

Journal of Human Lactation

<http://jhl.sagepub.com>

An Assessment of the Impact of Breastfeeding Clinic Attendance on Women's Breastfeeding Experiences

Caroline Lamontagne, Anne-Marie Hamelin and Monik St-Pierre
J Hum Lact 2009; 25; 42 originally published online Oct 29, 2008;
DOI: 10.1177/0890334408324451

The online version of this article can be found at:
<http://jhl.sagepub.com/cgi/content/abstract/25/1/42>

Published by:



<http://www.sagepublications.com>

On behalf of:



[International Lactation Consultant Association](http://www.ilca.org)

Additional services and information for *Journal of Human Lactation* can be found at:

Email Alerts: <http://jhl.sagepub.com/cgi/alerts>

Subscriptions: <http://jhl.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations <http://jhl.sagepub.com/cgi/content/refs/25/1/42>

An Assessment of the Impact of Breastfeeding Clinic Attendance on Women's Breastfeeding Experiences

Caroline Lamontagne, DtP, MSc, Anne-Marie Hamelin, DtP, PhD, and Monik St-Pierre, DtP, MSc

Abstract

Breastfeeding clinics aim to increase breastfeeding duration and diminish breastfeeding difficulties. Actual improvement in the duration and satisfaction of the breastfeeding experience for women using these clinics remains unknown. This observational study assessed the impact of a Québec City breastfeeding clinic's interventions on breastfeeding duration and satisfaction among women experiencing breastfeeding difficulties in comparison with women who did not receive clinic services. The study surveyed 86 women using telephone questionnaires and semistructured interviews. After adjusted logistic regression analysis, women who attended the clinic had a higher probability of breastfeeding for at least 6 months (odds ratio [OR] = 4.34; 95% confidence interval [CI] = 1.35-13.96) than women from the comparison group. They also had a higher probability of being satisfied with their breastfeeding experience (OR = 4.17; 95% CI = 1.31-13.22). Physical and moral support could explain this influence. Larger studies on breastfeeding clinics are needed to confirm their role in enhancing breastfeeding duration and satisfaction. *J Hum Lact.* 25(1):42-54.

Keywords: breastfeeding clinic, evaluation, physical support, moral support, breastfeeding experience

Health Canada,¹ like many other authorities such as the World Health Organization,² recommends exclusive

Received for review July 6, 2007; revised manuscript accepted for publication August 13, 2008.

No reported competing interests.

Caroline Lamontagne is a planning, programming, and research officer at the Public Health Office in the Capitale-Nationale area in Québec, Canada. **Anne-Marie Hamelin** is a professor of public nutrition in the Department of Food Sciences and Nutrition at the Université Laval, Québec, Canada, and a researcher at the Centre de santé et des services sociaux de la Vieille-Capitale. **Monik St-Pierre** works as a planning, programming, and research officer at the Public Health Office in the Capitale-Nationale area in Québec, Canada.

The authors acknowledge the clinicians of the Québec City Breastfeeding Clinic—namely, Marie-Josée Santerre, IBCLC, Cécile Fortin, IBCLC, Jean-Claude Mercier, PhD, and Martin Lalinec-Michaud, PhD, the members of the orientation committee; Stéphanie Camden, statistician; the survey firm SOM; and all the participants of this study. The authors thank the reviewers for their thoughtful comments on an initial version of this article. They also acknowledge the Programme de subvention en santé publique (PSSP) of the Agence de la santé et des services sociaux de la Capitale-Nationale for funding this master's degree study. Address correspondence to Anne-Marie Hamelin, Department of Food Sciences and Nutrition, Université Laval Québec (Québec), G1K 7P4, Canada.

Source of support: Programme de subvention en santé publique (PSSP) of the ministère de la Santé et des Services sociaux et de l'Agence de la santé et des services sociaux de la Capitale-Nationale.

J Hum Lact 25(1), 2009

DOI: 10.1177/0890334408324451

© Copyright 2009 International Lactation Consultant Association

breastfeeding for the first 6 months of life. After this period, infants should be introduced to solid foods and continue to be breastfed for up to 2 years or more. Scientific evidence has shown that maternal breastfeeding is the benchmark for infant feeding and that nonbreastfeeding presents many risks for children, mothers, and society.³

In 2001, the Ministry of Health and Social Services of the province of Québec, Canada, established the following objectives for 2007: a breastfeeding rate of 85% at maternity discharge, 50% at 6 months, and 20% at 1 year of life.⁴ By 2005-2006, breastfeeding rates in the province had reached 85% at maternity discharge and 47% at 6 months.⁵ Rates for the Greater Québec City region (approximate population 650 000 in 2001) were similar. Although close to Ministry objectives, these rates still leave room for improvement when compared with those in Norway, where 80% of women were breastfeeding at 6 months in 1998, and in Sweden, with 70% at 6 months in 2000.⁶ Moreover, in 2005, Québec breastfeeding rates for exclusive breastfeeding at 6 months were 3%⁵ (7% in Norway⁶), far from the 10% objective set by the Ministry.⁴

Health is a provincial jurisdiction in Canada, which means Québec is in charge of determining which health services it offers, including those related to

breastfeeding. Because Québec has a public health care system and public health insurance, most health services are provided free of direct charge or at minimal cost. Breastfeeding services normally available in Québec include prenatal courses and systematic one-time postnatal home visits by a nurse from a local community services center. In some regions, including the Greater Québec City area, nurses may make more than 1 visit if necessary, in the event of breastfeeding difficulties, for example. Breastfeeding support groups are also active in most regions of Québec. Last, several newly created breastfeeding clinics staffed by lactation consultants and general practitioners have been established in the province.

Despite these breastfeeding services, many women experience breastfeeding difficulties. In the Greater Québec City region, a study of 407 women found that many of them experienced breastfeeding problems, especially during the first 2 weeks. These included cracked nipples, low milk supply, latching difficulties or breast refusal, blocked ducts, baby always hungry, very frequent feeding, frequent baby crying, mastitis, and sore nipples.⁷ These difficulties were similar to those experienced by women elsewhere in the province of Québec and the rest of Canada.⁸⁻¹⁰ Among the main reasons given by women in the Greater Québec City region for ceasing breastfeeding were problems such as milk insufficiency (perceived or real), baby weight issues (insufficient weight gain), lack of time for the mother, and breast problems.⁷ Similar reasons are reported in other Canadian studies.^{8,10}

A number of studies and literature reviews have sought to assess which interventions influence breastfeeding duration. Generally, these studies suggest that support from health professionals is beneficial for both overall and exclusive breastfeeding duration.¹¹⁻¹⁵ Findings suggest that a combination of support, reassurance, teaching of breastfeeding techniques, and professional information provided on an in-person basis is beneficial for breastfeeding duration.^{13,16,17}

At the time of this study, there was 1 breastfeeding clinic in Québec City, located at the Centre hospitalier universitaire de Québec (CHUQ). It was established in 2004 by the Québec City regional public health department and the CHUQ at the request of field workers who wanted to provide better support to women with acute breastfeeding problems. At that time, the clinic was funded in part by the regional public health department and in part by the CHUQ.¹⁸ The breastfeeding clinic aims to offer quality care to women with breastfeeding difficulties. To obtain clinic services, women must be

referred by a nurse, dietitian, midwife, physician, or breastfeeding group volunteer. Once referred, they meet with a physician and an International Board Certified Lactation Consultant (IBCLC) from the clinic. This team assesses various parameters by completing a medical history, a physical and mental examination, and a breastfeeding evaluation.¹⁸ According to an anonymous satisfaction questionnaire distributed to all the clinic users in 2004-2005 and completed by 47% of them (245 forms completed), users were very satisfied with various aspects of the clinic,¹⁸ including client reception, wait time, usefulness of the information and treatment received, and overall satisfaction with their clinic experience.

