for online

registrants. Women interested in participating in the study were sent a link to the pre-program survey through e-mail or were contacted by telephone (depending on their preference). Inclusion criteria were as follows: 1) Ontario resident; 2) adult women aged 20 years or older; 3) comfortable communicating in English; and 4) expected to review all modules/classes in their prenatal program by May 31, 2014. Upon satisfying these criteria, participants were able to complete the pre-program survey (Appendix B).

Participants were advised to complete the post-program survey only after they had completed their program (Appendix C). Those participants who did not complete the post-program survey (after several reminders) were classified as lost to follow-up, and the correct answers to the knowledge questions were forwarded. Those who completed the post-program survey were provided with a \$15 gift card and the correct answers to the knowledge questions.

Healthy Pregnancies Knowledge Survey (HPKS)

Pregnancy-related knowledge was assessed in both the pre- and post-program surveys using the HPKS. The HPKS is a 25-item survey that captures three major content areas within prenatal programs delivered by PHUs in Ontario: healthy pregnancies, healthy lifestyles, and breastfeeding. Further details on the HPKS are reported elsewhere.¹¹ Collection of pregnancy-related knowledge both before and after completion of the prenatal program enabled an examination of potential knowledge change during the study period. The pre-program survey also collected participants' socio-demographic and pregnancy characteristics. Participants' self-report of knowledge change, satisfaction and learning preferences was collected in the post-program survey.

Statistical analyses

To identify possible non-response bias, *t*-tests, chi-square and Fisher's exact tests were used to examine the characteristics of the study group compared with those who were lost to follow-up. The remaining analyses, examining knowledge change and satisfaction responses, included only those participants who had completed both the pre- and post-program surveys. Pre and post survey scores for each participant were matched using a unique participant ID code. Paired *t*-tests were used to examine the differences in knowledge scores between pre and post surveys for both total scores as well as subtopic scores. Participant pre scores were also stratified into those with low baseline knowledge (with a score in the lower 25th percentile) compared with those with a higher baseline knowledge (a pre score above the lower 25th percentile). A paired *t*-test was used to examine the difference in knowledge scores when stratified for low and high baseline knowledge to determine whether knowledge improvement was seen only in those with a lower baseline knowledge score. Descriptive statistics were used to summarize participants' (study group and lost to follow-up) demographic and pregnancy-related characteristics, as well as responses to the satisfaction component (study group only) of the post-program survey. An alpha level of ≤ 0.05 was considered significant for all analyses. All analyses were performed using Stata, version 12.1 (Stata Corp., Texas, US).

RESULTS

Participant characteristics

One thousand one hundred and eight (1,108) pregnant women from the seven recruiting PHUs registered for the study. Of these, 741 participants (66.9%) met the eligibility criteria and completed the pre-program survey. A total of 511 participants completed both the pre and post surveys (i.e., the study group), representing a 31% loss to follow-up. The study group was statistically different from those who did not complete both surveys (those lost to follow-up) in terms of total family income, education level and sexual orientation, as shown in Table 1. For example, twice as many women in the lost to follow-up group reported a family income less than \$29,999, and significantly more women in the study group reported their sexual orientation as bisexual. The mean and median ages of the study

group participants were 30.2 and 30 years respectively, and participants ranged from 20 to 45 years old. Pregnancy characteristics and program completion results are depicted in Table 2. Ninety percent of participants reported that it was their first pregnancy, and 97% were expecting a singleton birth. The majority of study group participants (57%) entered their program during their third trimester (29–40 weeks). Nearly 75% of participants reported completing their entire prenatal education program.

Knowledge change

Table 3a shows the study group participants' mean knowledge scores on the pre- and post-program surveys, including the total and subtopic area scores. Participants demonstrated a significant increase in their mean total knowledge score on the HPKS, from 21.2 on the pre survey to 24.4 on the post survey ($p < 0.01$). There

