Breastfeeding: Supporting a Natural Choice

Exploring and Reducing Barriers to Breastfeeding in the Outer East

An Outer East Health & Community Support Alliance Project

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Glossary:

MCH:	Maternal and Child Health Nurse
ABA:	Australian Breastfeeding Association
OECHSA:	Outer Eastern Community Health Support Alliance
LGA:	Local Government Area
WHO:	World Health Organisation
NHMRC:	National Health and Medical Research Council
CALD:	Culturally and Linguistically Diverse

Abstract

Background: Exclusive breastfeeding ensures food security for infants under 6 months of age. Current breastfeeding rates in the Outer East are well below national targets and have been identified as a nutritional priority. The project expected to (1) increase understanding of barriers to breastfeeding in previously identified 'at risk' groups such as young mothers, mothers from culturally and linguistically diverse (CALD) groups and socially disadvantaged mothers and (2) increase community support for breastfeeding mothers by increasing the number of breastfeeding facilities and businesses displaying the 'Breastfeeding Welcome Here' sticker in the Outer East.

Setting : The Breastfeeding: Supporting a Natural Choice project was run in the Outer Eastern Local Government Areas (LGA) of Knox, Yarra Ranges and Maroondah. The breastfeeding friendly business initiative was run in the Healesville and Yarra Junction communities as a result of previous research recommending breastfeeding interventions to be suitable for these areas.

Objectives:

1. To increase understanding for health promotion professionals of barriers to breastfeeding in socially disadvantaged and CALD groups by September 2009
2. To increase the number of public places and businesses that are breast feeding friendly in the Outer East by 100% in the next 3 years, with the Sub-Objective to award at least 5 public places and businesses in the Healesville area that are breast feeding friendly by September 2009.
3. To improve awareness of the breast feeding friendly locations in the Healesville area available to breastfeeding mothers by 75% by the end of September 2009.
4. To provide recommendations to the OEPCP on priority future strategies to continue to support the goal of increased breast feeding by the end of September 2009.

Methods: *Barriers to Breastfeeding research*: Interviews and group consultations were run with key stakeholders. The results were combined with a literature review for qualitative analysis.
Breastfeeding Friendly Business initiative: Approval to register businesses on behalf of the ABA and distribute stickers was obtained. Suitable businesses were identified and approached with the business owner questionnaire. Data was collected on all businesses agreeing to be part of the initiative and a resource detailing locations of businesses displaying the 'Breastfeeding Welcome Here' sticker developed and distributed. Additionally local council was approached to advocate for a parent room in Healesville.

Results: '*Barriers to Breastfeeding' research*: Qualitative analysis of the data from interviews identified the following key themes: (1) Barriers to breastfeeding were diverse and experienced by mothers of all ages and experiences. (2) Needs identified focused on strong support systems, community acceptance and adequate facility provision. (3) Strategies to reduce barriers need to involve both the community and health professionals.
'Breastfeeding Friendly Business' initiative: 16 questionnaires were distributed with a return rate of 88%. 12 businesses (8 in Healesville and 4 in Yarra Junction) agreed to display the stickers and be included in the resource.

Conclusion: There is a need for increased breastfeeding facilities, more flexible support services and improved antenatal education in the Outer East to support and promote exclusive breastfeeding until the age of 6 months. The Breastfeeding Friendly Business initiative was successful and may be suitable to be run in other Outer Eastern areas.

Recommendations: (1) Continued advocacy for parent rooms in Healesville and Yarra Junction as well as in other breastfeeding facility desert areas in the Outer East. (2) Advocate for more flexible breastfeeding clinics, or a home visit lactation consultant. (3) Improve antenatal education by providing peer support education, with a greater focus on breastfeeding techniques and potential issues. (4) Continue the Breastfeeding Welcome Sticker program in other LGAs.

Keywords: Breastfeeding, community, businesses, barriers, 'Breastfeeding Welcome Here' sticker, food security

Background

The 'Breastfeeding: Supporting a Natural Choice' project aimed to increase the rate of breastfeeding of infants at the age of 6 months in selected areas in the Outer Eastern region. Exclusive breastfeeding ensures food security for all infants less than 6 months of age. Food security has been identified as a nutritional priority for the Outer East Community Support Health Alliance (OEHCSA) for the next 3 years[1].

