

# **Role of Commercial Infant Feed Companies in Infant Nutrition Information Provision to Public Health Nurses**

Amanda Haehl Student Dietitian

Supervised by: Charlotte Johnston, Senior Community Dietitian

Community Nutrition & Dietetic Service, HSE Dublin Mid-Leinster

June – August 2006

## **Abstract:**

### ***Aim of Study***

To determine the level of interaction that takes place between Commercial Infant Feed Companies (CIFCs) and HSE-Dublin Mid-Leinster Public Health Nurse (PHN) staff, and gain insight into the role PHNs feel that both companies and Community Dietitians (CDs) have in information provision.

### ***Methodology***

- Study population included Nurses in the communities of Westmeath, Longford, Laois, and Offaly.
- Information was acquired using an approximately five minute telephone questionnaire consisting of twenty five quantitative and qualitative questions.
- Records were kept of individual responses to each question by recording answers on separate questionnaire sheets.
- Through a system of numerical coding, participants were ensured confidentiality for all responses and analysis of acquired results.
- SPSS allowed for data analysis and tabulation for interpretation of research outcomes.

### ***Results***

- Thirty nurses ultimately participated in the telephone questionnaire providing a 26% response rate
- The majority of CIFCs visited every few months in 57% of the respondents with a 73% of visits being unexpected
- 43% received promotional material; 30% used them in the office while 7% used them in the community
- 46% of the nurses received formal product training from the formula reps
- 60% received invitations to seminars or national conferences; 36% of these actually attended
- CIFC training received a mean rating of 8.36
- CNDS training received a mean of 8.41
- 67% of the participants believe that commercial infant feed companies should play a role in the community
- Leaflets and Antenatal classes were suggested as other helpful services by Dietitians
- Comments included a desire for weaning information and recipes, increased Dietitian accessibility and more frequent updates, information on feeding practices, special diets or allergies, and group talks from Dietitians to mothers

### ***Conclusion***

- No research was identified regarding the level of interaction between commercial infant feed companies and PHNs or Dietitians
- The infant feed companies are providing more frequent updates than Dietitians and are more accessible through carelines and services provided by reps.
- Many Health Centres are disregarding the regulations against promotional material use in the office and community.

- Most PHNs expressed satisfaction with the CNDS, however some felt Dietitians were not always accessible and would prefer more frequent, less concentrated updates regarding infant feeding.

***Relevance to practice of dietetics***

- Need for further research into the interaction between CIFCs and health professionals and its affect on breastfeeding rates
- This study has provided baseline data on interaction levels that was up until this anecdotal.
- Results of this study should be disseminated to management in the health service and all relevant parties and decisions should be based on results obtained

## **Background:**

Mothers desire the best methods of caring for their babies, preventing illness and harm to promote a happy, healthy infancy and childhood. Worldwide, experts and healthcare providers agree that breastfeeding and breastmilk offers the needed nutrients as well as numerous health benefits for the baby and mother. Recent research by the Department of Health and Children Services emphasizes the proven benefits of breastfeeding to protect against illnesses such as asthma, coeliac, ear infections, childhood obesity plus many other complications infants encounter; additionally, a mother can return to pre-pregnancy weight more rapidly<sup>2</sup>. Even with the many benefits of breastfeeding, Ireland maintains a very low breastfeeding rate as many mothers choose instead to bottle feed. Ireland in 2001 experienced a 36% breastfeeding initiation rate<sup>2</sup>, almost half compared to the United States rate of 69.5% in 2002<sup>3</sup>. Ireland's low percentages may stem from a variety of possible reasons including the increasing number of working mothers and breastfeeding's past association with poverty<sup>1</sup>.

In an attempt to increase breastfeeding rates, health professionals established The International Code of Marketing Breastmilk Substitutes<sup>5</sup>. The series of regulations forbids distribution of samples and direct contact with pregnant women and mothers and restricts advertising infant formula in the community. Infant formula cannot legally be displayed by television commercials, magazines, or in the health care setting where a mother may be exposed to a particular brand or service<sup>5</sup>. Since an obvious majority of mothers choose to bottle feed their infants, they must acquire information in some manner to make appropriate choices for their own child. Mothers must therefore depend on the advice of Public Health Nurses and dietitians as their information source when choosing bottle feeding products and methods. Since Dietitians must train Public Health Nurses regarding infant feeding, a thorough understanding of available products proves crucial. Therefore, it seems important that Dietitians receive frequent and accurate product updates by the infant formula companies.