Other breastfeeding clinics exist in industrialized countries, but little information has been gathered about them, and their effectiveness remains essentially unevaluated. Contrary to the Québec City facility where physicians and IBCLCs work in teams, the other documented clinics are usually staffed with IBCLCs and nurses. They have been set up to help women experiencing breastfeeding difficulties and offer in-person and telephone services on a nonreferral basis.¹⁹⁻²¹ Their goal appears to be to increase breastfeeding duration and reduce the prevalence of breastfeeding problems.^{20,21} Evaluation studies also indicate that women are very satisfied with these clinics and believe that they help them enhance breastfeeding duration, learn more about breastfeeding, and find solutions to their problems. Women are particularly satisfied with the participative approach of these centers, the quality of information, and all the support and encouragement they receive.^{20,21}

To our knowledge, no study has assessed whether women attending such clinics actually breastfeed for a longer period or if they are more satisfied than women who do not use the clinics' services. In light of Health Canada's emphasis on the importance of evaluating different breastfeeding programs,¹ this article aims to assess the effects of the Québec City breastfeeding clinic on breastfeeding duration and overall satisfaction among women experiencing breastfeeding difficulties, as compared with women with similar difficulties who did not receive clinic services.

Methods

Design

This observational study with a comparison group used quantitative and qualitative methods. Individual

semistructured interviews were conducted to complement a telephone questionnaire administered to 2 groups of breastfeeding women.

This study was approved by the Clinical Research Ethics Committee at the Centre hospitalier de l'Université Laval and the Research Ethics Committee at the Centre de santé et de services sociaux in Trois-Rivières.

Population and Sampling Criteria

The sample population was composed of French-speaking women aged 20 years and older, living in the Greater Québec City region and having experienced major breastfeeding difficulties. To be included in the study, women had to be primiparous, have given birth to a healthy baby at full term, and have experienced major breastfeeding difficulties (nipple pain/sores/cracks, breast pain/infection, low milk supply, difficulty latching baby, frequent crying by baby, insufficient weight gain, breast refusal, and other similar problems) between delivery and the second month of the baby's life. Women who gave birth to an infant born with an abnormality or serious illness were excluded from the study.

The target group (TG) was composed of women having used the services of the breastfeeding clinic. They had to have given birth between July 1, 2004, and August 31, 2005. The comparison group (CG) was composed of women living in Trois-Rivières, a town located 200 km southwest of Québec City with no clinic services. Women from this group had to have given birth between May 1, 2004, and December 31, 2005. The birth period for the comparison group was deliberately made longer to facilitate recruitment because the number of mothers in Trois-Rivières was smaller than that of the target group. Trois-Rivières was chosen for the comparison because the basic breastfeeding services available there are similar to the basic services offered in the Greater Québec City region. Nurses systematically visit mothers at home after delivery and may make more than 1 return visit in the event of breastfeeding difficulties. In addition, nurses and other professionals have access to comprehensive and free clinical training on a regular basis. The type of assistance offered by breastfeeding support groups is similar from 1 region to another. However, women in the Trois-Rivières region do not have access to the services of a breastfeeding clinic unless they travel to Québec City, Montreal, or Sherbrooke. Breastfeeding rates are similar to those in the Greater Québec City region.⁵

Sampling Procedures and Data Collection

The quantitative component of the study was composed of a telephone questionnaire, administered to the 2 groups of women. Women in the target group were recruited by 2 members of the research team using a systematic stratified random sample drawn up from a list of children who had attended the clinic. For the comparison group, local community services center records of women who gave birth during the eligibility period were used to draw up a list of all women who satisfied the selection criteria. These women were then contacted by phone by a member of the research team to verify whether they had experienced major breastfeeding difficulties that may have warranted referral to the Québec City breastfeeding clinic. Women who met this criterion and who agreed to participate were included in the study.

The telephone questionnaire was composed of 80 closed, multiple-choice questions divided into 8 themes: information to verify respondent's eligibility, characteristics of the mother, characteristics of the child, breastfeeding experience, breastfeeding support, use of the breastfeeding clinic, other characteristics of the breastfeeding experience, and sociodemographic data. Dependent variables (duration of breastfeeding and satisfaction with the breastfeeding experience) were assessed with 2 questions:

1. How long did you breastfeed your child in total, taking all types of breastfeeding into account?
2. On a scale of 1 to 5, 1 being very dissatisfied and 5 very satisfied, how would you rate your satisfaction with your overall breastfeeding experience? (1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *moderately satisfied*, 4 = *satisfied*, 5 = *very satisfied*)

Exclusive breastfeeding duration was not assessed. The variables and questions were selected on the basis of the literature review and the themes recommended by the members of a steering committee. Question wording, notably for questions on sociodemographic data and characteristics of the mother, was derived from questionnaires used in major Québec and Canadian studies.²²⁻²⁷ Other questions, including those on breastfeeding, were inspired by a telephone survey used in a previous study.⁷ The telephone questionnaire was pretested on 5 women from the target group before

being administered by a professional survey firm (SOM) to all other women from the target group and the comparison group.

The qualitative component consisted of individual semistructured interviews with a subsample of women from the target group and the comparison group. For this component, women from the 2 groups were selected using a purposeful sampling method. The women who responded to the telephone survey were invited to participate in an interview. Those who expressed interest in participating were then subjected to a selection according to 2 criteria—total duration of breastfeeding and level of education—so as to obtain a diverse sample. Women meeting the criteria were contacted by phone by the research team. The first women contacted and who accepted our invitation were the first included in this component. As there were no existing interview grids in the literature to serve as models, a semistructured grid was designed using the Paillé method²⁸ and pretested on 4 women. It focused on the following themes: personal breastfeeding history, factors facilitating breastfeeding, obstacles and barriers to breastfeeding, social influence on breastfeeding, experience at the breastfeeding clinic, opinion about the creation of a breastfeeding clinic for Trois-Rivières, and other relevant information related to the breastfeeding experience.

