

## **BREASTFEEDING RESEARCH**

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### **Profile of Calls to a Breastfeeding Clinic Information and Help Telephone Line**

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**Breastfeeding mothers need orientation and help in order to succeed with breastfeeding. Lack of support from health professionals and societal barriers result in a median duration of breastfeeding in Puerto Rico of only 3 weeks. A telephone warm line at our breastfeeding clinic tries to provide some much-needed support and orientation. The purpose of this study was to determine the principal reasons for calls to the warm line and the action taken by the counselor. Five hundred and thirty three calls were received in a 4-month period. They were handled by certified lactation educators who gathered demographic and feeding information from the mother and registered the action taken. Descriptive analysis was used with crosstabs tables and multi-response analysis; chi-square test was used to establish the association between variables. 78.7% of callers were breastfeeding fully, while 21.3% were breastfeeding partially or formula feeding, 62.8% of the babies were 2 months old or less. 68.8% of the calls originated in the metropolitan San Juan area. The source of the referral was family/friend in 64.2% of**

**calls, while only 9.8% of the callers were referred by a physician, 3.0% by hospital personnel and 2.0% by other health care providers. Significant differences between full breastfeeders and partial or artificial feeders were found in calls related to position ( $p=0.01$ ), engorgement ( $p=0.04$ ), breast refusal ( $p=0.001$ ), product information ( $p=0.02$ ), medications ( $p=0.009$ ), breastmilk management and storage ( $p=0.001$ ), and relactation ( $p=0.02$ ). Actions taken by the counselor included orientation, referral to breastfeeding specialist physician and referral to breastfeeding support groups or classes. Results indicate that more active promotion of referral to breastfeeding support groups or classes is warranted since this action was taken in only 14.5% of fully breastfeeding mothers and 12.6% of partial breastfeeding or formula users. Promotion of the warm line among physicians, hospitals and other health care professionals is also needed.**

*Key words: Breastfeeding, Telephone counseling, Help, Orientation*

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**B**reastfeeding mothers need orientation and help to succeed with breastfeeding (1). Our society has lost the ability to give adequate counseling to breastfeeding mothers so they can deal with day to day challenges. Most of our new mothers have not had the opportunity to learn the basic skills of breastfeeding from their female role models (2).

Although some hospitals in the island have begun to move towards changing breastfeeding practices that negatively affect the initiation of breastfeeding, as recommended by the national and international health

authorities, many mothers do not receive help after hospital discharge (3,4,5).

While in the period 1990-1995 over 61% of our mothers initiated breastfeeding, the median duration was only 3 weeks (6). In a cross-sectional study carried out by the Commonwealth of Puerto Rico's Department of Health from March to May 2000 and reported by the Secretary of Health, utilizing a questionnaire based on the CDC's PRAMS, the prevalence of breastfeeding by postpartum mothers prior to discharge was 42.2% (7).

Significant barriers have been identified that can explain this short duration of breastfeeding. Among them are: deficiencies in knowledge and skills for breastfeeding management among health care professionals, hospital practices and lack of information and social support (1,8-17).

The purpose of this study was to determine the principal reasons given for calling a warm telephone line of a Breastfeeding Clinic and the action taken by the counselor.

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## Methods

This study was conducted from October 1, 2000 to January 31, 2001. Subjects were persons who needed advice or consultation on breastfeeding. Over five-hundred calls were received in the breastfeeding clinic during this period. They were handled by certified lactation educators who gathered demographic data (infant's age and place of origin of the call) and feeding information from the mother (full breastfeeding or partial/formula feeding). The Labbok & Krasovec breastfeeding definition for full breastfeeding and partial breastfeeding was used (18).

After the breastfeeding counselor identified the reason(s) for the call and registered it(them) in the data call register sheet, she registered the action taken to solve the client's problem, and how the client knew about the clinic. Descriptive analysis was used in this study; specifically, crosstabs tables and multi-response analysis. The principal reasons given for the call were tested by comparing reasons for the full breastfeeding group and for the partial breastfeeding or formula feeding group, using  $X^2$  test.

## Results

**Type of baby feeding.** Seventy-eight percent (78.7%) of the calls were from mothers who were breastfeeding fully or giving the baby breastmilk only. The percent of calls from mothers who were partially breastfeeding or formula feeding was 21.3% (Table 1).

**Table 1. Type of Infant Feeding**

	n	%
Full breastfeeding	351	78.7
Partial breastfeeding or formula	95	21.3
Total	446	100.0

Missing cases: 148

**Infant's age at time of the call.** Approximately one third (34.7%) of the babies had less than one-month of age with sixty-two percent (62.8%) of the babies being 2 months old or less. 19.5% of the babies had 3 to 4 months of age, 6.1% had 5 to 6 months of age and 11.2% had 7 months or more (Table 2).