## **Research Question:**

What is the manner and extent of interaction between Commercial Infant Feed Companies (CIFCs) and Public Health Nurses (PHNs)?

## **Research Hypothesis:**

Despite Community Nutrition and Dietetic Service annual update sessions, Commercial Infant Feed Companies continue to provide product information by targeting Public Health Nurses in the community.

## **Aim:**

To determine the level of interaction that takes place between CIFCs and HSE-Dublin Mid-Leinster PHN staff, and gain insight into the role PHNs feel that both companies and CDs have in information provision.

## **Objectives:**

- To perform a thorough literature review on breastfeeding rates and infant formula marketing to health care professionals.
- To create and complete a telephone questionnaire with public health nurses for data collection.
- To determine the number of visits CIFCs make to health centers and whether the visits are planned or unplanned.
- To determine the number of visits with individuals or groups of PHNs.
- To determine the type of information given if these visits are carried out.
- To discover if promotional material such as pens, sticky pads, etc are being left by companies and if they are used in offices or the community.
- To determine how often and in what manner PHNs are receiving new product updates.
- To identify if CIFCs are providing PHNs with any type of formal training.
- To discover if PHNs are being invited or attending local seminars and national conferences run by CIFCs.
- To determine PHNs views of CIFCs and their role in providing information in the community.
- To ascertain the number of PHNs in the study who have attended CNDS infant nutrition update sessions and determine their opinion of this training.
- To compare Ireland breastfeeding statistics and policies with the United States.
- To collate information received and to carry out statistics using SPSS.
- To draw conclusions regarding facts and participant attitudes and make recommendations regarding future progress.
- To write project as a scientific paper.

## **Methods:**

### ***Study Description:***

This study was an evaluation of the level of interaction between CIFCs and PHNs in HSE-Dublin Mid Leinster. The study population included Nurses in the communities of Westmeath, Longford, Laois, and Offaly. Information was acquired using an approximately five minute telephone questionnaire consisting of twenty five quantitative and qualitative questions.

### ***Selection of Study Participants:***

For eligibility in this study, the participants must have been Public Health Nurses or Registered General Nurses involved in mother and infant care for the communities of Westmeath, Longford, Laois or Offaly.

### ***Study Procedures:***

In order to acquire information regarding Commercial Infant Feed Companies and the extent of their interaction in the community, it was necessary to contact Public Health Nurses in the locations of interest. Using a contact database of Public Health Nurses in the appropriate communities, approval from the Director of PHNs was acquired before carrying out the study. Telephone interviews were then conducted to provide data for research and analysis.

### ***Sample Size:***

After acquiring the names and contact information for one hundred and fifteen eligible Public Health Nurses, attempts were made to contact each individual by telephone. All nurses were primarily located in Westmeath, Longford, Laois, or Offaly. Ultimately, thirty Public Health Nurses participated in the study by answering the telephone questionnaire providing a 26% response rate.

