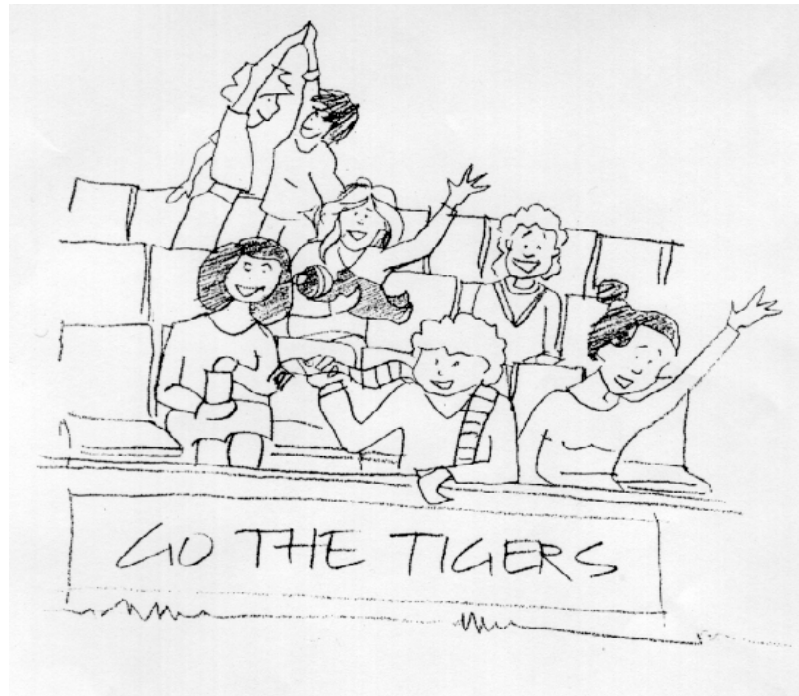


Community Nutrition Unit, 1998

BREASTFEEDING IS OK IN PUBLIC



PROJECT EVALUATION



Tasmania
DEPARTMENT of
HEALTH and
HUMAN SERVICES

ACKNOWLEDGEMENTS

This project has been the result of collaborative effort and initiative from a large number of people with a passion for breastfeeding promotion.

Active contributions to project planning came from members of *the Tasmanian Breastfeeding Support Coalition*, in particular key members Ros Escott, Sue Cox, Elisabeth Wilson, Sally Robinson, Dr. Nic Cooling, Jenny Masters, Pat Pryke, Linda Smith and Helen Horwarth.

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EXECUTIVE SUMMARY

- This document reports on the evaluation of the *It's OK to Breastfeed project* undertaken by the *Tasmanian Breastfeeding Support Coalition* supported by the staff of the Community Nutrition Unit.
- Breastfeeding initiation and duration rates in Tasmania are well down on interstate figures, and will not reach target rates for the year 2000 based on existing trends. A coordinated, multi-strategy and multi-disciplinary approach to breastfeeding promotion is required in Tasmania.
- The project used a social marketing strategy to increase community awareness of the appropriateness of breastfeeding in public. Lack of social support for breastfeeding in public has been identified in previous studies to be a barrier to breastfeeding duration.
- Inside Metro bus advertising was considered as a viable medium for this project. Budget limitations, the considerable reach of the medium and the socio-economic mix of passengers confirmed its potential after further feasibility investigations.
- A \$4000 seeding grant was obtained on submission to the Southern Region Health Promotion Group to pilot a internal advertising campaign with a particular focus on the evaluation of the medium and collation of a large community attitude sample.
- Evaluation involved 2 community surveys using a face-to-face structured interview method in the vicinity of bus let-down/pickup locations in and around Hobart in Summer (Dec/Jan 1996/7) and Winter (July 1997). Data collection was facilitated by NMAA member volunteers and student nurses.
- Pre-intervention surveys collected attitudinal information about breastfeeding and tested a number of proposed messages and poster ideas prior to poster development.
- Post-intervention surveys repeated attitudinal questions and investigated the performance of the medium in this project.
- The medium (internal bus advertising) performed well as a medium for health promotion related awareness raising:
 - Recall of exposure to the poster was achieved in almost half (48%) of those surveyed
 - Message recall was good, indicating that exposure had lead to internalisation of the message
 - message exposure was repeated for most passengers, with a quarter (23%) indicating that they had seen the poster in excess of 10 times over the 2 month intervention period
 - Opportunistic media coverage of the campaign was achieved to help promote the issue and the intervention.
- Despite being successful in increasing public awareness the intervention had a limited effect on *changing* community attitudes to breastfeeding in public. This was in part due to the fact that approximately 75% of the population surveyed already supported breastfeeding in public. The campaign served to *reinforce* positive attitudes about breastfeeding in public and achieved a small shift in previously unsupportive attitudes.
- Internal bus advertising has been demonstrated as a viable and cost-effective health promotion medium, particularly for public awareness campaigns targetting youth.

INTRODUCTION

The physical, social, economic and environmental benefits of breastfeeding infants to at least 6 months of age is widely acknowledged, supported by a wealth of international research and policy at all levels of government. In Tasmania, breastfeeding promotion features as a primary recommendation of the Tasmanian Food and Nutrition Policy¹ and is identified as an indicator of infant and nutritional health via the state’s Health Goals and Targets.

Stickney and Webb² completed a review of breastfeeding promotion strategies in Australia in 1995. This review identified a number of features that help define best practice in breastfeeding promotion; including:

- The need for a public health context and coordination of individual activities
- A multi-strategy approach is needed- no single strategy for the promotion of breastfeeding is likely to make a significant impact.
- An intersectoral approach is desirable- this demonstrates an understanding of the different levels at which a program must operate in order to bring about permanent change.
- In designing a plan, and selecting strategies for the promotion of breastfeeding, it is important to consider all factors that may undermine breastfeeding (ie. The need for formative research).
- Special consideration should be given to the characteristics of the media environment and target audiences.

Stickney and Webb’s review indicated that breastfeeding promotion initiatives were centred around a limited number of strategy options and lacked coordination and evaluation.² This finding was consistent with results identified in a 1996 audit of breastfeeding promotion activity in Southern Tasmania.³

The development, implementation and evaluation of this intervention was framed against the following Tasmanian breastfeeding promotion context.