The project furthermore expected to expand on the work of previous research into barriers to breastfeeding in previously identified[2] 'at risk' groups such as young mothers, mothers from culturally and linguistically diverse (CALD) groups and socially disadvantaged mothers. At the conclusion of this research it was anticipated that an increased understanding of barriers to breastfeeding in the above 'at risk' groups would have been reached and recommendations for future project direction to improve breastfeeding rates would be made.

Breastfeeding has nutritional, economic, health and social benefits. Evidence shows breastfeeding may play a role in preventing the onset of chronic diseases including Type 1 diabetes, inflammatory bowel disease and the onset of allergy diseases[3]. Therefore ensuring food security for infants remains a nutritional priority for the Outer East.

Recent research into breastfeeding rates in the Yarra Ranges[4] shows that 53% of mothers are exclusively breastfeeding their children at 3 months, in comparison to the Eastern Metropolitan region rate of 56.6%. At 6 months, 39% of mothers in the Yarra Ranges region are exclusively breastfeeding compared to 44% of mothers in the Eastern Metropolitan Region[4].

The World Health Organisation (WHO) and the National Health and Medical Research Council (NHMRC) recommend exclusive breastfeeding until 6 months of age, continued up until at least 12 months of age supplemented by appropriate foods[5,6]. National targets have been set for 50% of infants to be exclusively breastfed until the age of 6 months. This shows current breastfeeding rates in the Shire of Yarra Ranges to be below the state average and well below national targets.

Previous research[2] has identified one potential cause of low breastfeeding rates within the Outer Eastern Region to be the poor provision of breastfeeding facilities such as parent rooms and baby change tables, identified as 'desert areas'. Healesville and Yarra Junction have been identified as such 'desert areas' within the Shire of Yarra Ranges, and therefore suitable for a breastfeeding intervention.

Further recommendations based on previous research focused around increasing understanding of barriers to breastfeeding in socially disadvantaged groups, normalising the public perception of breastfeeding and increasing breastfeeding facilities in the Yarra Ranges.

Based on these recommendations, the project acted to:

(1) Increase understanding of barriers to breastfeeding in 'at risk' groups and make recommendations for future project direction

(2) Educate and increase involvement of local businesses with breastfeeding mothers and produce a resource detailing breastfeeding friendly locations was produces as a support for breastfeeding mothers.

Healesville was selected as the location to run the project given that the town acts as a community 'hub' for many nearby regions, and despite lacking breastfeeding facilities such as parent rooms and baby change facilities, already has many good breastfeeding support services that women travel from some distance away to access. Yarra Junction was also included in the project as the communities are closely linked.

The 'Breastfeeding: Supporting a Natural Choice' project is the first of its kind to be run in the Yarra Ranges Shire. Similar initiatives have previously been run in the Manningham and Blue Mountains LGAs and results from these initiatives were considered when designing the project.

The project fits within OEHSCA's 3 year strategic plan to improve food security for the Outer East by improving food security for infants and increasing community support and strategies to promote breastfeeding for mothers. Within the program planning cycle, this project fits within the planning and the implementation steps of the cycle. The program planning framework can be used at each individual step of the program planning cycle (planning, implementation and evaluation) to maximise a program's success. The 'barriers to breastfeeding' research is part of the planning stage, and the 'breastfeeding friendly businesses' initiative involved planning, implementation and planning for evaluation.

At the completion of the project, it was anticipated that at least 5 businesses in Healesville and Yarra Junction would support breastfeeding by displaying the 'Breastfeeding Welcome Here' Sticker. The project expected to produce a resource detailing the locations of breastfeeding friendly businesses. Increasing the number of breastfeeding facilities within the Shire was not an objective of the project however the project aimed to raise awareness of the need and advocate within local government. Finally the project expected to increase understanding of barriers to breast feeding in 'at risk' groups as identified above, and if appropriate make recommendations for future project direction.

Vision and Objectives

In 2008 the Outer East Health and Community Support Alliance (OEHCSA) identified food security or access to affordable, appropriate and nutritious food supply as a priority health promotion issue. This project therefore aims to ensure food security for infants across the region by:

- promoting and encouraging a community environment that supports and accepts a mothers' right to breastfeed in public
- creating a community link to maximise social connectedness for breastfeeding mothers
- Investigate barriers to breastfeeding in the more socially disadvantaged groups in the region.