***Data Management:***

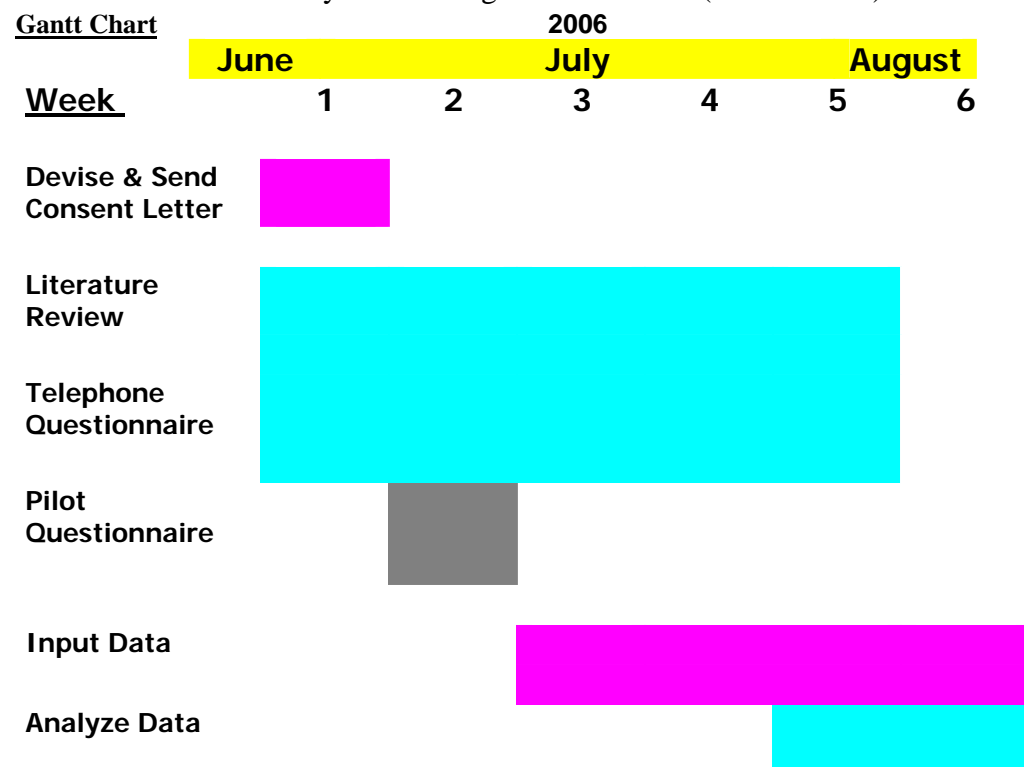
Using qualitative and quantitative questions, telephone interviews were completed. Records were kept of individual responses to each question by recording answers on separate questionnaire sheets, ensuring appropriate coding of responses for confidentiality. SPSS allowed for data analysis and tabulation for interpretation of research outcomes.

***Ethical Considerations:***

Consent letters were sent to all potential candidates in Westmeath and Longford allowing for withdrawal from the study. Due to time constraints, the participants of Laois and Offaly did not receive consent letters, however the supervising Public Health Nurse for the area approved participation in the study. Through a system of numerical coding, participants were ensured confidentiality for all responses and analysis of acquired results.

***Timetable:***

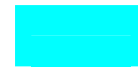
All research, information collection, analysis and interpretation occurred within the timeframe of June twenty-first to August fourth 2006 (**Gantt chart**).



Create  
Presentation



Final  
Presentation



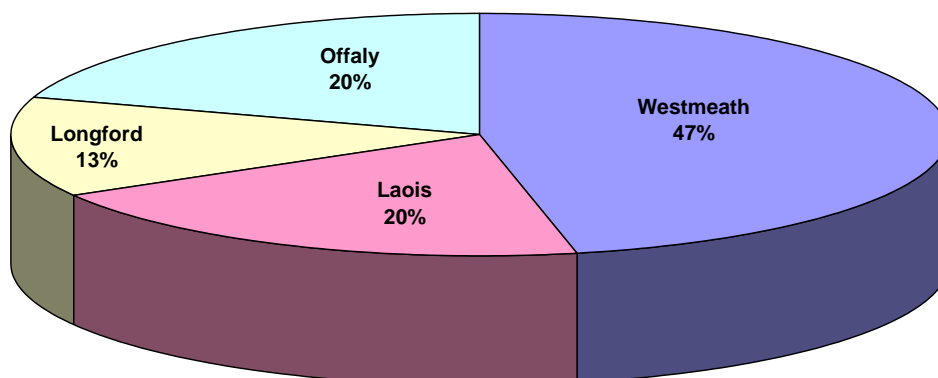
## Discussion and Results:

### *Study Population and Demographics*

One Hundred and fifteen Public Health Nurses in the counties of Westmeath, Longford, Laois, and Offaly were identified as eligible for participation the study. Consent letters were initially sent to Westmeath and Longford, however time constraints did not allow for distribution to nurses in Laois or Offaly. The questionnaire was piloted on the first few participants allowing for slight editing to select questions in order to elicit more specific or helpful responses. The results from the pilots were also included for analyzing since the alterations were only minor. Thirty nurses ultimately participated in the telephone questionnaire providing a 26% response rate.