- There is a considerable infrastructure of professional and community groups committed to the promotion of breastfeeding in Tasmania, and these groups have begun a process of coalition building in order to more effectively coordinate and value-add to breastfeeding promotion.
- The available data from Tasmania suggest that breastfeeding initiation rates are well down on interstate comparisons and that the slow increasing trend since the early 1980’s is currently not steep enough to achieve the national target of 90% breastfeeding on discharge by year 2000.⁴
- Breastfeeding duration data suggests that the greatest challenge for breastfeeding promotion is to slow down the rapid decline in breastfeeding in the first 1-2 months post discharge and to maintain or increase breastfeeding initiation rates.⁵
- There are a range of modifiable and non-modifiable factors that influence breastfeeding initiation and duration that require understanding before attempting to develop breastfeeding promotion initiatives. These factors include:
 - socio-economic and demographic- eg. age, occupation, education level
 - psychosocial and cultural- eg. ethnicity, return to work, social support
 - biomedical- eg. sore nipples
 - health service factors- eg. hospital practices, health professionals attitudes, perception of insufficient milk.⁶
- A draft minimum data set for breastfeeding monitoring and surveillance has recently been developed for Tasmania. This data collation and reporting is an important

strategy to evaluate breastfeeding promotion outcomes and help identify priority groups and strategy opportunities.

A major barrier to breastfeeding for some women is the stigma or embarrassment associated with breastfeeding in public places. Even people who have positive attitudes toward the concept of breastfeeding may be uncomfortable with the idea of breastfeeding in public, or in front of non-family members.^{7,8} This barrier can be diminished by interventions that change societal attitudes and support for breastfeeding in public. Changing attitudes to breastfeeding in public places is considered a long term goal.² Public awareness campaigns that raise awareness about an issue have an important role to play in shifting community attitudes, but are unlikely to have an effect in isolation of sustained efforts and the use of multiple strategies. This project is considered as an initial strategy initiative to be followed by a rolling series of strategies/ projects in a broader strategic approach to breastfeeding promotion in Tasmania.

THE PROJECT

The ‘It’s OK to Breastfeed’ project was developed as a pilot public awareness project. A major emphasis was placed on the evaluation of internal bus advertising as a medium for health promotion, and the effectiveness and efficiency of the medium in raising public awareness. The pilot was based in the Hobart metropolitan area of Tasmania.

Project Goal: To increase community acceptance of breastfeeding in public

Objectives:

1. To strengthen the collaboration between breastfeeding promotion groups in Tasmania
2. To conduct formative research of the attitudes, beliefs and support relating to breastfeeding in public. To include market segmentation and testing of breastfeeding awareness messages.
3. To implement a short term breastfeeding promotion campaign in order to raise community awareness about breastfeeding in public.
4. To evaluate the effectiveness and efficiency of the medium (internal bus advertising) and its applicability for other health promotion campaigns.

PROJECT STRATEGIES

1. COALITION DEVELOPMENT

An invitation to attend an initial discussion group meeting was issued to all known breastfeeding promotion stakeholders in April 1996 from the Community Nutrition Unit. (Refer to Tasmanian Breastfeeding Support Coalition membership in Appendix 1). This group was established initially as a breastfeeding promotion working group and it has recently adopted the name of the *Tasmanian Breastfeeding Support Coalition*. This initial invitation communicated a desire to establish a multi-disciplinary and intersectoral group to work towards improving breastfeeding promotion at a regional/state level. The first meeting was attended by a large number of interested groups, all of whom still remain as active members of the Coalition. At the time, there was widespread support for a co-ordinated forum for discussion, sharing of ideas and coordination between groups in order to maximise the capacity to be able to influence breastfeeding rates and duration in Tasmania.

There was support from groups outside of the Department of Community and Health Services for some initial leadership and effort in establishing the group and helping coordinate its activities.

The lack of available information about breastfeeding (rates, influences and activities) in Tasmania was identified as a barrier to effective breastfeeding promotion across coalition member groups. As a result, Coalition members within the DCHS (Roger Hughes, Sue Cox, Jenny Masters) undertook to compile available data relating to breastfeeding initiation and duration from existing data collections and with the assistance of the Department of Obstetrics & Gynaecology University of Tasmania and Family and Child Health Services with the DCHS. A series of draft data papers were produced by the Community Nutrition Unit based on this data, and a proposed minimum data set for breastfeeding and infant feeding monitoring developed. (Appendix)

In order to identify existing breastfeeding promotion activity, members of the Coalition completed a mapping exercise within their respective groups (eg. NMAA, FACH services etc) and returned these for collation. This preliminary work led to the need for the group to begin developing strategies to promote breastfeeding at a local level and build on strategies previously outside of the capacity of the individual Coalition member groups resources. In what is planned as the first of a rolling series of interventions, the idea for a public awareness campaign to promote community support for breastfeeding in public was developed into a regional health promotion fund grant submission and consequently supported to pilot a campaign using internal bus advertising.

2. MEDIUM SELECTION AND FEASIBILITY

Internal bus advertising on Hobarts’ Metro Bus service was considered as a potentially viable advertising medium for a budget limited campaign. Metro statistics indicated that advertising in all Metro buses over a two month period would reach an estimated 1.8 million passengers, representing a mass reach and multiple exposure advertising /social marketing medium.

3. FORMATIVE RESEARCH AND EVALUATION

Based on this information, the awareness campaign was planned to test the effectiveness and efficiency of a campaign using internal bus advertising.

A pre-intervention community survey was planned in order to:-

- collect baseline attitudinal data about breastfeeding in public
- to test different advertising messages being considered for the campaign
- to assess the potential reach (and demography of patrons) of the medium planned for use.

A face-to-face interview questionnaire tool was developed by the Coalition membership and pre-tested amongst ten community members to reduce ambiguities in question design. No further question validation was attempted. A sampling method was designed to include the recruitment of equal numbers from 6 defined age/sex strata as outlined below:

Age/Sex strata recruitment targets

Age\ Sex	Male	Female
<20 yrs	35	35
20-60 yrs	35	35
60 yrs+	35	35
Total sample size target	105	105
=210		

Recruitment and interviewing was conducted in the proximity of bus terminal/let-down sites in order to capture patrons of the medium in question (eg. Metro buses). Recruitment and interviewing was conducted in the pre-intervention phase by Nursing Mothers Association members with identification as research volunteers with the Community Nutrition Unit.

Recruitment occurred in December 1996 (summer). Volunteers received pre-survey briefings and post-survey debriefings from the Community Nutrition Unit.

4. INTERVENTION PLANNING

Questionnaire design and poster development was undertaken by the Community Nutrition Unit with direction from the Coalition membership. The poster was displayed on all of Hobart's circulating Metro buses (n= 155) for a two month period over May- June 1997. Opportunistic media exposure was planned during the campaign period to increase community awareness about breastfeeding and the bus poster campaign (refer appendix) .