Goal: To increase the rate of breastfeeding at 6 months of age in the Outer East area community areas of Knox, Yarra Ranges and Maroondah in the next 3 years.

Objective 1: To increase understanding for health promotion professionals of barriers to breastfeeding in socially disadvantaged and CALD groups by September 2009

Objective 2: To increase the number of public places and businesses that are breast feeding friendly in the Outer East by 100% in the next 3 years,

> **Sub-Objective 2.1:** to award at least 5 public places and businesses in the Healesville area that are breast feeding friendly by September 2009.

Objective 3: To improve awareness of the breast feeding friendly locations in the Healesville area available to breastfeeding mothers by 75% by the end of September 2009.

Objective 4: To provide recommendations to the OEPCP on priority future strategies to continue to support the goal of increased breast feeding by the end of September 2009.

Objectives and Strategies

Objective 1: To increase understanding for health promotion professionals of barriers to breastfeeding in socially disadvantaged and CALD groups by September 2009		
Strategy	**Activity**	**Timeline***
1.1 Contact MCH nurses to further discuss reasons for low breastfeeding rates in socially disadvantaged groups.	• Complete background reading to thoroughly understand issues surrounding continuing breastfeeding • Develop list of questions and topics to discuss with MCH nurses • Contact MCH nurses	Week 1 – 2 Week 2 – 3 Week 3
1.2 Using a literature review attempt to further understand reasoning for low rates of breastfeeding by investigating social and community determinants for breast feeding.	• Complete a literature review of major search engines (medline, proquest) and grey literature • Compile results into a report and make recommendations based on findings	Week 1 – 4 Week 8
Objective 2: To increase the number of public places and businesses that are breast feeding friendly in the Outer East by 100% in the next 3 years, with the Sub-Objective to award at least 5 public places and businesses in the Healesville area that are breast feeding friendly by September 2009.		
Strategy	**Activity**	**Timeline**
2.1 Work with at least 5 businesses to support them to become "breastfeeding friendly" in a pilot program in the Healesville Area.	• Approach local business owners and advocate for the breastfeeding friendly initiative • Provide businesses with information on the benefits of breastfeeding and importance of social connectedness in preventing post-natal depression	Weeks 4 - 7
2.2 Produce a short survey aimed at investigating views of local businesses to becoming friendly.	• Research potential barriers to businesses becoming breastfeeding friendly • Produce a questionnaire aimed at target group • Compile results and provide recommendations	Week 2 -3 Week 3 Week 8
2.3 Approach local council about parent room in the town centre, and/or council buildings.	• Visit parent rooms in the Outer Eastern Region and determine factors that make a good parent room eg privacy • Contact local council members with results of previous research and advocate for a parent room in Healesville	Week 2 -3 Week 4 - 8
Objective 3: To improve awareness of the breast feeding friendly locations in the Healesville area available to breastfeeding mothers by 75% by the end of September 2009.		
Strategy	**Activity**	**Timeline**
3.1 Produce a resource for new mothers detailing the location of breast feeding friendly businesses in their local area including contact details and any restrictions.	• Compile list of local businesses agreeing to take on the breastfeeding friendly business initiative • Create resource containing addresses, opening ours, other important information and a map of breastfeeding friendly locations	Week 7 -8 Week 7 – 8
3.2 Produce Outer East specific "breastfeeding welcome business" stickers or achieve ABA approval to use current "breast feeding welcome here" stickers in shop windows.	• Contact ABA to ascertain whether current ABA stickers can be used in the campaign • *Create design and print Breastfeeding friendly stickers (if ABA stickers cannot be used)*	Week 2 *Week 3*
3.3 Distribute resource to mothers via maternal child health centre, new mums packs and mother's groups.	• Distribute resource to local MCH nurses, mothers groups and contact MCH nurses about including resource in new mum's pack	Week 8
Objective 4: To provide recommendations to the OEPCP on priority future strategies to continue to support the goal of increased breast feeding by the end of September 2009.		
Strategy	**Activity**	**Timeline**
4.1 Research current and past breastfeeding promotion campaigns used in other areas and previous breast feeding campaigns that may be adapted or re-introduced to promote breast feeding in the Outer East Melbourne area.	• Literature review of past and present breastfeeding campaigns • Recommendations for introducing a promotional campaign to be made	Week 2 – 4 Week 8
** Weeks 1- 8 are within the date period of July 27 to September 18, 2009.*		

Setting

The Breastfeeding: Supporting a Natural Choice project was run in the Outer Eastern Local Government Areas (LGA) of Knox, Yarra Ranges and Maroondah.