- Twenty eight of the thirty participants were public health nurses (93%) with the remaining two being Registered General Nurses (7%).
- The survey of thirty nurses was distributed as 47% from Westmeath, 20% from Laois, 20% from Offaly, and 13% from Longford (**Figure 1**).

**Figure 1** PHN Location of Service



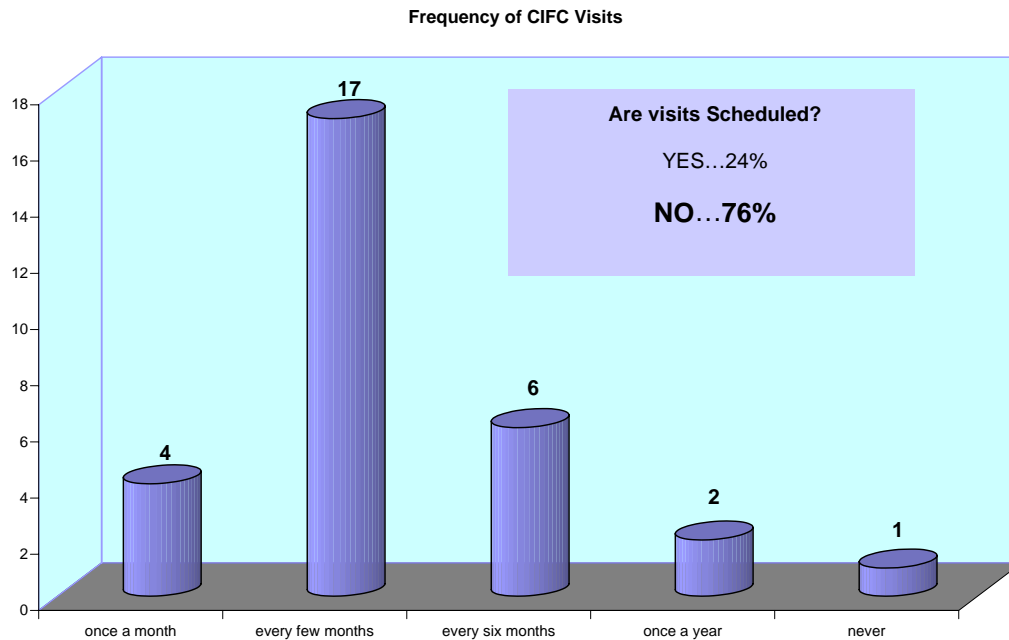
### *Commercial Infant Feed Companies*

#### Visit Frequencies and Scheduling

- 100% of PHNs or RGNs surveyed claimed an awareness of HSE breastfeeding policies.
- 100% were familiar with commercial infant feed companies such as *Cow and Gate*, *Milupa*, and *SMA*.

- Commercial Infant Feed Companies visited the health centers of 29 of 30 participants.
- Frequencies ranged from once a month to once a year. The majority visited every few months totally 57% of the respondents, 20% reported visits every six months, 13% once a month, 7% once a year and 3% never (**Figure 2**).

**Figure 2**



- Only 24% of visits by CIFICs were scheduled with a 73% majority of visits being unexpected, 3% never occurred at all (**Figure 2**).

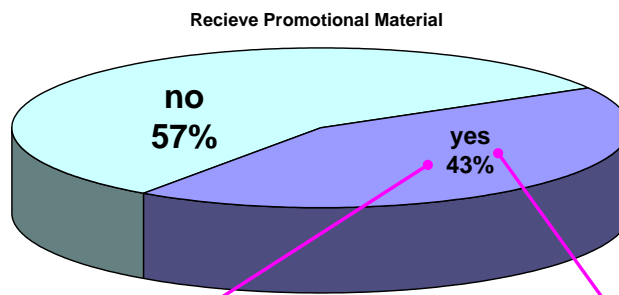
The fact that 73% of visits by formula companies were unscheduled presents a significant finding. The Midland Health Board Breastfeeding Policy and Action Plan explicitly states, “Companies can continue to communicate commercial information to staff through area line managers”<sup>4</sup>. These results reveal that the majority of the formula reps visiting the Health Centres of interest are not following the guidelines set out by the Midland Health Board.