5. INTERVENTION EVALUATION

A post-intervention questionnaire was developed based on the formative questionnaire and pre-tested amongst approximately 10 community members . Questions relating to message pre-testing were replaced with questions investigating poster awareness, message assimilation, bus utilisation etc. A suite of attitudinal questions were common to both questionnaires to enable the collection of attitudinal data from a large sample of the local community. (Refer appendix for questionnaires). Sampling and recruitment method was consistent with the pre-intervention data collection, with data collection being conducted by student nurses on practical placement at the Community Nutrition Unit.

DATA LIMITATIONS

The interpretation of data collected needs to be measured against the following limitations of the evaluation methodology:

POTENTIAL FOR BIAS AND LOGISTICAL ISSUES:

- There was some potential bias introduced by the data collectors, such as a reluctance to approach 'street kid's' or people whom it was perceived would have difficulty with answering questions. Anecdotal evidence from the collectors suggests that their own attitudes and those of recruits may have influenced responses. eg. young males got quite embarrassed when questioned about breast feeding.
- For some of the participants, breast feeding was obviously a sensitive topic to discuss with strangers in public surrounds. For example, It was difficult to approach people in a crowded bus shelter and expect them to answer questions on breast feeding.
- Whilst every effort was made to isolate recruits from 'outside the interview' distractions street interviews can be limited by a 'collective response or peer group' bias- individual recruits responding in a way that is expected of the group in question.
- Small but important proportions of the population were unable to participate via this methodology. eg. car drivers, deaf, blind, not competent in the English language or unable to use public transport.
- Pre and post intervention surveys were conducted in different seasons (pre- summer, post-winter). The effect of climate on attitudes to breastfeeding in public cannot be underestimated.
- Climatic influences also affect recruitment. The post-intervention survey was carried out in July, this being one of the colder months, the weather was windy and at times raining. The public was, on a whole, reluctant to stop in poor weather and answer questions, contributing to recruitment and interviewing difficulties.

STATISTICAL ANALYSIS

Survey responses were collated, analysed and stored electronically using SPSS for Windows. Statistics have been mostly limited to descriptive analysis. Non-parametric statistics (Mann-Whitney and Kruskal-Wallis tests have been used to test similarities/differences between pre

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and post-intervention sample responses. Because of the independence of each sample (only 2 respondents were interviewed in both pre and post-intervention), differences in attitudinal and other responses cannot reasonably be associated with intervention effects (ie. Q1-14). It should be noted that the power (limited by sample size and non-parametric testing) of analytical statistics used in this evaluation will limit the detection of statistically significant differences. Where appropriate, graphs have been used to identify possible differences.

Pooling of the pre and post intervention sample responses for the consistent attitudinal question suite will be reported in a following report from this project.

RESULTS

A total useable sample of 405 survey participants was obtained, consisting of 206 pre-intervention, 199 post-intervention recruits.

PRE AND POST CAMPAIGN SAMPLE DEMOGRAPHICS-COMPARISONS

Table 1: Sex distribution of respondents

	Male	Female	Total Sample
Pre intervention	113	85	198
Post intervention	78	118	197
Total	191	203	395

Missing observations =10 Mann-Whitney; two-tailed p=0.004

Table 2: Age distribution of respondents

	<20 yrs	20-60yrs	60+ yrs	Total Sample
Pre intervention	55	94	52	201
Post intervention	50	104	40	194
Total	105	198	92	395

Missing observations =10 Mann-Whitney; Two -tailed p=0.6216

Table 3: Occupation of respondent

	Pre-intervention	Post-intervention	Total sample
Student	55	52	107
Unemployed	24	23	47
Blue collar	40	30	70
White collar/Professional	30	19	49
Retired/Homes duties	52	61	113

Missing observations =15 Mann-Whitney; Two-tailed p=0.5943

Table 4: Personal experience of own children breastfeeding

	Yes children yes breastfed	Yes children not breastfed	No to both	Total Sample
Pre intervention	75	23	108	206
Post intervention	66	33	100	199
Total	141	56	209	405

Mann-Whitney, two-tailed p=0.2362

Table 5: How many times do you use the bus per week?

No. of bus trips per week	Pre-intervention	Post-intervention
0 - 5	66.4	60.7
6 - 10	22.8	26.5
11 -15	10.1	8.7
16 - 20	2.4	3.1
21 - 30	0	1

Missing observations= 38, Mann-Whitney, two tailed p=0.0056

Table 6: Mean bus utilisation

No. of bus trips per week	Mean/week	Standard deviation
Pre-intervention	5.064	5.01
Post-intervention	5.9	5.02

t=-1.59, df=365 p=0.113

ANALYSIS

Mann-Whitney U statistics were calculated for each of the demographic variables (sex, age, occupation, previous experience of child breastfeeding and bus utilisation) against pre and post- intervention population samples. This non-parametric statistic tests the null hypothesis that two independent populations are the same. The alternative hypothesis is that one population tends to produce larger observations than the other.

Based on demographic variable comparisons between pre and post samples the populations were similar for all tested variables except sex (More males in pre-intervention sample; p=0.00168) and bus utilisation (Greater bus use in post-intervention sample; p=0.0056)

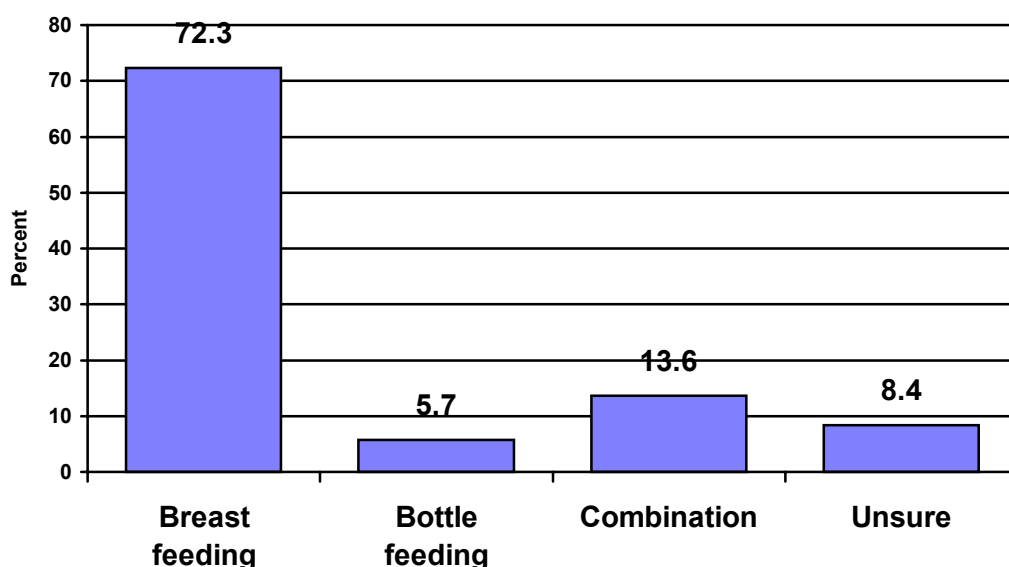
ATTITUDES TO BREASTFEEDING

Table 7: Question 1: What is the best way to feed an infant? (% responses)

	Pre- Intervention	Post- Intervention	Total
Breast feeding	80.1	64.1	72.3
Bottle feeding	3.9	7.6	5.7
Combination	9.7	17.7	13.6
Unsure	6.3	10.6	8.4

Missing observations= 1, Mann-Whitney, two-tailed p=0.005

Figure 1: Total sample response, What is the best way to feed an infant under 6 months of age.