Data Analysis

A descriptive analysis of the responses to the telephone questionnaire by the 2 groups was carried out using frequency tables. Then, chi-square and Fisher's exact tests were used to search for associations between the variables studied (sociodemographic, women's characteristics, breastfeeding experience, breastfeeding support) and use of breastfeeding clinic services. Chi-square and Fisher's exact tests were also used to determine if there was an association between these variables and the dependant variables, total breastfeeding duration, and overall breastfeeding satisfaction. Definitions proposed by Labbok and Krasovec²⁹ were used. In this article, *breastfeeding* refers to total breastfeeding, including all breastfeeding categories. In addition, for all association tests, after studying breastfeeding duration in both groups of women, we divided duration into 3 periods—less than 2 months, 2 to less than 6 months, and 6 months and over—with the aim of having a similar proportion of women in the 3 categories. For all tests, a probability level of $< .05$ was used to establish statistical significance. After that, adjusted logistic regression models were used to predict the factors associated with the

2 dependant variables: breastfeeding duration (2 periods: less than 6 months and 6 months and over) and overall satisfaction with the breastfeeding experience (2 categories: unsatisfied [1-2] and satisfied [3-5]). The 2 models were adjusted for confounding variables identified in the literature and for variables associated with clinic attendance, breastfeeding duration, and breastfeeding satisfaction, based on the association tests performed for this study. Results are reported as adjusted odds ratios, along with 95% confidence intervals. These tests were performed with SPSS 13.0 software for Windows and with SAS 9.1.

A validity measure was taken for total breastfeeding duration, which was measured with 2 questions. The correlation between the answers to these 2 questions was assessed with Cronbach's alpha ($\alpha = 1$).

The semistructured interviews were fully transcribed. A content analysis³⁰ of the interviews using mixed categories was then carried out. The elements were classified and codified to extract all the characteristics of the message. Data were coded using NVivo 2.0 software, 2002. A conceptual framework was used to guide decisions about data collection and support the analysis. The framework draws on Ajzen's theory of planned behavior (TPB), which has been used to study breastfeeding determinants.³¹⁻³³ According to this theory,³⁷ behavior is influenced by intention and perceived behavioral control. Intention is determined by attitude, subjective norms, and perceived behavioral control. Based on others' work, Godin^{38,39} added 2 additional concepts to this model: facilitating factors and reinforcing factors. For this study, Godin's conceptual framework (Figure 1) was used as a guide to develop interview questions to identify the factors influencing the breastfeeding experience of women. This framework subsequently served to organize the interview data and also facilitated our understanding of the factors influencing women's experiences in the discussion of interview results.

An intracoder reliability measure was performed. For this purpose, the coder recoded more than 10% of the interview material. A percentage of concordance between this coding and the initial coding was then calculated according to the Miles and Huberman⁴⁰ formula.

Results

General Profile of Participants

Of the 72 women in the target group recruited to take part in the study, 13 could not be reached, 5 refused to participate, and 2 were excluded because

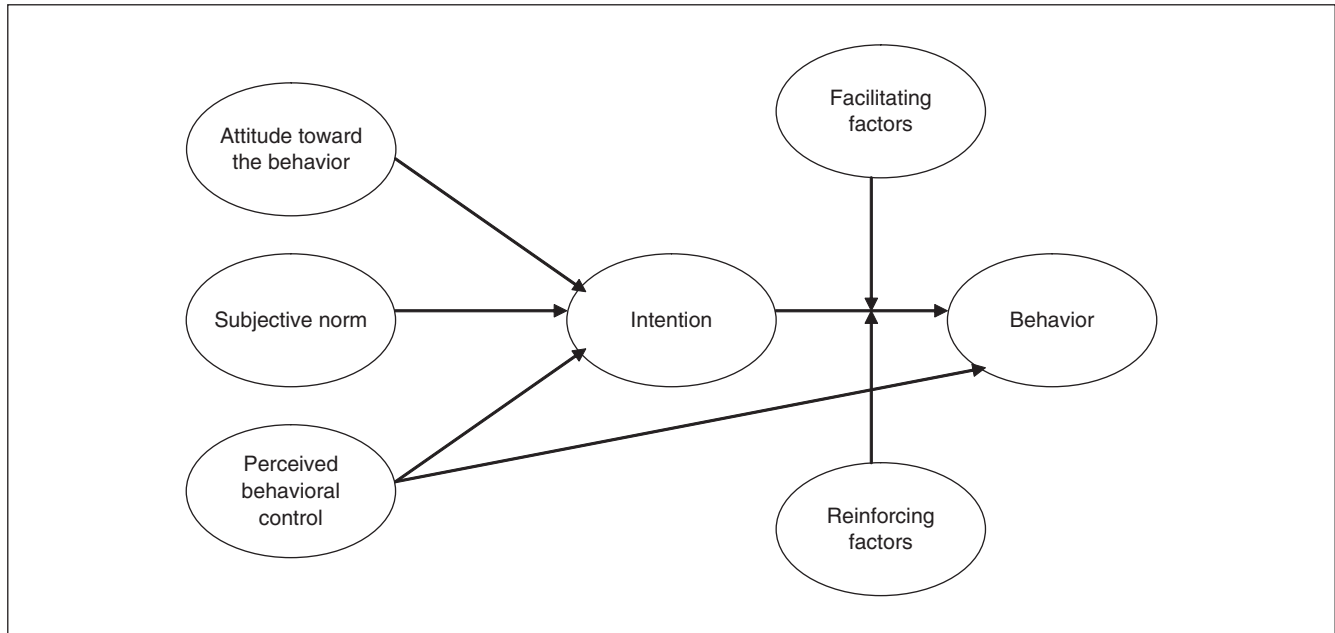


Figure 1. Conceptual framework.

they did not meet eligibility criteria. This left a total of 52 participants in the target group, including the 5 women who took part in the pretest. The survey responses of these 5 women were compiled along with those of the others, with the exception of their answers to 5 questions that were modified substantially after the pretest. For the comparison group, of the 68 women selected to participate in the study, 27 could not be reached, including 20 whose eligibility for the study was unknown. Three women refused to participate and 4 others were excluded, leaving a total of 34 women who completed the survey. Among all the participants ($n = 86$), 12 took part in the semistructured interviews, 6 from the target group and 6 from the comparison group.

The sociodemographic and economic characteristics of the participants shown in Table 1 suggest no baseline differences between the 2 groups. Also, the characteristics of the subsample of women who took part in the interviews are similar to those of the entire group.

As presented in Table 2, the 3 main major breastfeeding difficulties, all of which began before the baby was 2 months old, were the same for the target group and the comparison group. They were sore breast/nipple, low milk supply or insufficient weight gain or absence of stool for the infant, and difficulty latching baby to breast or breast refusal. The 4 main reasons for

ceasing breastfeeding (Table 3) were also similar for the 2 groups. The first 3 reasons for both groups were difficulties in latching baby or breast refusal, low milk supply, and pain. The fourth reason for the target group was the return to work, school, or daycare, whereas for women in the comparison group, it was infant health status or loss of weight. Finally, according to their responses, the main reasons why women from the target group attended the clinic were painful breasts or nipples (63.8%), difficulties latching baby or breast refusal (51.0%), milk insufficiency or poor weight gain (29.8%), and latching problems (21.3%). Some women also attended the clinic because of frequent baby crying (8.5%) or problems with inverted nipples (4.3%).