### **Information and Training**

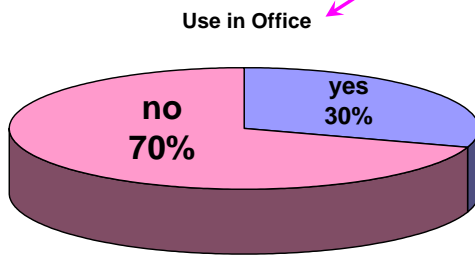
- 56% of those surveyed did not receive promotional material but of the 43% that did (**Figure 3**), 30% used them in the office (**Figure 4**) while 7% used them in the community as well (**Figure 5**).

However, the Midland Health Board also provides specific guidelines for all infant feeding promotional material to be used in the health centres as well as the community. “The Board’s premises will not display / use posters, pens, calendars or other promotional products promoting infant formulae”<sup>4</sup>. The results of the survey reveal many health care centres are overlooking this regulation and continuing to use the promotional material in many offices.

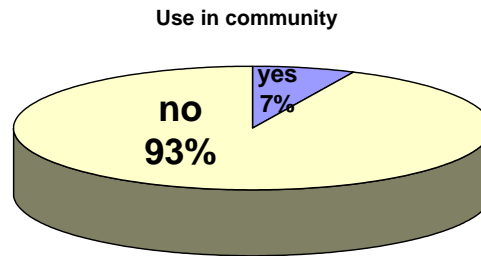
**Figure 3**



**Figure 4**

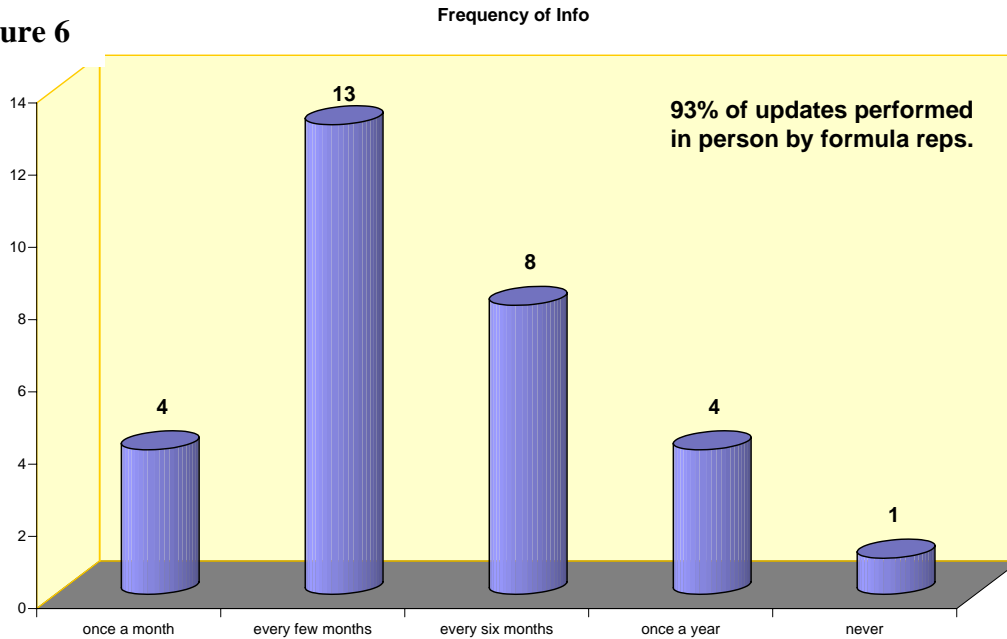


**Figure 5**



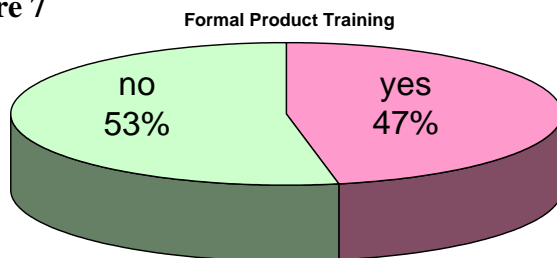
Interestingly, the frequency of product updates from CIFCs to the health centres varied with the majority occurring every few months for thirteen Health Nurses (**Figure 6**). In contrast, updates by community nutrition services occur only one time per year. Many nurses suggested that Dietitian updates would be more helpful if they were more frequent updates with smaller amounts of information. However when comparing services it is important to consider the funding and staffing of each. Formula representatives are paid to promote the sale of their product; the sale provides funding for further advancement of the product. On the other hand, a Dietitian retains the responsibility to provide a range of education and services to a variety of health care centres and personnel, creating not only time pressure but the issue of funding as well. Since a Dietitian does not receive payment when a mother chooses to breastfeed rather than bottle-feed, the services do not provide a source of funds. Therefore, a specific mother and infant dietetic service may be useful in order to provide the concentrated and frequent services needed. In addition, funding must be provided to ensure these services are fulfilled, allowing mothers the source of education and support necessary for successful breastfeeding.