The research into barriers to breastfeeding in socially disadvantaged groups was spread over the 3 shires in order to establish a wider variation of results and encompass possible variations in results from the different areas.

The breastfeeding friendly business initiative was run in the Healesville and Yarra Junction communities. These areas act as community hubs and provide excellent breastfeeding support services for new mothers, however are lacking in breastfeeding facilities such as parent room and baby change facilities. Previous research[2] has recommended breastfeeding interventions, which will increase support and facilities, as being suitable for these areas.

Prior to commencement of the project, facilities in Yarra Junction were limited to baby change tables in the Yarra Junction Public toilets, Healesville shopping centre and a local café.

Yarra Ranges Demographics[4]:

The Shire of Yarra Ranges is located on Metropolitan Melbourne's eastern fringe. The Shire's population is currently estimated at 143,398 people. The median age of the Shire is 35-40 years, with a large proportion of families with young children living in the Shire.

The Shire is a mixture of urban and rural communities. Around 70% of the Shire's residents live in the 'urban' areas, an area that represents approximately 3% of the total landmass of the Shire. Therefore the diversity of needs within the Shire is greater than experienced by other metropolitan councils as a result of the dispersion of communities. Both towns have limited public transport, with access to buses only beyond Lilydale.

The Yarra Ranges experiences a diversity of cultures with 16.9% of the population born overseas, and 9.9% from a non-English speaking country. Cultural and language barriers can affect access to health information and services, therefore the project research focused on CALD and socially disadvantaged groups.

Methodology

The project was run in 2 parts:

(1) Barriers to breastfeeding research

(2) Breastfeeding friendly business initiative.

The project utilised both quantitative methods such as data collection and qualitative methods such as interviews, group consultations and questionnaires.

Barriers to Breastfeeding Research

1. **Key Stakeholder Interviews**

Interviews were conducted with a range of stakeholders from the Outer Eastern Area, with a focus on the Healesville and Yarra Junction areas. Stakeholders comprised of MCH nurses and peer support workers for socially disadvantaged and young mothers aged under 25 years. Questions asked aimed to gain an understanding of community views on current supports for breastfeeding, perceived barriers, and recommendations for improving breastfeeding supports (Appendix 1). Additionally stakeholders were asked whether they would be happy to distribute the Breastfeeding Welcome Here resource and several distributers secured.

2. **Community Consultations**

Unstructured community based consultations were held with local mothers from Healesville and Yarra Junction. Discussion topics addressed aimed to increase awareness and understanding of perceived barriers to breastfeeding, support services and experiences breastfeeding in public (Appendix 2).

3. **Literature Review**

A literature review was conducted of current literature related to benefits of breastfeeding, factors found to affect the duration of breastfeeding and barriers to breastfeeding for women in Australia. A focus was also directed towards the effect of low income and sexualisation of breasts.

A non-exhaustive search was performed using Medline using key search terms of breastfeeding, barriers, sexualisation, low income, support, community. The search was limited to articles less than 10 years old and relevant to women in a developed setting such as Australia. Also articles from WHO, DAA and NHMRC were accessed as supporting groups of breastfeeding.(Appendix 3)

4. **Business Owner Questionnaire**

A questionnaire was created for the combined purposes of:

1. Gathering information on business owner's opinions in regards to breastfeeding in public
2. Collecting data for future resource production
3. Providing business owners with information on the project, the benefits of breastfeeding and why they should become involved.

The questionnaire was distributed to 16 businesses (6 in Yarra Junction and 10 in Healesville). (Appendix 4)

5. Analysis

Results from interviews, discussion group, questionnaires and the literature review were complied and analysed as qualitative data. Reoccurring themes and trends were identified and recommendation for further project work made based on the results.