ANALYSIS

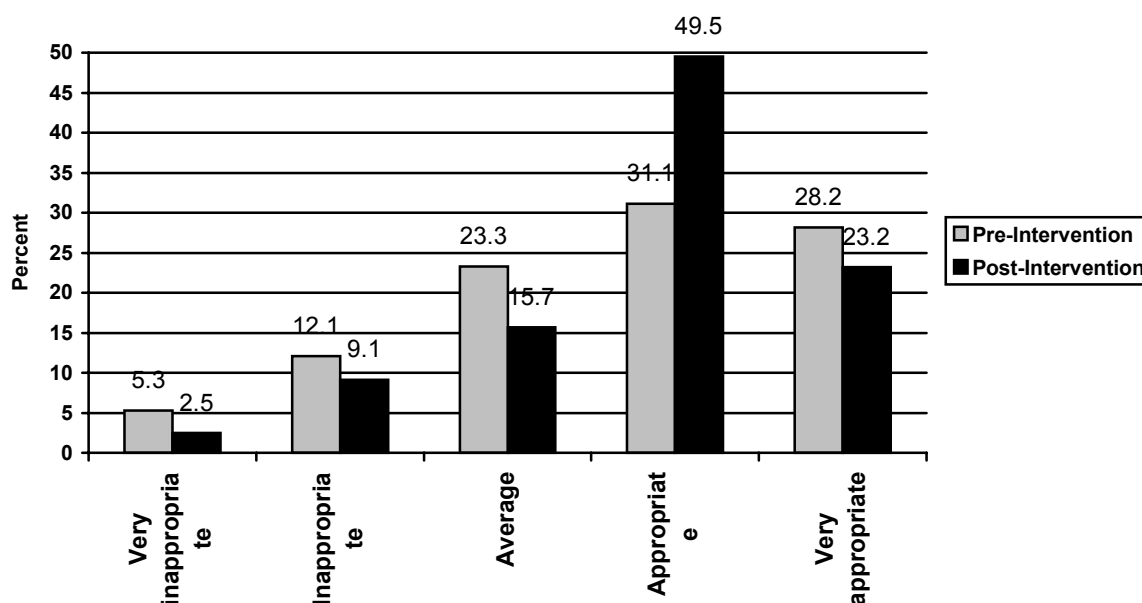
The responses to this question were unequal between the pre and post intervention groups. A smaller proportion of the post-intervention group indicated breastfeeding as the most appropriate way to feed an infant under 6 months of age. This may be explained by seasonal differences. Attitudes re- appropriateness of breastfeeding in public may be influenced by climatic variables - post-intervention surveys were conducted during winter. The large majority of both samples recognised breastfeeding as the most appropriate way to feed under 6 months of age.

Table 8: Question 2: How appropriate do you think it is to breast feed in public?

n=404	Pre- Intervention	Post- Intervention	Total
Very inappropriate	5.3	2.5	4
Inappropriate	12.1	9.1	10.6
Average	23.3	15.7	19.6
Appropriate	31.1	49.5	40.1
Very appropriate	28.2	23.2	25.7

Missing observations= 1, Mann-Whitney, two-tailed p=0.2024

Figure 2: How appropriate do you think it is to breast feed in public?



ANALYSIS

Whilst Figure 2 indicates a greater representation of positive attitudes in the post-intervention group, Mann-Whitney analysis indicates no significant difference between pre and post-intervention attitudes to breastfeeding in public.

Table 9: Question 3: What is it that makes you feel this way- most common responses? (Total pooled sample; pre+post)

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POSITIVES		Count	NEGATIVES		Count
Natural		112	Fear of exposure/privacy		40
Best for baby		8	Normally a room for that		8
Mothers choice		12	Embarrassing		12
Baby needs it		21	Mothers should stay at home		4
If baby hungry feed it		54	Offends other people		5
Mothers right		12			
Should be allowed anywhere		6			
Convenient/affordable		4			

ANALYSIS

The majority of responses were positive (ie. Supportive of comments about the appropriateness of breastfeeding in public. Postive comments were predominantly infant focused (concern for babies needs/rights) whereas negative comments were predominantly mother or others (non-infant) focused.

Table 10: Question 4: How comfortable do you feel when a woman you know breast feeds in front of you?

%	Pre-intervention	Post-intervention	Total
Very uncomfortable	1.9	1	1.5
Uncomfortable	10.2	6.1	8.2
Average	12.6	11.7	12.2
Comfortable	41.3	56.9	48.9
Very comfortable	34	24.4	29.3

Missing observations= 2, Mann-Whitney, two-tailed p=0.3233

Figure 3: Reported comfort rating 'when a woman you know breast feeds in front of you'

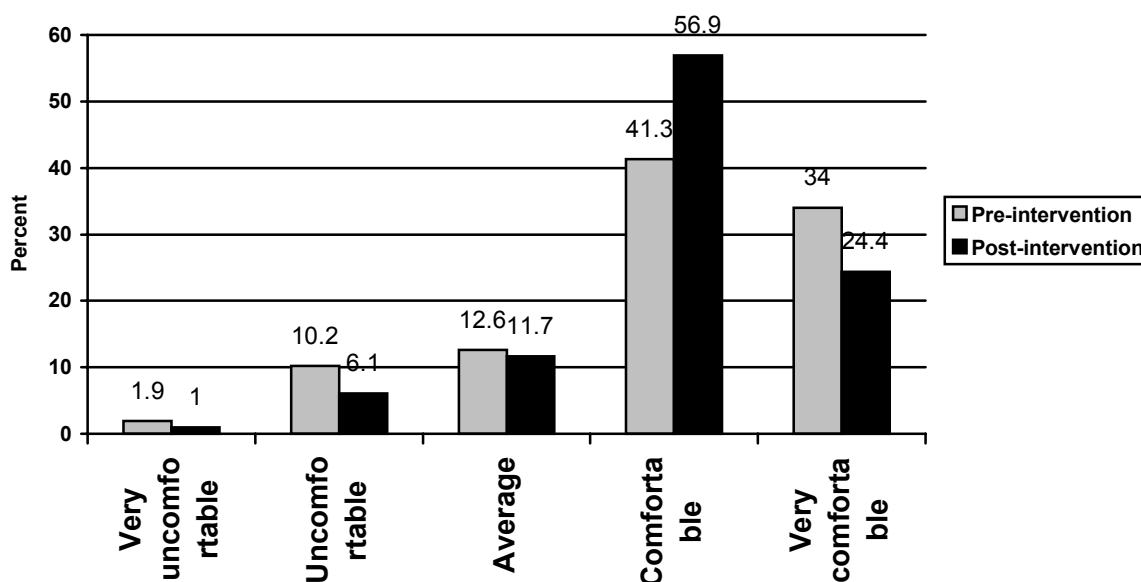


Table 11: Question 5: How comfortable do you feel when a woman you do not know breast feeds in front of you? (%)