**Figure 6**

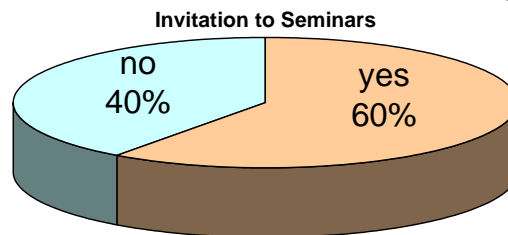


- 46% of the nurses surveyed noted receiving formal product training from the formula reps (**Figure 7**).
- 60% had received invitations to seminars or national conferences (**Figure 8**), 36% of these actually attended (**Figure 9**).

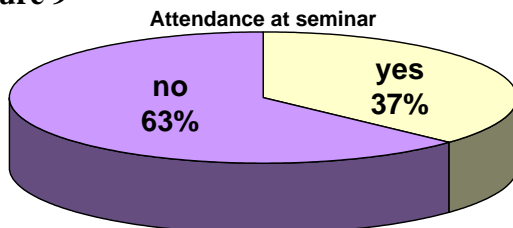
**Figure 7**



**Figure 8**



**Figure 9**



The nurses who attended training were asked to rate the training on a scale of one to ten with a score of one being very unhelpful while ten being very helpful. Fourteen responded, six of which gave the training a score of ten, four gave it a seven, two gave it a six, one gave it a nine, and one gave it an eight (**Figure 10**). This describes a minimum score of six, maximum score of ten and a mean of 8.36 with a standard deviation of 1.646. From this information, Nurses benefit from the information presented in the sessions held by formula reps.

Figure 10

CIFC Rating on a 1-10 Scale										
Score	1	2	3	4	5	6	7	8	9	10
Frequency	x	x	x	x	x	2	4	1	1	6

CIFC Rating on a 1-10 Scale	
Total Number	14
Min	6
Max	10
Mean	8.36
Std. Deviation	1.646

Figure 11

**Community Role**

67% of the participants believe that commercial infant feed companies should play a role in providing infant nutrition information in the community. Of those who approved, 36% believed the formula reps were important in order to provide information to the majority of mothers who bottle feed. 20% thought new product information was useful, while 10% believed the carelines provided by the companies were of service (Figure 12). Some nurses suggested the infant feed companies should be providing the education since they manufacture the products and would have the most accurate data.

Of the remaining 33% who believed formula reps should not have a role in providing information to the community, 17% believed this because they received unbiased, scientific information from the Dietitians, 10% believed formula companies were just selling products, and 3% attempted to promote breastfeeding exclusively (Figure 13).

Should formula reps have a role in the community?

Figure 12

67% said **YES** because...