Table 1. Participants' demographic characteristics

	Study group		Lost to follow-up		p-value
	n	%	n	%	
Age, years	511	–	230		0.63
20–24	45	8.8	27	11.7	
25–29	177	34.6	72	31.3	
30–34	215	42.1	84	36.5	
35–39	66	12.9	40	17.4	
40+	8	1.6	7	3.0	0.07
Racial or ethnic group					
Aboriginal	3	0.6	0	0.0	
Asian	119	23.3	59	25.7	
Black	10	2.0	14	6.1	
Indian/Caribbean	5	1.0	1	0.4	
Latin American	8	1.6	6	2.6	
Middle Eastern	7	1.4	6	2.6	
Mixed heritage	16	3.1	9	3.9	
White	328	64.2	130	56.5	
Other	3	0.6	2	0.9	
Do not know	1	0.2	1	0.4	
Total family income before tax last year					0.03
Less than \$29,999	43	8.4	38	16.5	
\$30,000 to \$59,999	68	13.3	32	13.9	
\$60,000 to \$89,999	89	17.4	31	13.5	
\$90,000 to \$119,999	88	17.2	42	18.3	
\$120,000 to \$149,999	59	11.6	19	8.3	
\$150,000 or more	62	12.1	23	10.0	
Do not know	11	2.2	9	3.9	0.03
Highest level of education completed					
Up to grade 7	0	0.0	0	0.0	
Grade 8 or higher, but did not receive high school diploma	6	1.2	3	1.3	
High school diploma	14	2.7	8	3.5	
Some college or university	30	5.9	29	12.6	<0.01
College or university degree or higher	456	89.2	189	82.2	
Sexual orientation					
Bisexual	7	1.4	1	0.4	
Gay	0	0.0	0	0.0	
Heterosexual	500	97.9	217	94.4	
Lesbian	0	0.0	1	0.4	
Two-spirit	0	0.0	0	0.0	
Queer	1	0.2	3	1.3	
Do not know	0	0.0	1	0.4	
Born in Canada					0.31
Yes	351	68.7	146	63.5	
No	156	30.5	81	35.2	0.10
Time living in Canada, years					
<1	9	5.8	4	5.1	
1–3	24	15.6	12	15.2	
4–5	11	7.1	10	12.7	
6–10	22	14.3	10	12.7	
10+	64	41.9	40	50.6	
Do not know	2	1.3	1	1.3	

Note: Responses of “prefer not to answer” have been omitted from this table.

Table 2. Participants' pregnancy- and program-related characteristics

	Study group		Lost to follow-up		p-value
	n	%	n	%	
Total # of participants	511	—	230	—	
Expecting					0.80
Singleton	496	97.0	222	96.5	
Multiples	10	2.0	6	2.6	
Prefer not to answer	5	1.0	2	0.9	
First pregnancy					0.03
Yes	459	89.8	192	83.5	
No	46	9.0	35	15.2	
Prefer not to answer	6	1.2	3	1.3	
Main support during pregnancy					0.49
Partner/spouse	460	90.0	207	90.0	
Parent/family member	39	7.6	14	6.1	
Friend	3	0.6	4	1.7	
No support	4	0.8	1	0.4	
Other	3	0.6	3	1.3	
Prefer not to answer	2	0.4	1	0.4	
Trimester in which began prenatal program					0.76
1 st (0–12 weeks)	11	2.3	13	6.1	
2 nd (13–28 weeks)	192	40.6	109	50.7	
3 rd (29–40 weeks)	270	57.1	93	43.3	
Missing	38	7.4	15	6.5	
Program completion					—
All of the program	373	73.0	—	—	
More than half, but not all	101	19.8	—	—	
Less than half	23	4.5	—	—	
None	5	1.0	—	—	
Prefer not to answer	9	1.8	—	—	

was also a significant difference across participants' pre and post mean knowledge scores across each subtopic area ($p < 0.01$). When the differences in pre- and post-survey scores were stratified for low and high baseline knowledge, there was a significant increase in mean total knowledge scores on the HPKS for both groups (Table 3b). Table 4 depicts participants' self-reported knowledge change in various domains of their prenatal program. Consistent with the differences in the pre and post mean knowledge score changes, the majority of study group participants reported that their knowledge of each topic improved somewhat or a lot. Participants reported a considerable improvement in breastfeeding-related knowledge.

Program satisfaction

Participants' prenatal program satisfaction is shown in Table 5. The majority of participants reported that the programs had satisfied their questions across all content areas examined. Participants appeared most satisfied in terms of their breastfeeding-related questions. The majority of participants (66%) indicated that the material was always presented in a clear, understandable manner, and 63% reported that teaching aids were always easy to view and increased their learning.