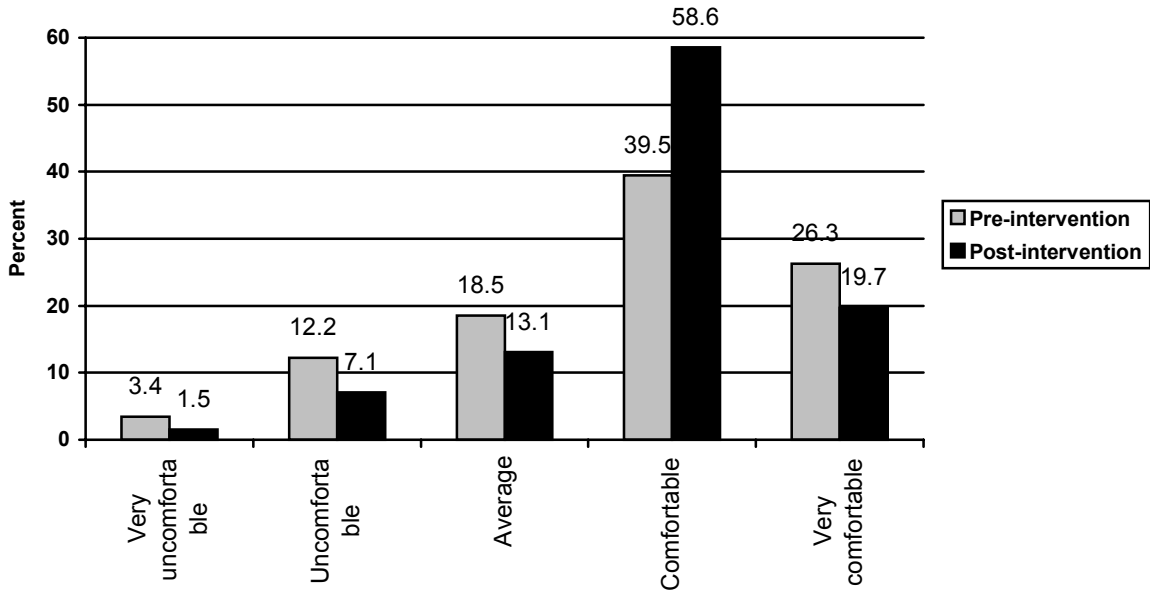
	Pre-intervention	Post-intervention	Total
Very uncomfortable	3.4	1.5	2.5
Uncomfortable	12.2	7.1	9.7

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Average	18.5	13.1	15.9
Comfortable	39.5	58.6	48.9
Very comfortable	26.3	19.7	23.1

Missing observations= 2, Mann-Whitney, two-tailed p=0.6052

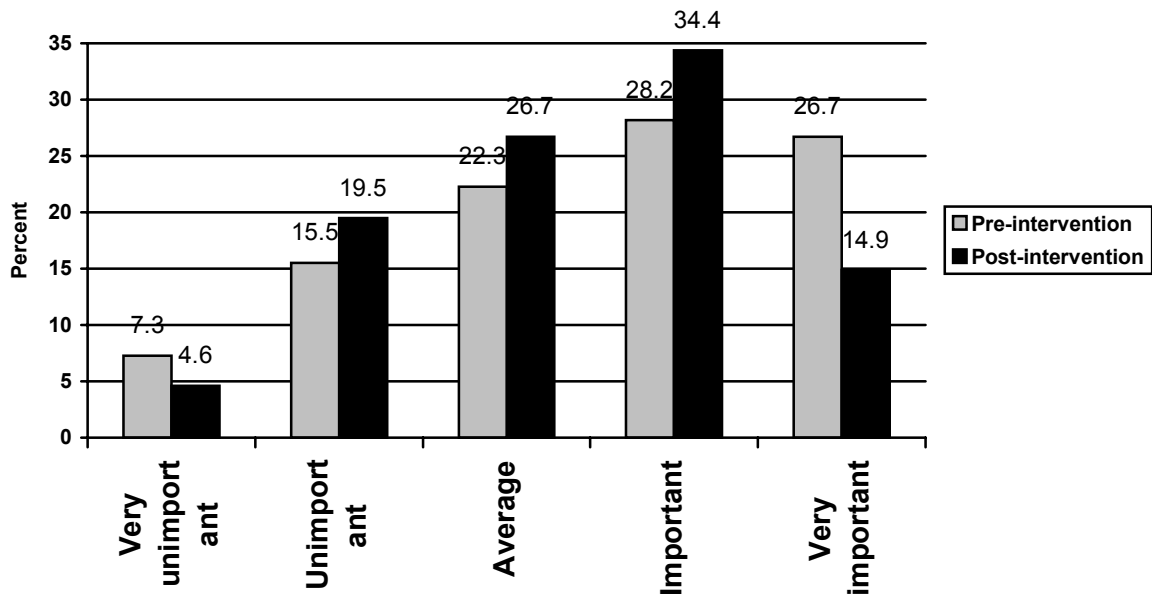
Figure 4: Reported comfort rating 'when a woman you do not know breast feeds in front of you'



ANALYSIS

Figures 3 & 4 suggest more positive responses to comfort ratings when in view of breastfeeding women of familiar and unfamiliar relationships. Mann-Whitney statistics however suggest no significant difference between pre and post-intervention populations..

Figure 5: Question 6: How important is it for a woman who is breast feeding in public to keep her breasts covered?