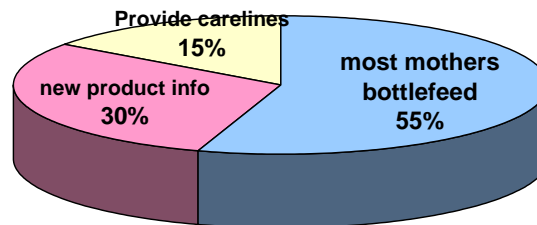
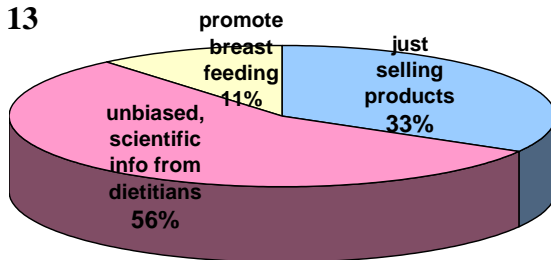


Figure 13



...33% said **NO**

**Community Nutrition and Dietetic Services**

**Current Services**

The community nurses were questioned regarding the Community Nutrition and Dietetics Services (CNDS).

- 100% of those questioned claimed awareness of the CNDS services in the community.
- 28 of the 30 nurses had attended the annual infant nutrition update sessions conducted by the CNDS at least once.

Those who attended were also asked to rate the update sessions on a scale of one to ten with one being very unhelpful and ten being very helpful. Thirteen participants gave the training a score of ten, five gave it a score of seven, three gave it a nine, three gave it an eight, one gave it a five, one gave it a four and one gave it a score of two (Figure 14). This demonstrates that out of twenty seven responses, there was a

minimum score of two, a maximum of ten a mean of 8.41 with a standard deviation of 2.117 (Figure 15). Compared to scores for CIFIC training, Dietetic services received a slightly higher mean score, one nurse did rate the Dietetic service as a two. This low score could be due to the overwhelming amount of information presented in the annual updates, a problem which could be solved through more frequent and less concentrated sessions with nurses.

Figure 15

Figure 14 CNDS Rating on a 1-10 Scale

Score	1	2	3	4	5	6	7	8	9	10
Frequency	x	1	x	1	1	x	5	3	3	13

**CNDS Rating on a 1-10 Scale**

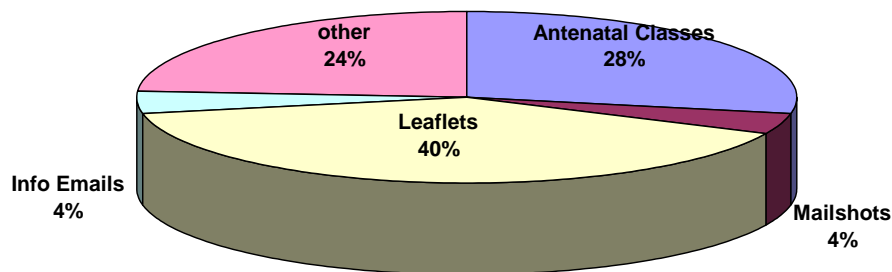
Total Number	27
Min	2
Max	10
Mean	8.41
Std. Deviation	2.117

**Other potentially valuable services**

When asked what other services might be useful from Community Nutrition, 33% asked for more leaflets and 23% suggested antenatal classes, 20% fell into the category of other, while 3% wanted mailings and the remaining 3% wanted informational emails (Figure 16). Antenatal classes were popularly suggested since mothers could learn useful information regarding infant feeding in order to make an informed decision. Leaflets were also suggested especially when in conjunction with training; some nurses mentioned that leaflets can be discarded or lost easily but they provide a useful reference tool.