Breastfeeding Duration and Overall Satisfaction

Table 4 shows associations between breastfeeding clinic attendance and different variables. Results of the chi-square and Fisher's exact analyses indicate that women receiving clinic services already intended to breastfeed longer ($P = .01$) at the time their babies were born. Moreover, they did actually breastfeed longer ($P < .001$) and were more satisfied with delivery center interventions ($P < .001$) than women from the comparison group. Overall breastfeeding satisfaction also tends to be greater for women who received clinic services ($P = .07$). Many other variables (motivation,

Table 1. Sociodemographic and Economic Characteristics of Participants

Characteristics	Total (N = 86) No. (%)	Target Group (n = 52) No. (%)	Comparison Group (n = 34) No. (%)	P
Maternal age, y				.94 ^a
20-29	48 (55.8)	29 (55.8)	19 (55.9)	
30-34	24 (27.9)	14 (27.0)	10 (29.4)	
35 and older	14 (16.3)	9 (17.3)	5 (14.7)	
Marital status				.15 ^b
Married/common law	84 (97.7)	52 (100.0)	32 (94.1)	
Divorced	1 (1.2)	0 (0)	1 (2.9)	
Single/never married	1 (1.2)	0 (0)	1 (2.9)	
Education				.40 ^b
Professional studies diploma or less	11 (12.8)	7 (13.5)	4 (11.8)	
College diploma	28 (32.6)	14 (27.0)	14 (41.2)	
University diploma	47 (54.7)	31 (59.6)	16 (47.1)	
Family income, \$.39 ^b
< 30 000	9 (10.5)	4 (7.7)	5 (14.7)	
30 000 to < 50 000	17 (19.8)	9 (17.3)	8 (23.5)	
≥ 50 000	60 (69.8)	39 (75.0)	21 (61.8)	

^a Chi-square test.

^b Fisher's exact test.

Table 2. Major Breastfeeding Difficulties Experienced

Difficulties ^a	Total (N = 79) ^b No. (%)	Target Group (n = 46) ^b No. (%)	Comparison Group (n = 33) ^b No. (%)
Sore breast/nipple	70 (88.6)	44 (95.7)	26 (78.8)
Milk insufficiency/insufficient weight gain/stool absence	51 (64.6)	27 (58.7)	24 (72.7)
Latching difficulties/breast refusal	37 (46.8)	26 (56.5)	11 (33.3)
Sucking difficulties	12 (15.2)	6 (13.0)	6 (18.2)
Frequent baby crying	8 (10.1)	3 (6.5)	5 (15.2)
Inverted nipple	5 (6.3)	4 (8.7)	1 (3.0)
Others	3 (3.8)	2 (4.4)	1 (3.0)

^a Each woman had 1 to 3 responses.

^b Data are missing for 7 women (6 from the target group and 1 from the comparison group).

Table 3. Reasons for Ceasing Breastfeeding

Reasons ^b	Total (N = 75) ^b No. (%)	Target Group (n = 41) ^b No. (%)	Comparison Group (n = 34) ^b No. (%)
Latching difficulties/breast refusal	29 (38.7)	17 (41.5)	12 (35.3)
Low milk supply	28 (37.3)	15 (36.6)	13 (38.2)
Pain	20 (26.7)	11 (26.8)	9 (26.5)
Return to work/school or start of daycare	15 (20.0)	11 (26.8)	4 (11.8)
Breastfeeding objective attained/child old enough	14 (18.7)	7 (17.1)	7 (20.6)
Inconvenience/tired from breastfeeding	10 (13.3)	2 (4.9)	8 (23.5)
Child's health/weight loss	10 (13.3)	1 (2.4)	9 (26.5)
Lack of time/need for autonomy/freedom	5 (6.7)	4 (9.8)	1 (2.9)
Health problem in mother/medication	4 (5.3)	3 (7.3)	1 (2.9)
Desire to drink alcohol/varied diet	2 (2.7)	1 (2.4)	1 (2.9)
Child's desire or choice	2 (2.7)	2 (4.9)	0 (0.0)
Person's opinion	1 (1.3)	0 (0.0)	1 (2.9)
Effect of bottle	3 (4.0)	3 (7.3)	0 (0.0)
Others linked to woman's morale	3 (4.0)	0 (0.0)	3 (8.8)
Others	10 (13.3)	3 (7.3)	7 (20.6)

^a Each woman had 1 to 3 responses.

^b Data are missing for 11 women from Québec.

Table 4. Variables Associated With the Frequentation of the Breastfeeding Clinic

Variables	Total (N = 86) No. (%)	Target Group (n = 52) No. (%)	Comparison Group (n = 34) No. (%)	P
Breastfeeding intention at the time the baby was born				.01 ^a
< 2 months	2 (2.3)	2 (3.9)	0 (0.0)	
2 to < 6 months	10 (11.6)	7 (13.5)	3 (8.8)	
≥ 6 months	55 (64.0)	34 (65.4)	21 (61.8)	
As long as the infant needs it	4 (4.7)	4 (7.7)	0 (0.0)	
Has not thought about it	8 (9.3)	4 (7.7)	4 (11.8)	
As long as the breastfeeding will go well	6 (7.0)	0 (0.0)	6 (17.7)	
Doesn't know	1 (1.2)	1 (1.9)	0 (0.0)	
Total breastfeeding duration				< .001 ^b
< 2 months	30 (34.9)	10 (19.2)	20 (58.8)	
2 to < 6 months	19 (22.1)	13 (25.0)	6 (17.7)	
≥ 6 months	37 (43.0)	29 (55.8)	8 (23.6)	
Global satisfaction of the breastfeeding experience				.07 ^b
Very dissatisfied/dissatisfied (1-2)	26 (30.2)	11 (21.2)	15 (44.1)	
Moderately satisfied (3)	16 (18.6)	10 (19.2)	6 (17.7)	
Satisfied/very satisfied (4-5)	44 (51.2)	31 (59.6)	13 (38.2)	
Satisfaction of the services at the delivery center				< .001 ^a
Very dissatisfied/dissatisfied (1-2)	25 (29.1)	13 (25.0)	12 (35.3)	
Moderately satisfied (3)	22 (25.6)	6 (11.5)	16 (47.1)	
Satisfied/very satisfied (4-5)	38 (44.2)	32 (61.5)	6 (17.7)	
Does not apply	1 (1.2)	1 (1.9)	0 (0.0)	

^aFisher's exact test.

