

# Calls to an Inner-City Hospital Breastfeeding Telephone Support Line

Laura Beth Chamberlain, BA, IBCLC, Anne Merewood, MA, IBCLC, Kirsten L. Malone, BA, IBCLC, Sabrina Cimo, MPH, and Barbara L. Philipp, MD, FAAP, FABM, IBCLC

## Abstract

Support for breastfeeding mothers after they leave the hospital is often inadequate in low-income, inner-city areas where few resources are available. In becoming a Baby-Friendly Hospital, inner-city Boston Medical Center established a breastfeeding telephone support line to overcome this discrepancy. Records of support line calls for the first 5 years of operation were reviewed to record the level of need and determine reasons for use. A total of 1959 calls for 2482 reasons were received between January 1999 and December 2003. The most common reason for calling was “need help obtaining a breast pump” or “need information about breast pumps” (44%; 1096/2482), followed by “breast issue” (7%; 181/2482) and “milk supply question” (7%; 167/2482). The results indicate that inner-city women seek breastfeeding support and demonstrate a substantial need for breast pumps. These findings suggest that the lack of breast pumps may be a barrier to continued breastfeeding for inner-city breastfeeding women. *J Hum Lact.* 21(1):53-58.

**Keywords:** breastfeeding, telephone support line, breast pump, inner city

In 1999, Boston Medical Center (BMC), an inner-city teaching hospital with approximately 2000 births per year, became the first Massachusetts hospital to gain the World Health Organization/United Nations Children’s Fund Baby-Friendly designation. As of February 2004, only 42 of approximately 18,000 Baby-Friendly hospitals worldwide were in the United States.<sup>1</sup> To become Baby-Friendly, an institution must meet certain standards of breastfeeding promotion and support, as described by the Ten Steps to Successful Breastfeeding.<sup>2</sup>

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**Laura Beth Chamberlain** is a research assistant at The Breastfeeding Center, Boston Medical Center. **Anne Merewood** is an instructor of pediatrics at Boston University School of Medicine, The Breastfeeding Center, Boston Medical Center. **Kirsten L. Malone** is a research assistant at The Breastfeeding Center, Boston Medical Center. **Sabrina Cimo** is a clinical research coordinator in the Department of Pediatrics, Division of Neonatology, Boston Medical Center. **Barbara L. Philipp** is an associate professor of pediatrics at Boston University School of Medicine, The Breastfeeding Center, Boston Medical Center. Address correspondence to Laura Beth Chamberlain, The Breastfeeding Center, Boston Medical Center, 850 Harrison Avenue, YACC-5, Boston, MA 02118.

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BMC serves a primarily poor, minority, and immigrant population, with a large percentage of US-born African Americans, the group with the lowest breastfeeding rates in the United States.<sup>3</sup> Prior to Baby-Friendly designation, few if any women called BMC with breastfeeding-related questions. Of 960 calls to the BMC Pediatric Practice telephone triage office in 1997, not 1 call concerned breastfeeding.<sup>4</sup> With the implementation of Baby-Friendly policies, BMC’s breastfeeding initiation rates rose from 58% (1995) to 87% (1999), and in-hospital exclusive breastfeeding rates increased from 6% to 34%. Initiation rates among US-born black women rose from 34% to 74% and among non US-born black women, from 78% to 96%.<sup>5</sup>

Since many breastfeeding problems do not surface until after the mother has left the hospital, step 10 of the Ten Steps requires a facility to “foster the establishment of breastfeeding support groups and refer mothers to them, on discharge from the hospital or clinic.” Barriers to care faced by BMC families include poverty, lack of education, language issues, and lack of transportation. Many BMC mothers have problems accessing lay breastfeeding support groups such as La Leche League, which is traditionally used by middle-class women and, in the Boston area, exists mainly in suburban communities. Without access to support and help, it can be difficult for inner-city mothers to exclusively breastfeed for