Table 3a. Mean pre- and post-program survey knowledge scores ($n = 511$)

	Mean score pre-program test	Mean score post-program test	p-value
Total knowledge	21.2	24.4	< 0.01
Healthy pregnancies	9.1	9.8	< 0.01
Healthy lifestyles	7.4	8.4	< 0.01
Breastfeeding	4.5	6.2	< 0.01

DISCUSSION

This cohort study was implemented to ascertain the level of knowledge change among Ontario women participating in PHU prenatal programs. Findings from the study highlight the success of these programs in increasing women's pregnancy and breastfeeding knowledge, the diversity in the women served and women's reported satisfaction with the programs. These findings are encouraging; however, they raise a number of important considerations and have implications for the delivery of effective programming in Ontario.

Knowledge change associated with participation in prenatal programs

This large-scale study indicates that prenatal programs offered through Ontario PHUs contribute to a significant increase in prenatal knowledge among women. The most significant knowledge change was in breastfeeding benefits and techniques. A great proportion of pregnancy information stems from lived experience and previous pregnancies,¹ and since 90% of the study group were primiparous this finding may reflect participants' lack of breastfeeding knowledge prior to their participation in the program. Participants reported that they had gained significant knowledge about breastfeeding after participating in the program and reported a very high level of satisfaction with their prenatal education program. Numerous associations have been made between prenatal exposure to breastfeeding information and expression of intent to breastfeed.¹² In addition, many studies have found positive associations between increasing knowledge and confidence, particularly related to breastfeeding initiation and exclusivity. The reported increase in breastfeeding knowledge found in the current study reflects a critical success of prenatal programs,

Table 3b. Mean pre- and post-program survey knowledge scores stratified for baseline knowledge

	Low baseline knowledge			High baseline knowledge		
	Mean score pre-program test	Mean score post-program test	p-value	Mean score pre-program test	Mean score post-program test	p-value
Total knowledge	16.6	22.1	< 0.01	23.1	25.4	< 0.01

given the numerous well-documented benefits of breastfeeding for mothers and their infants.¹³⁻¹⁷

Future research should explore factors that influence knowledge change, including the mode of delivery (online vs. in-person), duration, and secondary aids such as blended programs. There is currently a practice shift toward exploring different formats of instruction, including online prenatal education, given its cost-effectiveness and convenience. Government-funded programs, such as prenatal programs offered through PHUs, operate with limited resources, making an online modality attractive.

Women served by prenatal programs in Ontario

The characteristics of the participant sample suggest that prenatal programs in Ontario attract a diverse clientele, ranging in age, race/ethnicity, income level and residency, and reflecting the widespread popularity of prenatal programs among pregnant women in Canada. The majority of participants were primiparous, aged 30 years or older and had completed a college or university degree or higher, characteristics common to other studies.¹⁸ The diversity reported in the 2011 National Household Survey (NHS) for Ontario was reflected in the demographic characteristics of our study sample, demonstrating diversity in the programs' reach. For example, in the study sample, 30.5% of women were immigrants, consistent with the NHS, which found that 28% of Ontario's population are immigrants.¹⁹ Given that pregnant newcomers have been identified as a particularly vulnerable group for poor birth outcomes as a result of social isolation, financial issues and unmet nutritional needs, it is

encouraging to note their presence in accessing PHU prenatal programs.²⁰

Most participants began their prenatal program relatively late in their pregnancy. The first trimester represents a critical period in healthy fetal development, and it is important that women have the necessary information to support healthy choices and behaviours during this time. This is particularly true for those behaviours that are habitual, such as diet and physical activity, content areas in which study participants scored the lowest on knowledge change. Beginning a prenatal program in which the content may focus on labour and birth, or breastfeeding, may not be a priority during the initial weeks of pregnancy and may explain why the majority of participants began their programs having already accessed other prenatal education resources, such as books and websites. It is recommended that health care providers and public health professionals offering preconception and prenatal services communicate the advantage of receiving timely information through early access to prenatal programs. Careful review of the prenatal curriculum is recommended to ensure that key messages are relevant and contribute to achieving public health's mandate of improving birth outcomes. Future research should explore strategies for engaging pregnant women in prenatal programs at an earlier stage in their pregnancy.