**Main reasons given for call.** Significant differences between full breastfeeders and partial or artificial feeders were found among the principal reasons given for the call (Table 3). From the full breastfeeding group 3.1% of the calls were for problems related to breastfeeding positions

**Table 2. Infant Age at Time of the Call**

Months	n	%
<1	185	34.7
1	81	15.2
2	69	12.9
3	65	12.2
4	39	7.3
5	18	2.4
6	16	2.7
7	13	2.4
≥	47	8.8
Total	533	100.0

Missing cases: 61

or latch-on versus 8.5% of the partial breastfeeding or formula ( $X^2=6.22$ ,  $p=0.01$ ). The partial breastfeeding or formula group called significantly more due to engorgement problems (6.9%) ( $X^2=4.09$ ,  $p=0.04$ ), breast refusal (6.2%) ( $X^2=10.85$ ,  $p=0.001$ ), and relactation (2.3%) ( $X^2=5.15$ ,  $p=0.02$ ) than the full breastfeeding group.

**Table 3. Principal Reasons Given for Call**

	Full BF		Partial BF or formula		$X^2$	p-value
	n	%	n	%		
Position/latch-on	12	3.1	11	8.5	6.22	0.01*
Engorgement	11	2.9	9	6.9	4.09	0.04*
Low milk supply	31	8.2	17	13.1	2.66	0.10
Breast refusal	4	1.1	8	6.2	10.85	0.001*
Sore nipple	7	1.9	4	3.1	0.68	0.41
Product information	72	19.0	13	18.5	5.73	0.02*
Rental information	26	6.9	9	6.9	0.0	0.99
SG/ BF classes*	24	6.4	3	2.3	3.16	0.08
Medications	44	11.7	5	3.8	6.78	0.009*
Breastmilk M/S†	44	11.7	3	2.3	10.08	0.001*
Relactation	1	.3	3	2.3	5.15	0.02*
Others	101	26.8	45	34.6	2.89	0.08
Total	377	100.0	130	100.0		

\*SG= support group BF= breastfeeding †M/S= management and storage

The full breastfeeding group called more often for information about breastfeeding products (19.0%) ( $X^2=5.73$ ,  $p=0.02$ ), breastmilk management and storage (11.7%) ( $X^2=10.08$ ,  $p=0.0001$ ) and use of medications (11.7%) ( $X^2=6.78$ ,  $p=0.009$ ).

No significant differences among full breastfeeders and partial or formula feeders were found for low milk supply,

sore nipples, rental information or support groups and breastfeeding classes information.

**Action taken by the counselor.** The actions taken by the counselor include orientation, referral to the breastfeeding specialist physician of the clinic and referral to the clinic breastfeeding support groups or classes. More than one action could be taken for each call (Table 4). From the full breastfeeding group 93.3% received orientation about the problem presented, 12.5% were referred to the breastfeeding specialist physician and 14.5% were referred to the breastfeeding support groups or classes.

**Table 4. Action Taken by the Counselor**

	Full BF		Partial BF or formula	
	n	%	n	%
Orientation	321	93.3	79	83.2
Referral to breastfeeding specialist physician	43	12.5	39	41.1
Support group or classes	50	14.5	12	12.6

More than one action could be taken

From the partial breastfeeding or formula group 83.2% received orientation, 41.1% was referred to the breastfeeding specialist physician and 12.6% was referred to the clinic breastfeeding support groups or classes.

**Origin of the call.** Figure 1 shows the place of origin of the call in Puerto Rico. From San Juan, the capital of the island and the city where the clinic is located, we received 169 calls (33.8%). From Bayamón we received 69 calls (13.8%), from Carolina 56 (11.2%), from Caguas 37 (7.4%),

from Guaynabo 36 (7.2%), from Trujillo Alto 14 (2.8%), from Toa Alta 14 (2.8%) and from other towns 106 calls (21%).