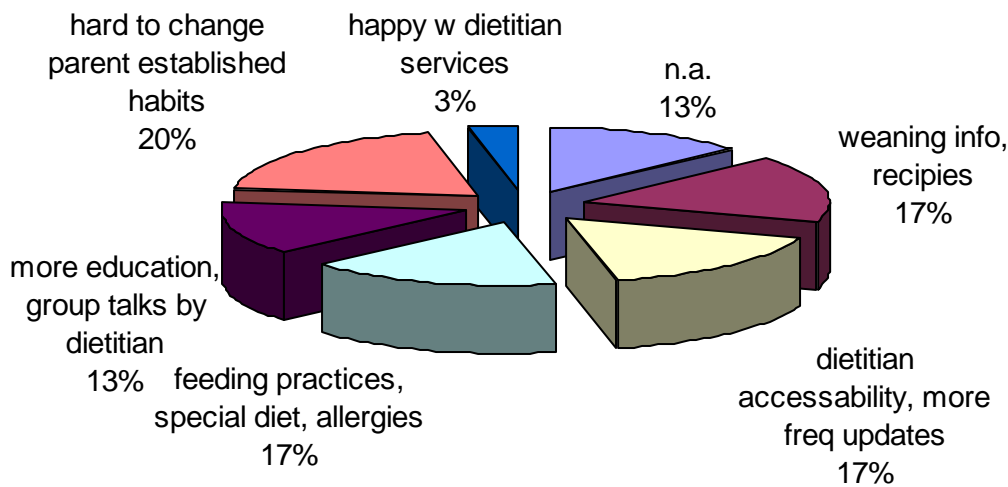
Figure 16

Other roles of CNDS



**Comments Regarding Infant Nutrition**

Finally, nurses were encouraged to provide any additional suggestions pertaining to infant nutrition. Answers included 17% for weaning information and recipes, 17% for increased Dietitian accessibility and more frequent updates, 17% for information on feeding practices, special diets or allergies, 20% believed that firmly established parental habits were too difficult to change, 13% wanted more education and group talks from Dietitians to mothers, and the final 3% were happy with the present dietetic services, with 13% declining a response (Figure 17).



**Figure 17**

**Conclusion:**

Through a literature review, no research was identified regarding the level of interaction between commercial infant feed companies and PHNs or Dietitians; however, information regarding current infant feeding practices was plentiful. The aims and objectives for the project were achieved providing useful insight into the relationships between PHNs, CIFCs and CNDS. PHN rating also revealed the opinions and feeling toward formula companies and community Dietitians.

In response to the original question, CIFCs interacted on a personal level with PHNs, providing updates every few months as well as formal training and invitations to conferences to approximately half of those interviewed. The infant feed companies are providing more frequent updates than Dietitians and are more accessible through carelines and services provided by reps. Clearly, many Health Centres are disregarding the regulations against promotional material use in the office and community.

Through research and analysis of results, the original hypothesis was proven correct. Commercial infant feed companies do provide updates directly to the PHNs even though Dietitians hold annual training. Although twenty eight of the thirty nurses attended the annual training, it appears that nurses depend on the more frequent updates from formula reps to supplement the information given by Dietitians. Overall, most PHNs expressed satisfaction with the CNDS, however some felt Dietitians were not always accessible and would prefer more frequent, less concentrated updates regarding infant feeding.

## Suggestions:

Continuation of this study would possibly reveal further findings of interest, however some alterations may provide more efficient and useful results.

- Continue investigation.
- The summer months proved an inconvenient time to reach Public Health Nurses.
- Public Health Nurses prefer to be contacted on land lines rather than mobile phones.
- It was observed that the most convenient time to reach PHNs was Monday or Wednesday mornings between 9:30 and 11:30.
- Health Care workers address each other one a first name basis.
- Stating the name of the research supervisor increased PHN cooperation with the survey.
- A group meeting may have been a more efficient manner of distributing the survey to PHNs.
- PHNs should be informed of the survey by a supervisor prior to initiation.
- Ask questions within a given timeframe, i.e. the past year or two years in order to acquire the most recent statistics and practices.
- Compare breastfeeding rates and policies of other countries such as USA, UK, and Asia.

## References:

1. Clarke J. (2006) Nature's Milk. [Irishhealth.com/clin/pregnancy](http://Irishhealth.com/clin/pregnancy). (July 14, 2006).
2. Department of Health and Children in association with The National Committee on Breastfeeding. (2005). *Breastfeeding in Ireland A five-year Strategic action plan*. (Mary Harney T.D.) Center for Health Promotional Studies, NUI Galway.
3. Merewood A, Mehta SD, Chamberlain LB, Philip BL, Bauchner H. (2005) Breastfeeding rates in US baby-friendly hospital: results of a national survey. *Pediatrics*. **116** (3), 628-34 (23 ref).
4. Midland Health Board. Breastfeeding Policy and Action Plan 2000-2005. 14-15.
5. Opie G, Simmer KM. (2004) Commentary The International Code of Marketing of Breastmilk Substitutes. *Journal of Paediatric and Child Health*. **40**, 348-349.