the first 6 months postpartum, continuing to 1 year or more, as recommended by the American Academy of Pediatrics.<sup>6</sup> Thus, the Breastfeeding Center established a telephone support line for breastfeeding women seeking assistance after going home from the hospital. The number (617-414-MILK) is distributed via magnets and pens at BMC breastfeeding classes that are held 3 times per week, it is posted in each postpartum room, and it is printed on BMC's customized bassinet cards, which replaced bassinet cards previously supplied to the hospital by an infant formula company. It also appears on a water bottle for mothers, contained in the BMC diaper discharge bag, which replaced the previous discharge bag containing formula samples and distributed to mothers through the hospital by an infant formula company. The number is also widely circulated among BMC providers as well as to clinicians in the 13 neighborhood health centers affiliated with BMC.

One function of the support line is to answer questions for local clinicians. As the number of breastfeeding women at BMC increased, providers, especially at neighborhood health centers associated with BMC, expressed a need for additional support in answering breastfeeding-related patient questions. Providers also called to advocate for their patients that needed support.

The purpose of this evaluation was to determine if inner-city women would use a breastfeeding telephone support line and to determine reasons for its use.

## Methods

After Institutional Review Board approval was obtained, data were collected to (1) establish if, and by whom, the support line was used and (2) identify the reasons for calling the support line. Approximately 57% of women giving birth at BMC are black (non-Hispanic), 23% are Hispanic, 14% are white (non-Hispanic), and 6% are of other race/ethnicities. Approximately 55% of new mothers receive Medicaid benefits, and 35% are uninsured.<sup>5</sup> Because of the telephone-based nature of the data, it was not possible to identify the caller's race/ethnicity or socioeconomic status. However, based on a combination of analysis of telephone area exchanges and asking the caller what town they were from, we established that 80% of calls came from the immediate Boston area, with the vast majority from the low-income neighborhoods around BMC. We conclude from these data, from the way the support line was publicized, and from our experience answering the calls

Data collection sheet for telephone calls.

WARM LINE CALLS

1. Date of Call M \_\_\_ D \_\_\_ YY \_\_\_ S M T W T F S

2. Time of Call \_\_\_\_\_ AM PM Unknown

3. Date Returned \_\_\_\_\_ Time Returned \_\_\_\_\_

4. ID of Caller: Mother \_\_\_\_\_ Father \_\_\_\_\_ Other Family Member \_\_\_\_\_  
Other \_\_\_\_\_ Health Professional [if BMC, get patient's MRN]

5. Phone # \_\_\_\_\_ 6. Town \_\_\_\_\_

7. Pediatrician/ Health Center \_\_\_\_\_ 8. Age of Infant \_\_\_\_\_

ISSUE:

9. LANGUAGE: Call conducted in: ENGLISH FRENCH SPANISH

10. REASON FOR CALL: (Circle one category for each separate issue.)

Sore nipples	Wants pump	Pump/ equipment question	Mom's meds	Milk supply
Formula/solids	Fussy baby	Sleepy baby	Maternal diet	Bottle issue
Thrush	Premie issue	Poor weight gain	Back to work/school	Stool question
Sleep issue	Bmilk storage	Breast issue	Maternal medical condition	Latch
Relactation	Weaning	Baby's feeding schedule	Outpatient consult request	
Special needs baby	Twins/multiples	Inpatient consult request	UNKNOWN	
General info	Other _____			

ADVICE GIVEN:

11. OUTCOME OF CALL: (Circle all that apply.)

Advice given	Advised to come to BF Center/ class	
Referred to support group	Referred to pump company	Advised to call/ see MD
Inpatient consult done	Outpatient consult done	Unable to reach caller
		Other _____ UNKNOWN

STAFF SIGNATURE: \_\_\_\_\_

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Figure 1. Data collection sheet for telephone calls.

that the population using the support line was comparable to the population giving birth at BMC.