^bChi-square test.

pain, the moment the decision to breastfeed was made, intentions respecting exclusive breastfeeding, oral contraceptive use, breast surgery, cigarette use, return to work, citizenship, and a number of variables related to support) were tested in relation to clinic attendance, but no associations were found (data not presented).

Variables associated with total breastfeeding duration are shown in Table 5. Motivation to overcome breastfeeding difficulties ($P = .03$), satisfaction with delivery center interventions ($P = .01$), and breastfeeding clinic attendance ($P < .001$) were associated with longer breastfeeding duration. Table 6 shows that the highest levels of breastfeeding satisfaction were associated with the worst levels of breastfeeding pain ($P = .01$), the only variable for which an association with satisfaction was found. Clinic attendance tended to be associated with the highest levels of breastfeeding satisfaction ($P = .07$). Other variables tested (sociodemographic, return to work, intentions respecting breastfeeding duration, the moment the decision to breastfeed was made, motivation, variables related to support) presented no association with duration and satisfaction (data not presented).

Results of adjusted logistic regression analyses for total breastfeeding duration are presented in Table 7. Analyses were adjusted for age, education, and income, as these variables are shown in the literature to

have a strong influence on breastfeeding duration. They were also adjusted for intentions regarding breastfeeding duration and satisfaction with delivery center services because of associations found in this study between these variables and clinic attendance. Finally, they were adjusted for motivation associated with breastfeeding duration. Results show that women from the target group had a higher probability of breastfeeding for 6 months or more (odds ratio [OR] = 4.34; 95% confidence interval [CI] = 1.35-13.96).

Results of the logistic regression analysis for overall breastfeeding satisfaction are also presented in Table 7. This analysis was adjusted for the same variables as the previous one. However, it was not adjusted for motivation but for pain level, a variable that was found to be associated with global satisfaction. After analysis, women from the target group were found to have a higher probability of being satisfied (3-5) with regards to their breastfeeding experience (OR = 4.17; 95% CI = 1.32-13.22).

Influence of the Clinic on the Breastfeeding Experience

Responses to the telephone questionnaire showed that women from the target group believed that the clinic had increased their breastfeeding satisfaction and (84.6%) allowed them to meet (75.0%) their

Table 5. Variables Associated With Breastfeeding Total Duration

Variables	Total (N = 86) No. (%)	< 2 Months (n = 30) No. (%)	2 to < 6 Months (n = 19) No. (%)	≥ 6 Months (n = 37) No. (%)	P
Motivation to overcome breastfeeding difficulties					.03 ^a
Not motivated (1-2)	3 (3.5)	2 (6.7)	0 (0.0)	1 (2.7)	
Moderately motivated (3)	7 (8.1)	5 (16.7)	2 (10.5)	0 (0.0)	
Motivated/very motivated (4-5)	76 (88.4)	23 (76.7)	17 (89.5)	36 (97.3)	
Satisfaction of the services at the delivery center					.01 ^a
Very dissatisfied/dissatisfied (1-2)	25 (29.1)	13 (43.3)	4 (21.1)	8 (21.6)	
Moderately satisfied (3)	22 (25.6)	11 (36.7)	4 (21.1)	7 (18.9)	
Satisfied/very satisfied (4-5)	38 (44.2)	6 (20.0)	10 (52.6)	22 (59.5)	
Doesn't apply	1 (1.2)	0 (0.0)	1 (5.3)	0 (0.0)	
Has used the services of the clinic					< .001 ^b
Yes	52 (60.5)	10 (33.3)	13 (68.4)	29 (78.4)	
No	34 (39.5)	20 (66.7)	6 (31.6)	8 (21.6)	

^a Fisher's exact test.

^b Chi-square test.

Table 6. Variables Associated With the Global Satisfaction of the Breastfeeding Experience

Variables	Total (N = 86) No. (%)	Very Dissatisfied/ Dissatisfied (n = 26) No. (%)	Moderately Satisfied (n = 16) No. (%)	Satisfied/ Very Satisfied (n = 44) No. (%)	P
Worst pain ^c					.01 ^a
0	5 (6.0)	3 (12.0)	1 (6.7)	1 (2.3)	
1-3	18 (21.4)	4 (16.0)	7 (46.7)	7 (15.9)	
4-6	13 (15.5)	8 (32.0)	0 (0.0)	5 (11.4)	
7-10	48 (57.1)	10 (40.0)	7 (46.7)	31 (70.5)	
Has used the services of the clinic					.07 ^b
Yes	52 (60.5)	11 (42.3)	10 (62.5)	31 (70.5)	
No	34 (39.5)	15 (57.7)	6 (37.5)	13 (29.6)	

Scale for pain ranges from 0 = no pain to 10 = worst pain.

^a Fisher's exact test.

^b Chi-square test.

^c Missing data = 2

objectives. Almost half of them even believed that the clinic allowed them to exceed (48.1%) their objectives. Women participating in semistructured interviews explained that the clinic helped them in their breastfeeding experience by providing physical support. Such support included identification of problems and of temporary or permanent solutions:

But to heal my breast, he prescribed me some little ointments and other little things to do to accelerate the healing. (TG2-199, our translation)

When I went to the breastfeeding clinic, someone finally explained that my daughter was not taking

the breast very well. They help me to fix the latch. (TG1-20, our translation)

In the same way, women said that the clinic was a valuable source of moral support. The clinicians provided encouragement and reassurance and helped them view their experience in a positive way.

I was at the point where I saw this as a very negative experience, but then, . . . they made me see it more positively . . . with their message in fact, they made me see it more positively. (TG3-192, our translation)

Table 7. Association Between the Breastfeeding Clinic Attendance on the Total Breastfeeding Duration (≥ 6 Months) and Overall Satisfaction With the Breastfeeding Experience (Being Satisfied [3-5])

	Breastfeeding Total Duration OR ^a (95% CI)	Global Satisfaction OR ^b (95% CI)
Breastfeeding clinic attendance	4.34 (1.35-13.96)	4.174 (1.32-13.22)

OR, odds ratio; CI, confidence interval.

^aAdjusted for family income, instruction, women's age, intention for the breastfeeding duration, satisfaction of the services at the delivery center, and motivation to overcome breastfeeding difficulties. Hosmer Lemeshow $\chi^2 = 5.39$, $P = .72$.

^bAdjusted for family income, instruction, women's age, intention for the breastfeeding duration, satisfaction of the services at the delivery center, and worst pain felt. Hosmer Lemeshow $\chi^2 = 7.14$, $P = .52$.

Some women even thought that the breastfeeding clinic had played a determining role in the success of their experience:

Strongly, because if they had not found the trick of the catheter (lactation device) that had made "E" gain the weight she needed, it would have been the end of breastfeeding. I would have stopped there. (TG2-193, our translation)

For other women, even if the advice given at the clinic had not solved their problems, it had at least helped them make the breastfeeding experience last longer.