Breastfeeding Friendly Businesses

6. Stickers

The Australian Breastfeeding Association (ABA) was contacted and approval received to distribute and register 14 'Breastfeeding Welcome Here' packs to local businesses on behalf of the ABA.

7. Data Collection

Suitable businesses for the breastfeeding friendly business initiative were identified based on privacy and access for a pram. These businesses were approached with the business owner questionnaire as outlined above. Data collected for production of the resource included contact information, facilities available, hours of operation and cost of a sandwich and coffee.

8. Resource Development and Design

Using data collected in the business questionnaire outline above, a list of eligible businesses and their details were collected. A basic design for the resource was produced by students, using previous resources from other LGAs as a guide. A graphics designer was consulted and text for the resource forwarded on. The resource text and design was approved by OECHSA and an initial print run of 200 completed. (Appendix 5)

9. Distribution

The resource was then distributed to key stakeholders secured in the earlier barriers research completed. Locations included hospitals, community health centres and MCH centres.

10. Advocating for a Parent Room

As part of the project's strategy to improve breastfeeding facilities in the Yarra Ranges Shire, parent rooms from across all 3 shires were visited and local mothers interviewed to establish key components of a good parent room. Local government was then approached with the idea of including a parent room in the redevelopment plans for the Memorial Hall in Healesville. At the time of writing the proposal is under consideration.

11. Evaluation

The final part of this section of the project was registering all businesses that agreed to take part in the initiative on the ABA website, ensuring all businesses were displaying their stickers, and creating an evaluation plan for future evaluation of project outcomes.

Results

Barriers to Breastfeeding in 'at risk' groups

Interviews and Group Consultations

Interviews and group consultations were conducted with a range of stakeholders from the Outer Eastern Area as described above in the methodology.

Qualitative analysis of the data from interviews identified the following key themes:

(1) Barriers to breastfeeding were diverse and experienced by mothers of all ages and experiences

(2) Needs identified focused on strong support systems, community acceptance and adequate facility provision

(3) Strategies to reduce barriers need to involve both the community and health professionals

(1) Barriers to breastfeeding were diverse and experienced by mothers of all ages and experiences

Barriers which occurred most often were physical barriers, lack of appropriate facilities and poor public perception of breastfeeding. Physical barriers included nipple problems such as cracking, mastitis and thrush, pain on feeding, poor attachment, engorged breasts, under or over supply of milk and sleep deprivation as a result or poor feeding.

In general women experiencing these problems knew what support services were available and where to go to seek help. The exception to this was young mothers, who the peer support workers felt weren't being referred to the appropriate services.

Lack of facilities for breastfeeding was seen as an inconvenience but would not stop a mother from breastfeeding. Public perception of breastfeeding had a grater impact on first time and younger mothers. As one mother stated, "young mothers haven't developed a sense of self and won't stand up for themselves, and if confronted for breastfeeding in public are unlikely to attempt to feed in public again". This is in contrast to older or more experienced mothers who stated they would stand up for their right to breastfeed in public.

Poor postnatal care also ranked highly as a barrier. Included in this theme was inconsistent advice or poor attitude from midwives, and short hospital stays (often less than 48 hours). However the length of stay could be counteracted by thorough midwife education and a positive attitude.

Barriers specific to the 'at risk' groups were trying to maintain 'normal life' as if prior to pregnancy. This includes being able to smoke, drink and go out for young mums, and activities such as returning to work, school or university for mothers in general. Young mothers were also concerned about their appearance and 'not being able to look nice while breastfeeding', 'dress in the latest fashions' or the effect feeding would have on their breasts. It was observed that breastfeeding in public is harder for at risk groups. One peer worker described a ''stigma' around young mothers assuming that they would not breastfeed.'

The topic of sexualisation of breasts was raised among several groups. Young mothers commented that often their partners felt like the breasts belonged to them and not the baby. Others commented that as breasts are seen as a sexual object and that people feel uncomfortable seeing them being used to feed a baby.

(2) Needs identified focused on strong support systems, community acceptance and adequate facility provision

Support was the most highly ranked need discussed. Support from family and friends ranked highest, with positive, consistent midwife and MCH nurse support also seen as important. Women felt that they received good support from these sources and would seek further support if required.