Calls to the support line, located in the hospital-based Breastfeeding Center office, were either answered directly or by a machine, which prompted the caller to leave a message. An international board certified lactation consultant (IBCLC) answered or returned almost all calls; on rare occasions, because of staffing issues, an assistant trained in lactation management answered calls, with senior backup available. Calls regarding complex issues were discussed by the lactation team, which includes the Breastfeeding Center's medical director, an IBCLC physician. As the telephone support line was designed as a warmline, all calls were not answered immediately, but calls received Monday through Friday were returned within 24 hours; calls received Friday evening through Sunday were returned the following Monday morning. Information was recorded at the time of each call on a standardized coding sheet (Figure 1) and entered into a computer database for analysis. Each call was recorded separately, even if the caller had called previously about the same

Table 1. Reasons for Support Line Calls\*

Reason	No.	(%)
Pump	1096	(44.2)
Breast issue	181	(7.3)
Milk supply	167	(6.7)
General information/education	148	(6.0)
Sore nipples	146	(5.9)
Maternal medication question	102	(4.1)
Returning to work/school	93	(3.7)
Latch	91	(3.7)
Baby's feeding schedule	79	(3.2)
Breast milk storage	50	(2.0)
Bottle issue	40	(1.6)
Fussy baby	37	(1.5)
Thrush	36	(1.5)
Poor weight gain	31	(1.2)
Stool question	28	(1.1)
Formula/solids	24	(1.0)
Maternal diet	23	(0.9)
Sleepy baby	19	(0.8)
Premie issue	7	(0.3)
Sleep issue	5	(0.1)
Other	79	(3.2)
Total	2482	(100.0)

\*Total reasons recorded. Some calls had more than 1 reason that was recorded.

issue. Both the "reason for support line call" and the "resolution of call" could have more than 1 entry. Staff documented all topics that were discussed during the call under "reason for support line call." Therefore, if a mother called about getting a pump but her actual problem was a breast issue, both reasons would be coded. Five years of calls (January 1999 through December 2003) were analyzed.

## Results

A total of 1959 calls for 2482 reasons and 1984 resolutions<sup>1</sup> were received over 5 years. The total number of calls increased each year as the support line became better known in the community and at the hospital (Figure 2). The prime reason for calling the support line over the 5 years was maternal need for a breast pump or needing information about a breast pump (44%; 1096/2482; Table 1). In 2002 and 2003, we clarified the pump question to obtain more information. We found that for those 2 years specifically, 88% (662/756) of pump-related calls were from women (or providers representing mothers) who wanted to obtain a low-cost pump, and 12% (94/756) of calls were about problems with existing pumps. In 30% of calls about breast pumps, support line staff also discussed other topics with the caller. Of

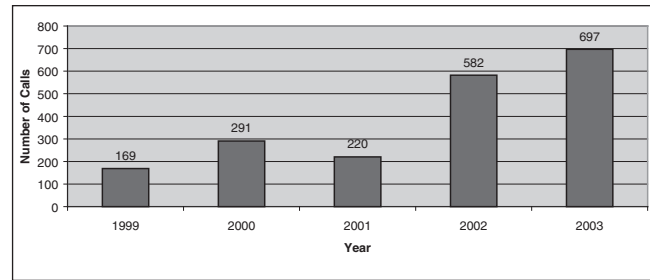


Figure 2. Call distribution.

these calls, 19.4% were about returning to work or school (61/314), 17.8% were about a breast issue (56/314), and 11.5% were about sore nipples (36/314).

Other calls in the first 5 years concerned breast issues (including engorgement, mastitis, and thrush) (7%; 181/2482), milk supply questions (7%; 167/2482), and other common breastfeeding issues. Most calls (71%; 1396/1959) concerned infants younger than 3 months. Mothers made 71% (1376/1959) of the calls, health care professionals made 24% (471/1959), and fathers made 2% (44/1959). In 80% (1596/1984) of cases, issues were resolved over the telephone, while 6% (121/1984) of women were advised to see a physician and 5% (105/1984) were advised to come to the Breastfeeding Center or go to the BMC breastfeeding class, where a certified lactation consultant was available (Table 2). Pump-related calls were usually resolved over the telephone by checking the mother's insurance and referring her either to an appropriate insurance provider (if her current insurance provider did not pay for a pump) or to the relevant breast pump company that accepted her insurance.