According to women who participated in semistructured interviews, other factors may have influenced the breastfeeding experience, including characteristics of the women and their intentions and attitudes. Some women considered that they themselves were the ones who had had the most decisive influence on their breastfeeding experience. A number of them also indicated that support from other people around them, such as health professionals, family, and friends, had had an impact. These persons may have influenced their experience through physical support (advice on breastfeeding, help with breastfeeding management, help at home, etc) or through moral support (encouragement, reassurance, etc). At the same time, according to the interviews conducted with the 12 women, health professionals could also have a negative influence when they failed to detect a problem, gave contradictory or erroneous information, or displayed an attitude that was too pro-breastfeeding or too disheartening, making the women feel guilty.

However, despite the influence of other persons on the breastfeeding experience, several women (1 from the target group and 5 from the comparison group) explained that clinic staff play or may play an important role in helping women with their difficulties because of their specialization, expertise, and extensive experience in the field.

Discussion

The purpose of this study was to assess the effects of services at a breastfeeding clinic in Québec City on breastfeeding duration and overall breastfeeding satisfaction. The results indicate that the clinic has had a positive influence on the experience of women, as assessed using adjusted logistic regression. During semistructured interviews, women explained how physical and moral support from the clinic influenced their breastfeeding experiences. This corroborates the results of 2 other studies conducted on breastfeeding clinic evaluations.^{20,21} These show that women are very satisfied with their experiences at these clinics and that they attribute this to the advice given regarding the physical aspects of breastfeeding and to the encouragement and reassurance provided. However, it is important to consider that these clinics and the clinic in this study are managed differently. Unlike at the other breastfeeding clinics, the IBCLC lactation consultants at the Québec City facility work with physicians, not nurses. In addition, women must be referred by a health professional, physician, or member of a breastfeeding support group to have access to clinic services, which is not the case at the 2 other clinics referred to in the literature.^{20,21} A referral is a clear indication that a woman used another breastfeeding service before visiting the breastfeeding clinic, which leads us to believe that the difficulties experienced by the women in this study could be greater than those of women who did not require a referral. Because of these differences and others, it is not possible to extrapolate our results to other clinics.

Besides corroborating the positive opinion of women regarding breastfeeding clinic services, this study provided an additional contribution. Indeed, the analysis showed that when compared with women experiencing similar difficulties, women who used breastfeeding clinic services were more likely to have breastfed for at least 6 months or more and more likely to be satisfied with their breastfeeding experience.

In addition, it is noteworthy that women from the 2 groups were similar with respect to key sociodemographic characteristics such as age, marital status,

education, and income, all of which are known to be associated with breastfeeding initiation and duration.^{10,15,41,42} They were also comparable for the breastfeeding difficulties they experienced, their level of motivation to overcome difficulties (generally very high at 4-5), and their satisfaction with home visits by nurses. The worst pain level experienced during breastfeeding was similar for women from the 2 groups. Nevertheless, for this variable, a significant association with overall breastfeeding satisfaction was found: women experiencing the highest pain were also those who were the most satisfied with their experience. This may seem rather surprising. Yet, it is important to specify that the pain level variable measured the worst pain experienced during the overall breastfeeding experience. This pain may be felt only occasionally and not during the entire experience. It may also be caused by latching, the let-down reflex, or other factors and may have no impact on a woman's breastfeeding satisfaction. Likewise, it is also possible that a woman whose infant refuses the breast feels no pain at all, even though her satisfaction with the experience is low. These examples showing that pain may be very high but periodic, or that sometimes there is no pain but great dissatisfaction, may contribute in explaining why an association between satisfaction and pain was found.

However, women from the 2 groups presented certain differences regarding reasons for ceasing breastfeeding and intention to breastfeed that will be discussed below. Reasons for ceasing breastfeeding were similar except for "return to work and school or daycare," which was mentioned by women from the target group. This was expected because these women breastfed for a longer period than women in the comparison group. Finally, intentions respecting breastfeeding duration were significantly associated with breastfeeding clinic attendance. It is interesting to mention that the intention to breastfeed for 6 months was associated with a similar percentage of women from both groups. However, a greater number of women from the target group said that they would breastfeed as long as the infant needed it. In the comparison group, a greater number of women answered that they would breastfeed as long as breastfeeding went well. This suggests that women from the target group had stronger intentions respecting breastfeeding duration because they were prepared to continue breastfeeding even in the event of difficulties. In fact, differences in intentions related to breastfeeding duration for women in the 2 groups seem to indicate a different way of thinking

more than a different way of acting. In other words, even if the 2 groups did not have the same intentions at the beginning, they may have reacted similarly when faced with the difficulties they met.

In addition, 55.8% of the women in this study who used the services of the clinic breastfed for 6 months and beyond. Compared with the overall percentage of women in the Greater Québec City region who were breastfeeding at 6 months (45%),⁵ women who used the clinic seemed to breastfeed for a longer period than women in the general population, despite the fact that they experienced major breastfeeding difficulties. It should be noted, however, that the women in this study appear to have higher than average education and family income levels than Québec mothers in general.⁵ When looking at the literature relating to effective interventions in breastfeeding, it is not surprising to observe the positive effects of the clinic's services. In fact, skilled breastfeeding support made available to women on a proactive basis by peers or professionals, as well as a combination of information, guidance, and support, has been shown to be effective in increasing breastfeeding duration.^{11,12,16,17,43} These services are available at the breastfeeding clinic studied, where a specialized staff is employed to offer women physical and moral support. Elsewhere, women explained that the kind of support they want includes reassurance, efficacious approaches if they have difficulties, and someone to listen to them and encourage them without any pressure.⁴⁴

In the semistructured interviews, women identified the physical and moral support they received during visits to the clinic as factors that influenced their breastfeeding experience. Although it is unclear where these factors fit within the conceptual framework, physical support could be seen as a facilitating factor of breastfeeding, whereas moral support is partly a reinforcing factor. According to the framework, these factors influence the adoption of behaviors—in this case, the continuation of breastfeeding. So, it is plausible that physical and moral support influences the breastfeeding experience. Other contextual elements, such as the physical support provided by health professionals and people in woman's entourages, could also be seen as facilitating and/or reinforcing factors. Many studies found that partner and network members were sources of support that affected breastfeeding duration.^{8,10,15,42,45} However, the influence of health professionals on breastfeeding duration remains less clear.^{15,42} Finally, intention and attitude toward behaviors to adopt are determinants that are part of the conceptual framework.

These were mentioned by women in our studies, as well as in others,^{15,36,42,46} as elements influencing their breastfeeding experience or at least the initiation of this experience.