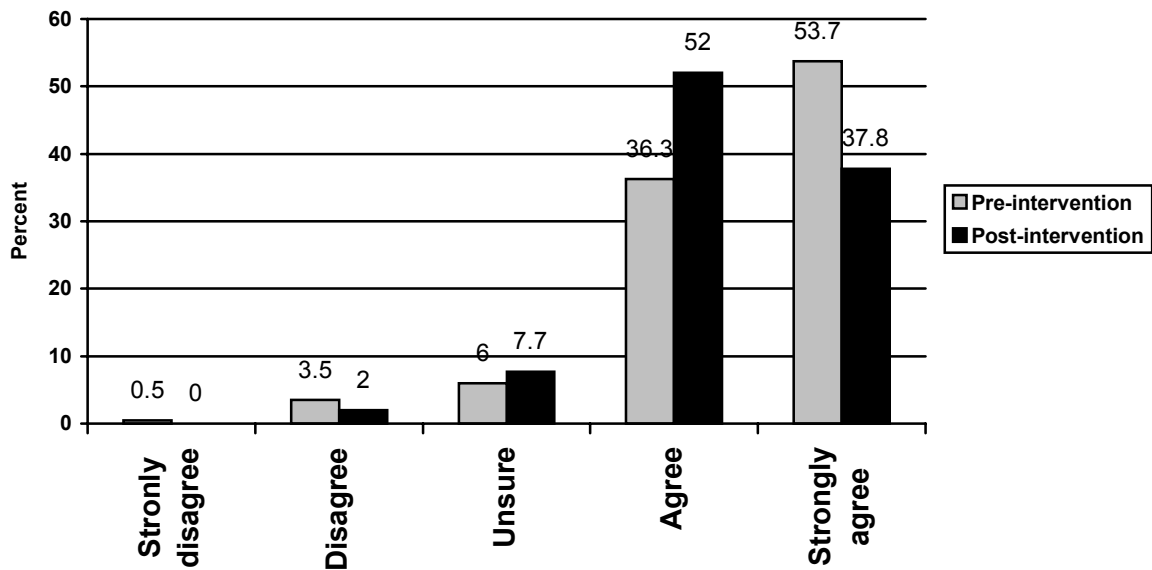


Missing observations= 4, Mann-Whitney, two-tailed p=0.1002

ANALYSIS

There is no significant difference (MWU test) between pre and post-intervention populations with regard to the importance of keeping breasts covered whilst breastfeeding.

Figure 6: Q7. To what level do you agree with the view that mothers choice is the most important factor when making infant feeding decisions.



Missing observations= 8, Mann-Whitney, two-tailed p=0.011

Table 12: Q8: What groups in the community do you think are most likely to disapprove of breastfeeding in public?

	Pre-intervention	Post-intervention	Total
Men	8.8	5.3	6.8
Young men/boys	1	2.6	2
Older men	8	2	4.5
Males cumulative total	17.8	9.9	13.3
Women	1	2	1.5
Older women	9.7	5.3	7.2
Young women/girls	1	0	0.4
Females cumulative total	11.7	7.3	9.1
Young people	1.8	5.3	3.8
Older people	50.4	27	37
Mix	8.8	18.4	14.3
Unsure	9.7	32.2	22.6

Missing observations= Mann-Whitney, two-tailed p=0.0000

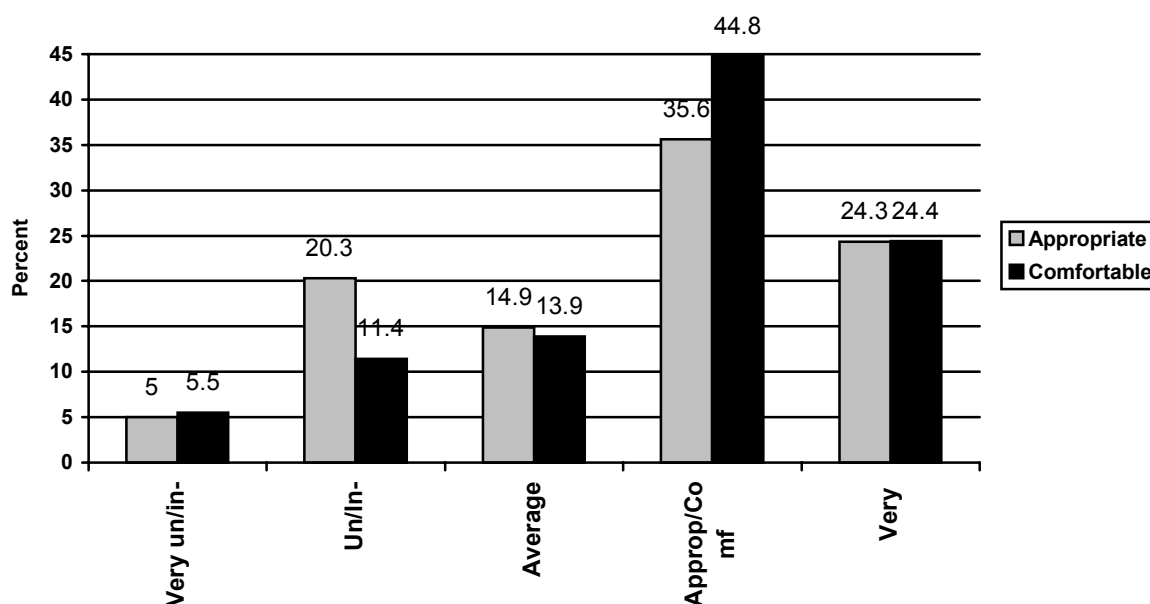
ANALYSIS

The pre and post intervention populations were significantly different. (MWU test). Older people seemed to be identified as the groups least likely to be supportive of breastfeeding in public. Responses were widespread, with a considerable proportion of the post intervention sample unsure.

ATTITUDES TO BREASTFEEDING IN DIFFERENT PUBLIC SETTINGS

AT WORK

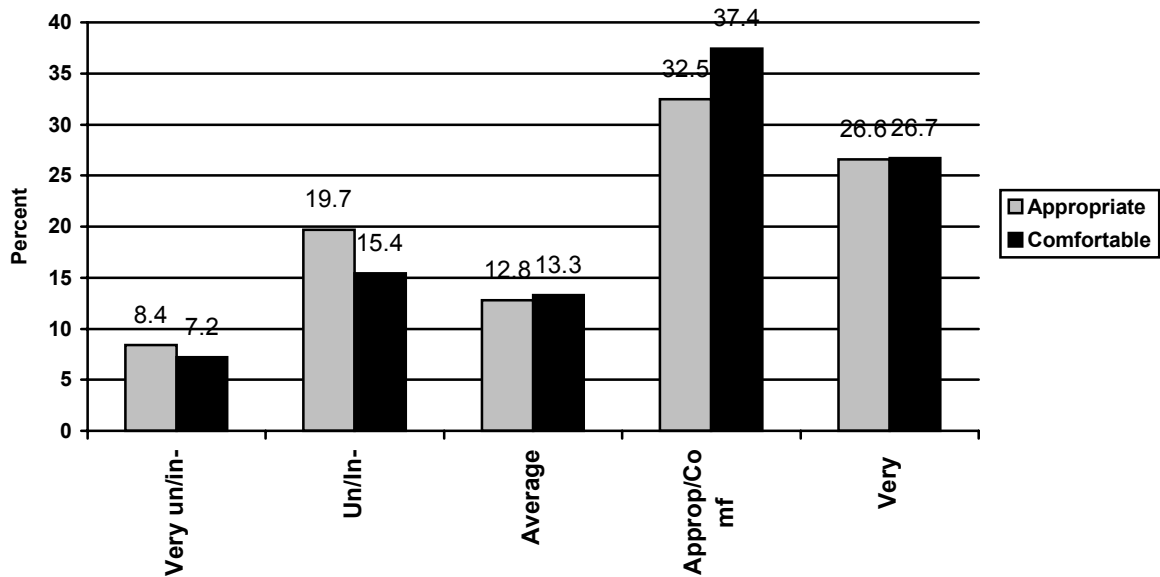
Figure 7: How appropriate to you rate and comfortable do you feel about breastfeeding in the work setting?