## Discussion

Former US surgeon general Dr David Satcher described raising breastfeeding rates in minority and impoverished populations as "a public health challenge."<sup>7</sup> Poor and minority women used the BMC telephone support line frequently, demonstrating a clear need for breastfeeding assistance in the inner city. Little exists in the literature regarding breastfeeding support lines, but one recent study in an urban Puerto Rican setting also found a telephone support line to be well used,<sup>8</sup> and another from Portland, Oregon, reported high call volume and found that most mothers called requesting general breastfeeding information.<sup>9</sup> To our knowledge, this is the first evaluation to be published on breastfeeding telephone support lines in the inner city.

Table 2. Call Information\*

	No.	(%)
Age of infant at time of call		
Prenatal	102	(5.2)
0-1 wk	491	(25.1)
1-2 wk	200	(10.2)
2-4 wk	231	(11.8)
1-3 mo	372	(19.0)
3-6 mo	119	(6.1)
6-12 mo	54	(2.7)
1-2 y	19	(1.0)
3+ y	2	(0.1)
Unknown/NA	369	(18.8)
Total	1959	(100.0)
Identification of caller		
Mother	1376	(70.2)
Father	44	(2.3)
Other family	13	(0.7)
Health professional	471	(24.0)
Other	55	(2.8)
Total	1959	(100.0)
Resolution of call		
Advice given	1596	(80.4)
Come to breastfeeding center/class	105	(5.3)
Advised to call/see doctor	121	(6.1)
Referred to support group	9	(0.5)
Unable to reach caller	153	(7.7)
Total	1984	(100.0)

\*Some calls had more than 1 reason or resolution coded. Also, the total number of calls does not equal the total number of individual callers because some callers called more than once.

The fact that 44% of calls concerned the need for or information about a breast pump highlights a hitherto undocumented barrier to breastfeeding among inner-city women. In previous studies, breast pumps were not cited as a reason for a call. One might expect more calls about sore nipples, latch, and low milk supply since these are among the most common problems women experience in the first few weeks.<sup>10</sup> Although the health care professionals answering the calls raised and discussed these issues, most women called requesting breast pumps without offering a reason as to why they needed it. The information we collected indicates the reason why women actually called a support line, not the most common breastfeeding problems of the population. Although a breast pump is not always an appropriate solution, and not every woman who called requesting a breast pump actually obtained one, breast pumps are clearly necessary for women in low-income communities, especially those who must return to work.

Requests for breast pumps were largely resolved over the telephone. BMC's own health maintenance organization (HMO; the Boston Medical Center

HealthNet Plan) offers double-pumping electric breast pumps as a benefit to any breastfeeding plan member who needs one, as does another HMO in the Boston area, the Neighborhood Health Plan. Both these HMOs can be obtained together with Medicaid. The Massachusetts Healthy Start program also offers a breast pump as a benefit. Most of the breast pumps distributed at BMC are paid for through these insurance companies because many inner-city women use Medicaid and Healthy Start. Between April 2003 and April 2004, we tracked all pumps given out at BMC, via the support line and at the hospital during the immediate postpartum period. Of the 436 pumps we helped mothers obtain, 50% were paid for by the BMC Health Net Plan, 20% by the Healthy Start program, and 11% through Neighborhood Health Plan.