It is important to take into consideration the limitations of this study. The number of women reached per total population was relatively low. For the target group, around 15% of all women from the Greater Québec City region using the services of the clinic (including women who were multiparous, younger than 20 years old, etc) took part in the study. For the comparison group, 50% of potentially eligible women were recruited. The number of women taking part in the interview represented another limitation. Because the limited number of interviews conducted did not enable us to reach content saturation, it is possible that some important information and nuances were missed. Voluntary participation on the part of the women studied may also constitute a bias. Nonvalidated but pretested instruments represent another limitation of the study. Regardless of these limits, this study helps shed new light on how services such as breastfeeding clinics help women who experience major breastfeeding problems. Indeed, it is important to determine if and why these services are effective to provide better support to women experiencing such difficulties.

Results of this study with respect to breastfeeding duration and satisfaction, as well as the reasons mentioned by women to explain the clinic's influence, support the existence of a breastfeeding clinic. It would, however, be relevant to validate the measurement instruments and extend the research to a larger sample of women. This would make it possible to attain greater statistical power and content saturation. It would also be interesting to evaluate breastfeeding clinics in other industrialized countries to compare results and detect commonalities and differences. Studies on service trajectories taken by women would also be necessary to determine if women used all the community services available to them before going to the breastfeeding clinic and if these services were optimal and in accordance with the Baby-Friendly Hospital Initiative and with the Baby-Friendly Initiative in the Community^{47,48} recommendations. Studies on women's breastfeeding trajectories would also show whether clinics reach everyone who needs them. However, more studies are needed to ensure the relevance of these clinics as related to the duration of and satisfaction with the breastfeeding experience.

In summary, attending a breastfeeding clinic such as the one in Québec City was associated with longer breastfeeding duration and improved satisfaction of the breastfeeding experience for women. Physical and moral support offered by the clinicians might explain this influence.

References

1. Health Canada. *Exclusive Breastfeeding Duration—2004 Health Canada Recommendation*. 2004. http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/nutrition/excl_bf_dur-dur_am_excl_e.pdf. Accessed February 28, 2008.
2. World Health Organization. *Infant and Young Child Nutrition (WHA54.2)*. 2001. <http://www.ibfan.org/english/resource/who/whares542.html>. Accessed February 28, 2008.
3. American Academy of Pediatrics. Breastfeeding and the use of human milk. *Pediatrics*. 2005;115:496-506.
4. Dionne S, Jetté S. *L'allaitement maternel au Québec—Lignes directrices [Maternal Breastfeeding in Québec—Guidelines]*. Québec: Ministère de la Santé et des Services sociaux; 2001. <http://publications.msss.gouv.qc.ca/acrobat/f/?documentation/2001/01-815-01.pdf>. Accessed February 28, 2008.
5. Neill G, Beauvais B, Plante N, Haiek LN. Recueil statistique sur l'allaitement maternel au Québec, 2005-2006 [Québec Statistical Collection on Maternal Breastfeeding, 2005-2006]. Québec: Institut de la statistique du Québec; 2006.
6. Cattaneo A, Yngve A, Koletzko B, Guzman LR. Protection, promotion and support of breast-feeding in Europe: current situation. *Public Health Nutr*. 2005;8:39-46.
7. Lepage M-C, Doré N, Carignan G. Étude sur l'alimentation du nourrisson et sur l'utilité des services en périnatalité pour la pratique de l'allaitement—région de Québec [Study on infant nutrition and on perinatal services utility for breastfeeding practice—Québec city region]. Québec: Régie régionale de la santé et des services sociaux de Québec, Direction de la santé publique; 2000.
8. Barber CM, Abernathy T, Steinmetz B, Charlebois J. Using a breastfeeding prevalence survey to identify a population for targeted programs. *Can J Public Health*. 1997;88:242-245.
9. Guillemette A, Badlissi D. Enquête sur l'alimentation du nouveau-né dans Lanaudière, 2003-2004—Fascicule 11, Les difficultés liées à l'allaitement [Survey on nutrition of newborn in Lanaudière, 2003-2004—Fascicule 11, Breastfeeding difficulties]. Québec: Agence de la santé et des services sociaux de Lanaudière; 2006. <http://www.agencelanaudiere.qc.ca/ASSS/Publications/Fascicule%2011%20-%20Les%20difficult%C3%A9s%20li%C3%A9es%20%C3%A0%20l'E2%80%99allaitement.pdf>. Accessed February 28, 2008.
10. Dubois L, Bédard B, Girard M, Beauchesne E. "L'alimentation" dans: *Étude longitudinale du développement des enfants du Québec (ÉLDEQ 1998-2002) ["Nutrition": in Longitudinal Study of Child Development in Québec]*. Québec: Institut de la statistique du Québec; 2000.
11. Britton C, McCormick FM, Renfrew MJ, Wade A, King SE. Support for breastfeeding mothers. *Cochrane Database Syst Rev*. 2007;(1): CD001141.
12. Sikorski J, Renfrew MJ, Pindoria S, Wade A. Support for breastfeeding mothers: a systematic review. *Paediatr Perinat Epidemiol*. 2003;17:407-417.
13. Guise JM, Palda V, Westhoff C, Chan BK, Helfand M, Lieu TA. The effectiveness of primary care-based interventions to promote breastfeeding: systematic evidence review and meta-analysis for the US Preventive Services Task Force. *Ann Fam Med*. 2003;1:70-78.