Of concern are the participants who did not complete the post-program survey (i.e., lost to follow-up). Our study revealed that low-income women were the largest group lost to follow-up in comparison with the study group. Data analyses from the Maternity Experiences Survey found that lower-income women were less likely to attend prenatal classes in Canada.¹ These women may face a number of barriers to accessing prenatal

Table 4. Self-reported knowledge change in various domains in prenatal education curriculum

	Statement					
	I became a lot more confused about this topic	I became somewhat more confused about this topic	My knowledge about this topic did not change	My knowledge about this topic improved somewhat	My knowledge about this topic improved a lot	Prefer not to answer
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Preterm labour	6 (1.2)	11 (2.2)	63 (12.3)	243 (47.6)	186 (36.4)	2 (0.4)
Physical and emotional changes during pregnancy	2 (0.4)	4 (0.8)	131 (25.6)	216 (42.3)	156 (30.5)	2 (0.4)
Stress and relaxation during pregnancy	4 (0.8)	1 (0.2)	149 (29.2)	209 (40.8)	145 (28.4)	3 (0.6)
Healthy eating	2 (0.4)	2 (0.4)	200 (39.1)	203 (39.7)	103 (20.2)	1 (0.2)
Physical activity	1 (0.2)	4 (0.8)	232 (45.4)	186 (36.4)	87 (17.0)	1 (0.2)
Environmental exposures	5 (1.0)	2 (0.4)	178 (34.8)	199 (38.9)	125 (24.5)	2 (0.4)
Resources for more information	3 (0.6)	5 (1.0)	69 (13.5)	176 (34.4)	253 (49.5)	5 (1.0)
Breastfeeding benefits	6 (1.2)	5 (1.0)	90 (17.6)	147 (28.8)	256 (50.1)	7 (1.4)
Breastfeeding techniques	5 (1.0)	6 (1.2)	53 (10.4)	121 (23.7)	320 (62.6)	6 (1.2)

Table 5. Participants' satisfaction with their prenatal program

Q. How well did your prenatal education program satisfy your questions on the following:

	Not at all n (%)	Somewhat n (%)	Mostly n (%)	Very well n (%)	Prefer not to answer n (%)
Physical changes of pregnancy	10 (2.0)	65 (12.7)	207 (40.4)	221 (43.2)	9 (1.8)
Emotional changes of pregnancy	10 (2.0)	69 (13.5)	188 (36.7)	237 (46.3)	8 (1.6)
Common changes or concerns during pregnancy	4 (0.8)	44 (8.6)	192 (37.5)	263 (51.4)	9 (1.8)
Nutrition during and after pregnancy	9 (1.8)	73 (14.3)	233 (45.5)	190 (37.11)	7 (1.4)
What to expect of a new baby	14 (2.7)	54 (10.6)	188 (36.7)	246 (48.1)	10 (2.0)
The postpartum period	13 (2.5)	63 (12.3)	180 (35.2)	247 (48.2)	9 (1.8)
Breastfeeding	4 (0.8)	42 (8.2)	135 (26.4)	320 (62.5)	11 (2.2)

Q. How would you respond to the following statements?

	Never n (%)	Sometimes n (%)	Usually n (%)	Always n (%)	Prefer not to answer n (%)
The material was presented in a clear, understandable manner.	3 (0.6)	23 (4.5)	139 (27.2)	340 (66.4)	7 (1.4)
Teaching aids were easy to view and increased my understanding.	5 (1.0)	51 (10.0)	129 (25.2)	321 (62.7)	6 (1.2)

programs, including registration cost for program, transportation, language barriers, and computer access and/or literacy. Given the impact of income on birth outcomes, it is important for prenatal programs to engage and retain low-income populations. Strategies for continuing to engage these women should be explored.

Client satisfaction

Women are generally satisfied with their prenatal program, which effectively addressed many of their pregnancy-related questions. A high level of satisfaction associated with breastfeeding-related questions mirrors the large degree of knowledge change within this content area. This reinforces the fact that Ontario PHUs are effectively delivering this important content to pregnant women through prenatal programs. Relative to other content areas, satisfaction with nutrition-related content was lower. This may be a reflection of two factors. First, women were entering their programs later in pregnancy, when they may have had a better understanding of nutrition-related considerations and therefore few questions or concerns about this subject matter. Alternatively, perhaps nutrition-related messages are not as clearly or adequately emphasized within the programs' curriculum. This should be explored in future research.