Poor community support for breastfeeding in public was identified as a barrier to breastfeeding as explored above. One effect of this observation is that stronger community support and improved public perception of breastfeeding was seen as being a potential support.

Inadequate facilities in the local areas would not stop mothers from breastfeeding, however might discourage them from leaving the house, increasing social isolation and risk of post-natal depression. This suggests that increasing the facilities and subsequent community support available for breastfeeding mothers might encourage more women to continue breastfeeding for longer and become more active in the community earlier on.

(3) Strategies to reduce barriers need to involve both the community and health professionals

Antenatal care and education was seen as the most important service improvement needed. Whilst current antenatal education covers breastfeeding thoroughly, a common theme was that women were strongly focused on the birth and not processes occurring after soon after such as breastfeeding, and therefore not absorbing the information. Often antenatal education for breastfeeding focuses on the benefits, which women are already aware of, and not breastfeeding techniques and potential problems.

Peer education was seen as being a way to improve the quality of education, as it was felt women may become more involved learning about breastfeeding from a peer who was currently breastfeeding.

Several comments were made on the need for a more flexible service, referring both to the attitudes of midwives and also the availability of the service. Many mothers commented on how the time lapse between an issue arising, and being able see a lactation consultant, would be long enough to cease breastfeeding.

Community environment and negative public perception of breastfeeding ranked highly as a barrier to breastfeeding, especially in at risk groups, and could be improved through promotional campaigns and community advocacy.

Many MCH nurses felt that the average hospital length of stay was too short to properly establish breastfeeding techniques. This needs to be addressed at a government level, however community awareness needs to be raised in regards to the issue. Additionally good quality midwife care and a positive attitude towards breastfeeding can help to make the most of limited time available, however for either of these to occur, additional resources and funding will be required.

Research into 'at risk' groups identified that health professionals saw groups at risk of lower breastfeeding rates to be mothers under the age of 25 and socially disadvantaged mothers who may be experiencing hardships relating to finances, housing, drug and alcohol abuse, mental health or domestic issues. Interestingly CALD groups were seen to have good breastfeeding continuation rates as a result of strong family and inter-community support. Therefore research and recommendations have focused and socially disadvantaged and younger mothers.

Finally to address the needs of the 'at risk groups' it was felt that more support groups and networks such as the 'Starting Out' program would be most effective. Another comment around the fact that the ABA's apparent target group is women within the 30 – 40 years age range, making the organisation unattractive to young mums suggests a rebranding or branching of the organisation may provide a more accessible support service for young mothers.

'Breast feeding Welcome Here' sticker

16 businesses were contacted in total including cafes, community centres and retail outlets. Only businesses that fulfilled the ABA's criteria for being breastfeeding friendly (room to more a pram and smoke-free) were contacted. Additionally businesses that were open to the street were excluded on the basis they appear not private enough for mums to feel comfortable breastfeeding.

In total of the 16 businesses contacted, 12 agreed to be part of the initiative (displaying the sticker, registering online with the ABA and being included in the 'Breastfeeding Welcome Here' resource). 2 businesses did not return the survey in time to be included in the resource. Of the 2 businesses that declined to take part, one was happy to have women breastfeeding but didn't want to advertise, and the other was undergoing a change of ownership.

Breastfeeding Friendly Business Questionnaire Results	
Questionnaires distributed	16
Questionnaires returned	14 (88%)
Businesses happy to display sticker and be included in the resource	12 (86% of returned questionnaires)
Businesses that did not want to display the sticker	2 (1 from Yarra Junction, 1 from Healesville)

Baseline data:

When interviewing stakeholders in the first stage of the project, mothers were asked about breastfeeding in public and the 'Breastfeeding Welcome Here' sticker in order to obtain some baseline data.

Only 1 sticker was reported as previously being seen in the Outer East area by a mother attending breastfeeding clinic. 2 mothers recognised the 'Breastfeeding Welcome Here' sticker but were unfamiliar with what it meant.

When the purpose of the sticker was explained, many mothers expressed that they would be more likely to breastfeed in a location displaying the sticker, however not having the sticker displayed would not stop them from breastfeeding.

The poor initial response rate to the 'Breastfeeding Welcome Here' sticker indicated a need for campaign promotion to improve awareness. Subsequently the resource design was adjusted to include information on the 'Breastfeeding Welcome Here' sticker.