Ratings of appropriateness differed according to age group ($X^2=36.5, 8 \text{ df}, p=0.0000$), with older age group less positive with appropriate ratings. Similar differences were observed with comfort ratings ($X^2=34.2, 8 \text{ df}, p=0.0000$). Sex differences were not obvious.

IN THE RESTAURANT

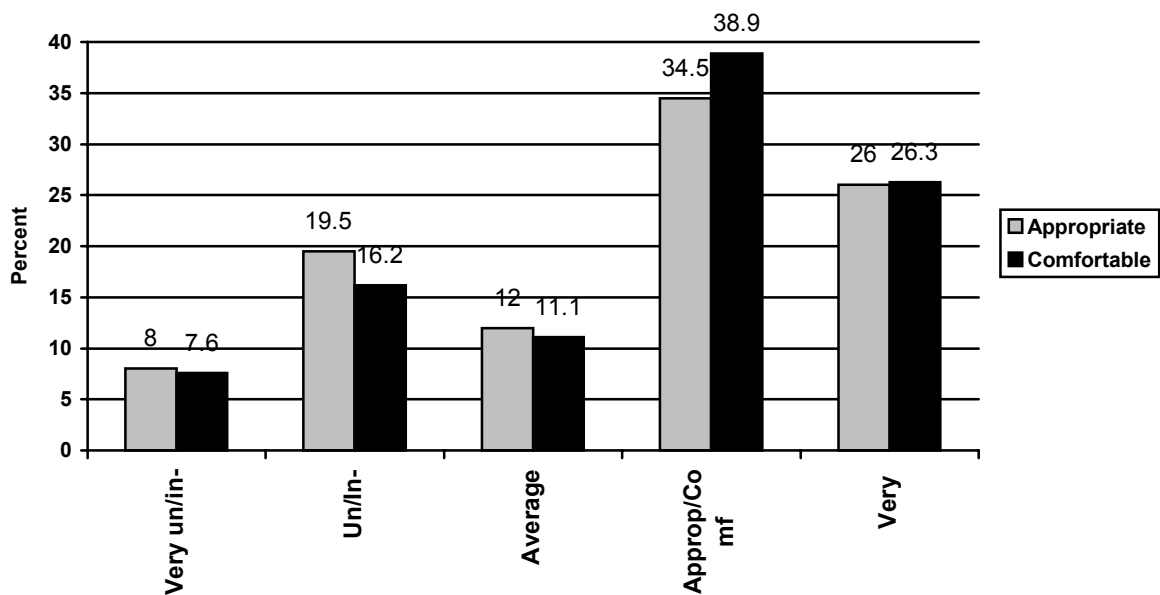
Figure 8: How appropriate to you rate and comfortable do you feel about breastfeeding in a restaurant?



Ratings of appropriateness differed according to age group ($X^2=24.2, 8 \text{ df}, p=0.002$), with older age group responses being widely distributed compared to highly positive ratings of 20-59 yr age group. Age differences were also observed against comfort with breastfeeding in restaurant ($X^2=15.5, 8 \text{ df}, p=0.049$), with middle age group (20-59 yrs) most comfortable. Sex differences were not obvious.

IN A CROWDED PUBLIC PLACE

Figure 9: How appropriate to you rate and comfortable do you feel about breastfeeding in a crowded public place (Mall)



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Ratings of appropriateness differed according to age group ($X^2=18.8, 8 \text{ df}, p=0.015$), with older age group responses being widely distributed compared to highly positive ratings of <20 and 20-59 yr age group and sex ($X^2=14.7, 8 \text{ df}, p=0.005$), with males more positive about appropriateness. Comfort ratings differed between age groups ($X^2=16.1, 8 \text{ df}, p=0.04$). Sex differences were also observed against comfort with breastfeeding in mall), with men most comfortable.

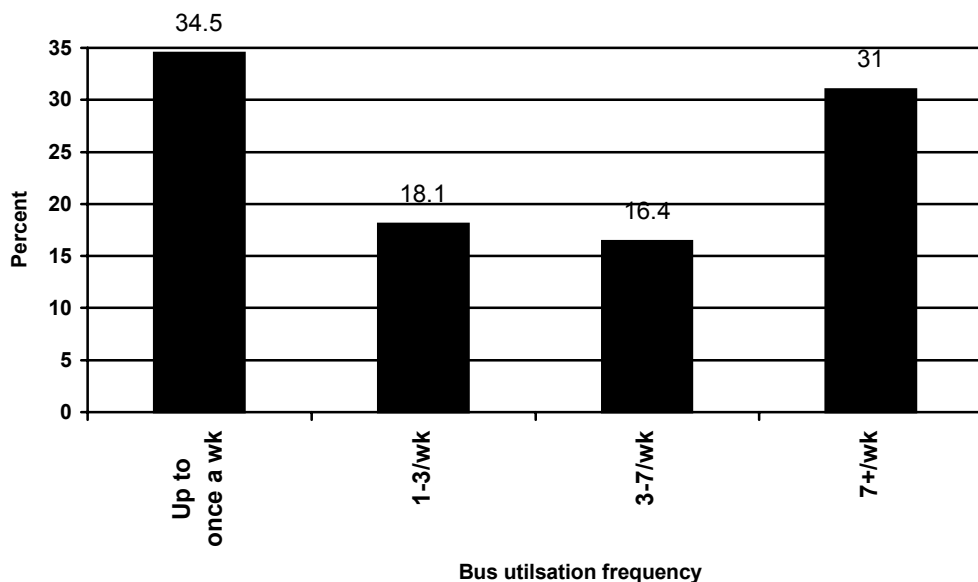
OBSERVATION

The consistency of responses regarding appropriateness and comfort with women breastfeeding in different settings suggests that those unsupportive of breastfeeding in public generally will be unsupportive of breastfeeding in any public location.