**Table 5. Source of Referral**

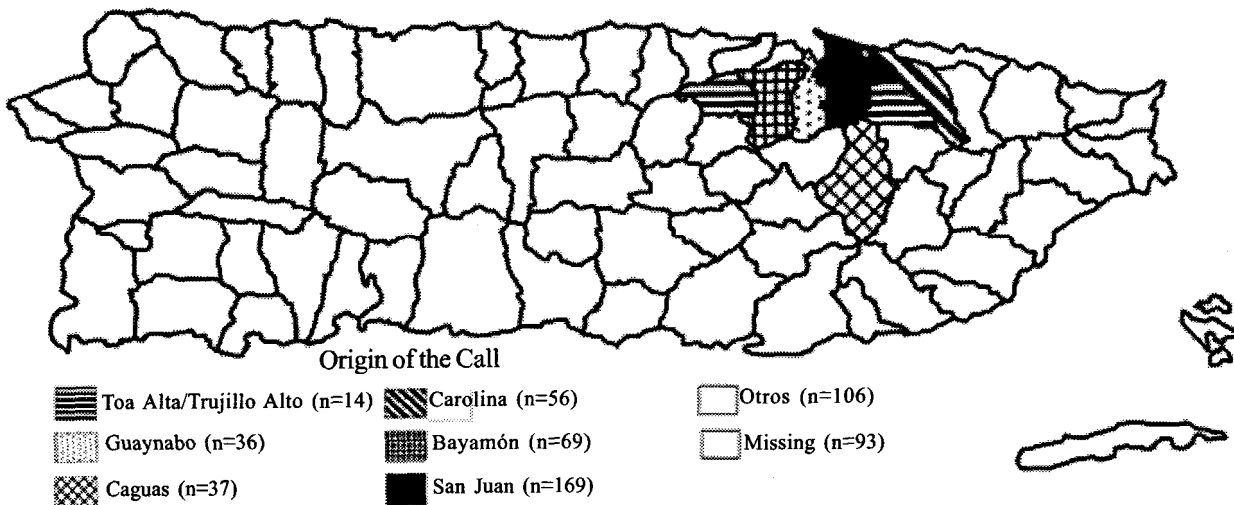
	n	%
Family friend	348	64.2
Newspaper	17	13.1
Magazines	25	4.6
Breastfeeding classes	17	3.1
WIC	4	0.7
TV radio	5	0.7
Telephone directory	5	0.9
Hospital	16	3.0
Physician	53	9.8
Other health care provider	11	2.0
Other source	41	7.6
Total	542	100.0

Missing cases: 54

**Source of referral.** The source of the referral was family/friend in 64.2% of the calls, while only 9.8% of the callers were referred by a physician, 3.0% by hospital personnel and 2.0% by other health care providers (Table 5).

Other sources of referral were newspapers (13.1%), magazines (4.6%), breastfeeding classes (3.1%) and 0.7% from the WIC clinics or TV/Radio.

**Figure 1. Origin of the Call**



## Discussion

Early contact, support, and telephone follow-up as enhancing factors of breastfeeding duration have been identified in the literature (19). The majority of the calls to this breastfeeding help telephone line came from mothers with babies of eight weeks of age or less. This is a critical period for the establishment of breastfeeding. A high percent of the calls came from mothers who were breastfeeding exclusively, which probably represents the mothers with high motivation to seek information and help when needed.

We found, as determined by other authors, that the most common problems found among breastfeeding mothers were position or latch-on problems, breast engorgement, mother's perception of inadequate milk supply and sore nipples, among others (20). When we classified the principal reasons given for the call we found that there are statistically significant different reasons to call between mothers who were fully breastfeeding and mothers who were partially breastfeeding or formula feeding. Mothers who were fully breastfeeding called for information and help about medications while breastfeeding, management and storage of human milk and breastfeeding products. Mothers who were partially breastfeeding or formula feeding, on the other hand, called due to engorgement problems, position or latch-on problems, breast refusal and relactation. These situations are precisely related to inappropriate feeding routines and use of formula. Other reasons to call from both groups were low milk supply, sore nipples, and information about breastfeeding support groups and classes.

The evaluation of the origin of the calls showed that nearly two thirds came from the greater San Juan metropolitan area. This probably reflects the fact that the breastfeeding help and orientation line is not a toll free number. Efforts should be made to obtain funding for a toll free number in order to extend the services offered by the telephone line.

When we evaluated the action taken by the counselors we found that the majority of the callers received orientation from them while two-fifths of the partial breastfeeding or formula feeding mothers were referred to the breastfeeding specialist physician. Less than one-fifth of the callers was referred to the breastfeeding groups or classes. This relatively low referral percentage rate was inadequate since research has proven that participation in breastfeeding classes has positive impact in the initiation, type and duration of breastfeeding; and the participation in support groups increases breastfeeding duration by a mean of 1.5 months (1).

Family members or friends referred two-thirds of the

callers. This could represent an indicator of user satisfaction with the services offered by the telephone line. Physicians, hospitals, other health care providers and WIC referrals represent less than one-fifth of the calls, which shows the necessity of active promotion of the line service among these sectors to increase referrals.

## Recommendations

The breastfeeding telephone line could give information and help about most common breastfeeding problems. Efforts should be made to increase the service islandwide with a toll free number and promotion of the telephone line among physicians, hospitals, other healthcare professionals and WIC clinics. A study to evaluate the impact of the telephone line on the initiation, duration and type of breastfeeding will measure the effectiveness of this strategy.

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