Without the telephone support line, many women would not have found out that they were eligible for an electric breast pump or been able to obtain one because most local pharmacies do not accept insurance reimbursements for breast pumps and the prices for breast pumps are beyond the reach of most BMC families. A 1-month breast pump rental and milk collection kit in the Boston area costs \$125; a "personal use pump" (recommended for the working mother who wants to purchase rather than rent) costs between \$175 and \$285.<sup>11</sup> Support line staff thus became experts in insurance reimbursement and advised women on the types of insurance needed to receive "free" breast pumps. They also referred insured women directly to a breast pump company that accepted the relevant insurance reimbursement and, in most cases, delivered the pump to the mother in the hospital or at home. Covering the cost of a breast pump makes financial sense for HMOs: breastfeeding an infant for 3 months can save \$475 per child in health care costs per never-breastfed infant, during the first year of life.<sup>12</sup>

Realistically, if a woman is to continue breastfeeding after her return to work in a developed country, she usually relies on a breast pump to collect milk and to maintain her milk supply. African American women return to work earlier than women of other races do,<sup>7</sup> and returning to work is more likely to decrease breastfeeding duration among women of low socioeconomic status than among wealthier women.<sup>13,14</sup> If low-income women need breast pumps and high-quality breast pumps are expensive, we propose that lack of access to breast pumps may adversely affect breastfeeding duration rates in this population. In the BMC community,

the telephone support line was used as a solution for many women who were in need of a breast pump.

Limitations of this review included a large number of unknowns in age of infant and in location of caller. In the early stages of data collection, support line staff were less likely to ask the infant's age, for example, if the mother's only question was how to obtain a breast pump on her return to work. Over time, the unknowns were reduced. In the first 3 years, location of the caller was established by reviewing the telephone exchange, but some callers used cellular phones; thus, the data were not complete. A revised data collection sheet that included the question, "Which town do you live in?" was used in the past 2 years to clarify these issues.

The authors also note that a high level of awareness was needed by the telephone support staff for potential high-risk calls, and multilingual staffing was important. During one high-risk call, a mother's initial question was, "Which formula is the best? My baby doesn't like breast milk any more." Questioning revealed that the infant had not eaten ("he weaned") for 16 hours prior to the call: the infant was referred to urgent care and admitted to the pediatric inpatient unit with suspected meningitis. Another caller speaking only Spanish asked "how to use the blue liquid": questioning revealed that the mother intended to add the liquid coolant from the freezer packs (located in the storage section of her breast pump) to the pumped milk. Such alarming stories stress the need for constant alertness and for experienced, well-trained staff. Therefore, in the past 2 years, we have added 2 additional telephone lines, 1 in Spanish and 1 in French, and have also employed staff that can answer these calls. Only 3% of our calls to date were on the Spanish and French lines.

### Conclusion

Urban breastfeeding women will use a telephone support line. This evaluation reveals a need for breast pumps in the inner city, and lack of access to pumps may be one reason for low US breastfeeding duration rates in this population. Offering low-cost breast pumps through medical insurance and providing a service to help women access these pumps is one way to meet this need.

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### Resumen

#### *Llamadas a una línea telefónica de apoyo a la lactancia materna en un hospital del centro de la ciudad*

El apoyo a las madres lactantes después de salir del hospital es con frecuencia inadecuado en áreas del centro de la ciudad donde vive una población de bajos ingresos económicos con recursos limitados. El Boston Medical Center (BMC) al convertirse en Hospital Amigo del Niño estableció una línea telefónica de apoyo para compensar esta discrepancia. Se revisaron los archivos de 5 años para evaluar la necesidad y determinar las razones de su uso. Un total de 1959 llamadas con 2482 razones se recibieron desde Enero de 1999 a Diciembre del 2003. La razón más común de las llamadas fue "Ayuda para obtener una extractora de leche" o "Información sobre extractoras de leche" (44%; 1092/2482) seguida por "asuntos relacionados con el pecho" (7%; 181/2482); y "preguntas sobre producción de leche" (7%; 167/2482). Los resultados indican que las mujeres que viven en el centro de la

ciudad buscan ayuda en lactancia materna y muestran una gran necesidad de extractoras de leche. Estos hallazgos ilustran que la insuficiencia de extractoras de

leche puede ser una barrera para continuar con la lactancia materna en mujeres que viven en el centro de la ciudad.