Questionnaire

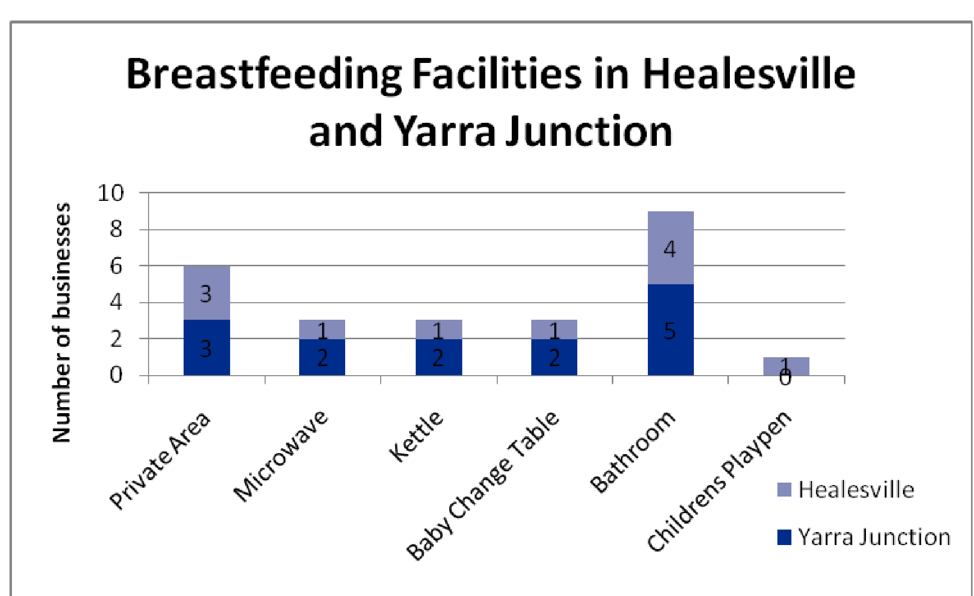
16 businesses were contacted, with a questionnaire return rate of 88%. This was mainly due to personalised interviews and simple survey design. In some cases students helped to fill in the questionnaire during busy periods, however encouraged participants to answer in their own words the questions targeting barriers to breastfeeding and attitudes towards breastfeeding in public.

The barriers to breastfeeding target questions had 57% response rate of the returned questionnaires. This lower response rate may be due to business owners being too busy or not interested in responding.

Of the responses obtained all business owners though that breastfeeding was best for infants. This shows good knowledge amongst businesses owners, and suggests that lack of support for breastfeeding is not due to lack of support for breastfeeding but more lack of inclusion in community support programs.

Reasons suggested for women not breastfeeding in public included lack of privacy or comfort, not feeling welcome, or feeling self conscious secondary to prejudice, stigma, or bad publicity.

Facilities:



Of the 14 businesses surveyed, 9 had bathroom facilities, 6 had a private area to feed, and 3 had a microwave, kettle and baby change table. Of the 2 businesses that did not want the 'Breastfeeding Welcome Here' sticker, 1 had a bathroom and neither had any additional facilities.
The community centres in Healesville and Yarra Junction had more resources (kettle, microwave), and were willing to add to these facilities. Only 4 businesses were willing to add to their facilities. In some cases this was because the business felt it already had all facilities necessary, and in some cases because adding to the facilities placed too much strain on the business.

Resource

An initial print run of 200 copies of the resource was approved. The published resource (Appendix 5) has been given to the dietitian at Healesville Community Health Centre for distribution to Healesville hospital, Healesville and Yarra Junction MCH centres and Box Hill Hospital. Additionally a launch is planned for the Children's Day in Healesville at the end of October 2009.

Breastfeeding Facilities

Baby change facilities were located in Healesville and Yarra Junction for inclusion in the 'Breastfeeding Welcome Here' Resource. Baby Change facilities identified in Yarra Junction included:

- Public toilets
- Library

In Healesville, baby change facilities were located in:

- Beechworth Bakery
- Coles Shopping Complex – this facility was locked. Centre management was contacted and persuaded to leave the facility unlocked during the day.