INTERVENTION EVALUATION MEDIA UTILISATION

Respondents to the post-intervention survey reported mean bus utilisation per week at 5.06 +/- 5.01 times per week. There was no significant difference between sexes (t-test, $p=0.399$) but age differences were observed with younger age group (<20yrs) greater bus patrons than older groups. (ANOVA, $F \text{ prob}=0.0000$)

Figure 10: Bus utilisation (post intervention group)



INTERPRETATION

Bus as a medium for social marketing of health messages will most reach the young segment of the population (ie.<20 yrs), however has potential as a mass reach, multiple exposure opportunity for all age and sex groupings)

MESSAGE TESTING

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As part of the formative “market research” messages and poster layouts were tested to identify interpretation, reaction and support for the ‘It’s OK to breastfeed anywhere’ message. From the initial 206 respondents, 50 responses were given that were either negative or indicated confusion about the message. This feedback resulted in changes to the cartoons to:

- make the workplace cartoon look like the mother feeding was part of a larger workplace feeding during a break
- adjust clothing - increased skirt length, more realistic tops for breastfeeding etc.
- Make baby more visible, etc.

The majority of responses indicated accurate interpretation of the messages intended by the poster.

INTERVENTION EFFECTS

Table 13: Question 15: Have you noticed a poster displayed inside buses over the last two months?

	n=196	%
Yes		48.0
No		52.0

The following market segments were most observant of the poster in buses:

- The young <20 yrs, (60%, $p=0.0571$)
- Females, (54%, $p=0.0576$)
- Students, (63%, $p=0.0000$)

ANALYSIS

Approximately half of the 199 respondents remembered noticing the breastfeeding poster. As recall is an important prerequisite for awareness raising, this recognition rate was a promising reflection of the value of this medium. This was particularly so for the young, females and student segments of this sample population. Regardless of the effect that the poster has had on message internalisation, awareness of a poster promoting breastfeeding has been raised in a large number of bus users. Extrapolating this result to Metro bus utilization figures and generalising the results to the whole bus using population, approximately 900,000 (ie. 48% of 1.8 million passengers) potential exposures to the poster would have been achieved (multiple exposures), and that these resulted in recall (awareness of the poster and its message).

Table 14: Question 16: If yes, what was its message.

	Number of respondents
Breast feeding in public is OK	45
Breast feeding on bus is OK	4
Promoting breast feeding	14
Dont know/not sure	13
Breast feeding is natural	3

ANALYSIS

Poster message interpretation for the majority of respondents centred around the acceptance of breastfeeding in public and breastfeeding promotion.

Table 15: Question 17: What effect did this poster have on your attitude to breast feeding in public.

n=90	%
No effect, I still don't support BF	10.0
I am now more supportive	4.4
It reinforced my support	26.7
No effect, I previously supported BF	48.9
I now disapprove of BF in public	3.3
Other	6.7

All (4/90) 'I am now more supportive' responses came from females.

ANALYSIS

From the 90 (Of 199) respondents who completed this question, the major response was that it had no effect of attitudes about breastfeeding in public because they previously supported it. Combined with the result that 26% reported that the poster message reinforced their support reinforces the result that approximately 75% of the public positively supports breastfeeding. The effect of the poster in achieving attitudinal changes in those groups least supportive of breastfeeding indicates that only 4.4 (4 out of 90) respondents indicate that they are more supportive of breastfeeding as a result of the poster. Just as interesting is the similar number who reported that the poster had the effect of increasing their resistance to breastfeeding in public. A conservative interpretation of this result would be that the poster campaign has had a limited effect in changing community attitudes to breastfeeding in public but may have helped galvanise already positive attitudes.

Table 16: Question 18: Estimate how many times you would have looked at this poster over the last two months?

n=90	%
Once only	12.2
1 - 5	47.8
5 - 10	14.4
More than 10 times	23.3
Unsure	2.2

ANALYSIS

Almost half of the post-intervention sample used the bus more than once but less than 5 times per week, with approximately a quarter using buses more than daily(eg>10 times/wk). This reinforces the potential for repeated exposure to internal bus social marketing strategies such as posters. Students are the predominate multiple user group, making the medium a useful one for targeting school and tertiary age individuals.

Table 17: Question 19: Did you notice anything in the media about breast feeding over the last two months?

n=106	%
Yes	17.0
No	83.0

Table 18: Question 20: If yes, what?

Number of respondents

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TV	4
Newspaper	6
Not sure where	3
Positive review	3
Articles	1
Complaints of breast feeding*	1

* possible referring to letters to the editor generated as a result of the intervention

ANALYSIS

Opportunistic media coverage for the campaign (7ZR radio talkback x2, newspaper articles-see appendix) was achieved via media releases and media liaison. Recall of breastfeeding promotion messages in the media after the campaign was encouraging.

Table 19: Question 21: What section of the bus do you usually sit?

n=189	%
Front section	29.6
Mid section	38.1
Back section	16.4
Depends/unsure	15.9

- The 60+ age segment (and the retired occupational segment) indicated a preference for the front of the bus (72%, $p=0.0000$)
- Males were most likely to sit at the back(31% vs 6%, $p=0.0000$) as are the young.

ANALYSIS

Usual seating preference on buses was investigated to determine possible effects of poster location. In this campaign, all posters were located in the front section. As most elderly passengers seem to prefer front section seating(72%), this may have been appropriate given the need to target this population group, however, it may have reduced younger access(75% sitting in mid or back sections) the poster’s message. Numerous posters and/or random location on buses may have increased poster reach.

RECOMMENDATIONS FOR FUTURE INTERNAL BUS ADVERTISING HEALTH PROMOTION INTERVENTIONS

- Effort in assessing the features and reach of the medium is important, as this helps identify the different 'market segments' accessible.
- Post-intervention evaluation of attitude changes might be best assessed using a prospective cohort design rather than the retrospective method used in this evaluation(ie. following the same cohort (sample) of people throughout the campaign and re-assessing attitudes after the campaign period, instead of asking respondents to indicate whether the campaign had changed their attitudes).
- Random siting of posters on buses is recommended to limit the effect of 'habitual seat preferences' on poster exposure. (ie. Posters confined to front section may limit exposure to elderly people).
- Do not rely on re-useable poster technology as means of reducing cost (by increasing poster shelf life, reuse etc). Posters do not survive in a state worth re-using. Money can be saved by using disposable poster backings.
- A useful side-product of the formative evaluation and project evaluation data collections has been the collation of a useful database for further strategy development and ongoing community attitude monitoring.

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