An important aspect of client satisfaction is understanding program attrition. One third of participants who completed the pre-program survey did not complete the post-program survey, and one quarter of participants who completed the post-program survey reported that they did not complete the entire program. Future program evaluation is recommended to understand contributing factors and engagement with both populations, particularly given that the former included a vulnerable group (i.e., low income).

Limitations

Although this study demonstrates important findings related to knowledge change in PHU prenatal programs, there are some limitations that must be considered. This is a cohort study in which women volunteered to participate in a prenatal program. As such, the study lacks a randomized control group of women,

which limits inferences about causation in the relationship between pregnancy-related knowledge and program participation. In addition, only pregnant adult females were included in the sample. It is important to also engage expectant partners in prenatal education efforts, and future research should explore partners' experience and knowledge change through these programs.

The HPKS has not been formally validated. However, this survey is the first prenatal knowledge-change tool developed for Canadian public health programming contexts. Additionally, pilot testing of the HPKS revealed that adult pregnant women found the tool to be clear and user-friendly.¹¹ Accordingly, it was deemed appropriate for meeting the objectives of the study. The HPKS is primarily intended to capture knowledge of prenatal curricula and does not account for participants' behaviour either during or after pregnancy. However, knowledge of practices that support healthy pregnancies and babies creates a foundation and may be predictive of those behaviours and have a positive influence on self-efficacy and confidence.

It is expected that prenatal programs delivered through PHUs vary in their instructors, delivery and populations served. Others have noted that these factors are difficult to control for in analyses,¹⁶ although they likely have a bearing on the knowledge gained by participants.

It is difficult to attribute any change in knowledge to the program alone given the number of resources available for information (e.g., friends/family, blogs, discussion boards). To allow for some control over the influence of concurrent knowledge, the survey also inquired into what types of resources women used outside the prenatal program during the study period (Appendix B).

Finally, although this study found statistically significant increases in participants' pregnancy-related knowledge following their engagement in prenatal programs, the clinical relevance of this improvement is unclear. Despite this uncertainty, the individual-level increases in both measured and self-reported knowledge are likely important to the confidence and self-efficacy of the participants, particularly those who are primiparous. Future research could clarify the importance of pregnancy-related

knowledge increases by demonstrating the accompanying changes in behaviours (e.g., regarding breastfeeding initiation and duration).

CONCLUSION

This is the first large-scale study in Ontario to examine the ability of PHU prenatal programs to influence women's pregnancy-related knowledge. The findings reported will contribute to the evidence on the effectiveness of prenatal education and assist PHUs with program planning regarding the delivery of public health prenatal programs in Canada.

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RÉSUMÉ

OBJECTIFS : L'objectif principal était d'examiner comment la participation aux programmes prénatals donnés par les bureaux de santé publique de l'Ontario influence les connaissances des femmes enceintes sur la grossesse. Les objectifs secondaires étaient d'examiner les caractéristiques sociodémographiques des femmes qui participent à ces programmes et d'évaluer leur satisfaction par rapport aux programmes.

MÉTHODE : Nous avons mené une étude de cohorte auprès de 511 femmes adultes enceintes inscrites à un programme prénatal dans l'un de sept bureaux de santé publique en Ontario. Avant le programme, les participantes ont rempli un questionnaire portant sur leurs caractéristiques sociodémographiques, leur grossesse et leurs connaissances préalables sur la grossesse. À la fin du programme, elles ont rempli un questionnaire évaluant leurs connaissances sur la grossesse et leur satisfaction par rapport au programme. Les connaissances sur la grossesse ont été évaluées à l'aide du questionnaire *Healthy Pregnancies Knowledge Survey*, qui sonde les connaissances dans trois sous-domaines : la grossesse en santé, les modes de vie sains et l'allaitement maternel.

RÉSULTATS : La note moyenne des participantes a augmenté de façon significative, globalement et dans chaque sous-domaine de connaissances. La plupart des participantes ont déclaré que le programme avait très bien ou en grande partie répondu à leurs questions dans tous les domaines abordés.

CONCLUSION : Notre étude est la première intervention à grande échelle qui examine la capacité des programmes prénatals offerts par les bureaux de santé publique de l'Ontario à influencer les connaissances des clientes sur la grossesse. Les constatations de l'étude contribueront aux fondements scientifiques de la planification des programmes d'éducation prénatale.

MOTS CLÉS : éducation prénatale; connaissances; attitudes; pratiques en santé; parents; évaluation de programme; recherche en évaluation des soins infirmiers