14. Labarere J, Gelbert-Baudino N, Ayrat AS, et al. Efficacy of breastfeeding support provided by trained clinicians during an early, routine, preventive visit: a prospective, randomized, open trial of 226 mother-infant pairs. *Pediatrics*. 2005;115:e139-e146.
15. Dennis CL. Breastfeeding initiation and duration: a 1990-2000 literature review. *J Obstet Gynecol Neonatal Nurs*. 2002;31:12-32.
16. Couto de Oliveira MI, Bastos Camacho LA, Tedstone AE. Extending breastfeeding duration through primary care: a systematic review of prenatal and postnatal interventions. *J Hum Lact*. 2001;17:326-343.
17. Renfrew M, Dyson L, Wallace L, D'Souza L. *The Effectiveness of Public Health Interventions to Promote the Duration of Breastfeeding: Systematic Review*. London: National Institute for Health and Clinical Excellence; 2005.
18. Direction régionale de santé publique de la Capitale-Nationale. *Clinique externe d'allaitement du CHUQ, État de la situation—Document de consultation [CHUQ External Breastfeeding Clinic—Position Statement]*. Québec: Agence de la santé et des services sociaux de la Capitale-Nationale; 2006.
19. Gibbins SA, Green PE, Scott PA, MacDonell JW. The role of the clinical nurse specialist/neonatal nurse practitioner in a breastfeeding clinic: a model of advanced practice. *Clin Nurse Spec*. 2000;14:56-59.
20. Adams C, Berger R, Conning P, Cruikshank L, Dore K. Breastfeeding trends at a community breastfeeding center: an evaluative survey. *J Obstet Gynecol Neonatal Nurs*. 2001;30:392-400.
21. Stefiuk W, Green KL, Turnell R, Smith B. Process evaluation of the Saskatoon breastfeeding center. *J Hum Lact*. 2002;18:29-37.
22. Statistics Canada. *National Population Health Survey, Household Component, Cycle 3 (1998-1999), Questionnaire*. 2000. http://www.statcan.ca/english/sdds/instrument/3236_Q1_V3_E.pdf. Accessed February 28, 2008.
23. Statistics Canada. *Canadian Community Health Survey (CCHS), Cycle 2.2 Nutrition, Questionnaire*. 2005. http://prod.library.utoronto.ca:8090/datalib/codebooks/cstldi/cchs/cycle2_2/quest_e.pdf. Accessed February 28, 2008.
24. Statistics Canada. *Canadian Community Health Survey (CCHS), Questionnaire for Cycle 2.1, January 2003–November 2003*. 2003. http://www.statcan.ca/english/concepts/health/cycle2_1/pdf/integrated.pdf. Accessed February 28, 2008.
25. Statistics Canada, Social Development Canada. *National Longitudinal Survey of Children & Youth, Cycle 5 Survey Instruments 2002/03 Book 1—Parent, Child & Youth*. 2005. http://www.statcan.ca/english/sdds/instrument/4450_Q2_V4_E.pdf. Accessed February 28, 2008.
26. Santé Québec. En 2002 . . . J'aurai 5 ans! Étude longitudinale sur le développement des enfants du Québec (ÉLDEQ)—Volet 1998, Questionnaire papier rempli par l'intervieweuse (QPRI) [In 2002 . . . I'll be 5 years old! Longitudinal Study of Child Development in Québec—1998 Part, Interview Completed Paper Questionnaire]. 1998. [http://www.stat.gouv.qc.ca/publications/sante/pdf_eldeq/E1-QPRI\(5mois\).pdf](http://www.stat.gouv.qc.ca/publications/sante/pdf_eldeq/E1-QPRI(5mois).pdf). Accessed February 28, 2008.
27. Santé Québec. En 2002 . . . J'aurai 5 ans! Questionnaire informatisé rempli par l'interviewer (QIRI)—E1 [In 2002 . . . I'll be 5 years old! Interview Completed Computerized Questionnaire (ICQ)—E1]. 1999. http://www.stat.gouv.qc.ca/publications/sante/pdf_eldeq/E1-Questionnaire_informatique.pdf. Accessed February 28, 2008.
28. Paillé P. *Procédures systématiques pour l'élaboration d'un guide d'entrevue semi-directive: un modèle et une illustration [Systematic Procedure for Elaboration of a Semi-Directive Interview Scheme: A Model and an Illustration]*. Québec: Communication au Congrès de l'Association canadienne-française pour l'avancement des sciences: Université de Sherbrooke; 1991.
29. Labbok M, Krasovec K. Toward consistency in breastfeeding definitions. *Stud Fam Plann*. 1990;21:226-230.
30. L'Écuyer R. L'analyse de contenu: notion et étapes [Content analysis: Notions and steps]. In: Presses de l'Université du Québec, ed. *Les méthodes de la recherche qualitative, sous la direction de Jean-Pierre Deslauriers*. Québec: Presses de l'Université du Québec; 1988:49-65.
31. Duckett L, Henly S, Avery M, et al. A theory of planned behavior-based structural model for breast-feeding. *Nurs Res*. 1998;47:325-336.
32. Khoury AJ, Moazzem SW, Jarjoura CM, Carothers C, Hinton A. Breast-feeding initiation in low-income women: role of attitudes, support, and perceived control. *Womens Health Issues*. 2005;15:64-72.
33. Swanson V, Power KG. Initiation and continuation of breastfeeding: theory of planned behaviour. *J Adv Nurs*. 2005;50:272-282.
34. Ajzen I. The theory of planned behavior. *Organ Behav Hum Decis Process*. 1991;50:179-211.
35. Godin G. L'éducation pour la santé: les fondements psychosociaux de la définition des messages éducatifs [Education for health: psychosocial basis of educative messages definition]. *Sci Soc Sante*. 1991;9:67-94.
36. Godin G. Le changement des comportements de santé [Modification of health behaviors]. In: Fischer GN, ed. *Traité de psychologie de la santé*. Paris: DUNOD; 2002:375-388.
37. Miles MB, Huberman AM. *Analyse de données qualitatives*. 2nd ed. Bruxelles: De Boeck Université; 2003.
38. Millar WJ, Maclean H. Breastfeeding practices. *Health Rep*. 2005;16:23-31. (Statistics Canada, cat. no. 82-003-XIE)
39. Scott JA, Binns CW. Factors associated with the initiation and duration of breastfeeding: a review of the literature. *Breastfeed Rev*. 1999;7:5-16.
40. Palda VA, Guise JM, Wathen CN. Interventions to promote breastfeeding: applying the evidence in clinical practice. *CMAJ*. 2004; 170: 976-978.
41. Graffy J, Taylor J. What information, advice, and support do women want with breastfeeding? *Birth*. 2005;32:179-186.
42. Rempel LA, Rempel JK. Partner influence on health behavior decision-making: increasing breastfeeding duration. *J Soc Pers Relat*. 2004;21:92-111.
43. Rempel LA. Factors influencing the breastfeeding decisions of long-term breastfeeders. *J Hum Lact*. 2004;20:306-318.
44. The Breastfeeding Committee for Canada, The National Authority for the WHO/UNICEF Baby-Friendly™ Hospital Initiative in Canada. *The Baby-Friendly™ Initiative in Community Health Services: A Canadian Implementation Guide*. Toronto: The Breastfeeding Committee for Canada; 2002.
45. World Health Organization, UNICEF. *Protecting, Promoting and Supporting Breast-feeding: The Special Role of Maternity Services*. Geneva, Switzerland: WHO; 1989.

Resumen

Las clínicas de lactancia materna tienen como objetivo aumentar la duración de la lactancia materna y disminuir las dificultades durante la lactancia materna. El impacto en el aumento en la duración y experiencia satisfactoria de lactancia materna en las mujeres que usan estas clínicas es desconocido. Este estudio observacional evaluó el impacto de las intervenciones en la duración y experiencia satisfactoria de lactancia materna entre mujeres que experimentaban dificultades de lactancia materna en una Clínica de Lactancia materna en la ciudad de Québec en comparación con mujeres que no recibieron servicios en la clínica. El estudio encuestó 86 mujeres a través de cuestionarios telefónicos y entrevistas semi-estructuradas.

Después de hacer un análisis logístico de regresión ajustado, las mujeres que fueron a la clínica tenían mayor probabilidad de lactancia materna al menos 6 meses (OR = 4.34, 95% CI = 1.35-13.96) que las mujeres del grupo de comparación. Ellas también tenían mas probabilidad de estar satisfechas con la

experiencia de lactancia materna (OR = 4.17; 95% CI = 1.31-13.22). Apoyo físico y moral puede explicar esta influencia. Es necesario hacer estudios más extensos en clínicas de lactancia materna para confirmar su papel en aumentar la duración y satisfacción de lactancia materna.