Additionally local council was approached about redevelopment plans for the Healesville public toilets and a parent room found to be included in the plans. Additionally a meeting was held with the Shire's mayor and plans for a parent room to be included in the redevelopment of Healesville's town hall discussed.

Summarised Literary review

(Complete project literature review at Appendix 5)

Evidence shows that breastfeeding is the best source of nutrition for babies and should be consumed exclusively for the first 6 months of life[5,6,7,8]. There are a large number of factors which impact on

women continuing to breast feed, or ceasing exclusive breastfeeding prior their babies reaching six months of age.

There are numerous clear benefits to breastfeeding, such as lower risks of obesity[9], Type II diabetes, high blood pressure, high total cholesterol, infection and illness in the infant and faster return to pre-pregnancy weight and decreased cancer risk in the mother[10]. Benefits are also present in mother child bonding and decreased costs on the family and economy[11,12]. Unfortunately knowledge of benefits alone does not relate to high rates of breastfeeding initiation and duration.

Many factors have been demonstrated to effect duration of breastfeeding such as demographics (gender, maternal age, socioeconomic status, level of education and other infants or children), biological (baby's ability to feed, latching. nipple problems, milk supply, smoking and maternal obesity), social (support from health professionals, family and friends, work hours and environment) and psychological factors (breastfeeding planning, commitment and self efficacy, personal opinion of breastfeeding and previous information)[13,14].

Barriers are widespread and include physical problems with feeding such as pain and difficulty, little support from health professionals, work, family or friends, mixed information by health providers, sexualisation of breasts, low income and many more.[15,16]

In order to promote and increase rates and duration of breastfeeding, some of the following interventions would be useful:[11, 17, 18]

- Increased antenatal education around breastfeeding and high level of breastfeeding support from nursing staff post birth.
- Increased access to consistent information and quality care.
- Consistent and appropriate support from health care providers.
- High level of support from partners, families, friends and the workplace.
- Improvements in community acceptance and support of breastfeeding as a natural, healthy action rather than the viewing the breast as a sexual object.
- Specialised support groups for low SES or young mothers.

While these interventions would result in costs for the health care system in community health funding, the benefits attained from increased breastfeeding would reduce costs in the future related to obesity and lifestyle related disease. It is important for health professionals to understand what the influences and barriers are to women continuing to breastfeed in order to better identify and support women who are at risk of early cessation of breastfeeding. It is also important to offer consistent and considerate support regardless of a woman's choice to breastfeed or not. In this way women can remain in touch with care, remain supported and together with their baby, and remain healthy.

Final Outcomes

The outcomes of the barriers to breastfeeding research will be made available to the Outer Eastern Community Health Support Alliance and distributed via the organisation to hospitals and MCH nurses. The 'Breastfeeding Welcome Here' resource has been delivered to Healesville Community Health Centre for distribution to the hospital and local MCH and community health centres.

Plans for a parent room in the Healesville Town hall continue to be under discussion with local government, however this is an unexpected outcome not initially anticipated when setting the original project objectives.

Discussion

'Barriers to Breastfeeding' Research

The results from the interviews and group consultations raised many similar themes, revealing that both MCH nurses and mothers agreed on the major barriers to breastfeeding and causation of early cessation. The results showed improved antenatal education and increased flexibility in services offered to be most important needs identified.

Of the barriers identified, improving breastfeeding facilities, post natal care, and antenatal education are likely to be the most straightforward barriers to address. However in order to address these barriers there needs to be strong links between community health and MCH nurses. One of the difficulties of the project was contacting MCH nurses, which could mean that addressing identified barriers may take time as MCH nurses and midwives are brought on board.

The most common barrier discussed, physical causes, could be reduced by increasing support services available. This complements the suggestion that services provided need to be more flexible, to allow mothers to see a lactation consultant when the issue arises, and not have to wait for an available appointment. A suggested way to achieve this would be to have a flexible lactation consultant available to make home visits, or to run more frequent breastfeeding clinics such as the ones in Healesville and Yarra Junction (both currently run 1 day a week and have limited spaces) as required. However these suggestions are limited by available funding and resources, and need to be advocated for as a priority for ensuring high breastfeeding rates in the Outer East.

One way to increase community support for breastfeeding would be to increase community involvement. One of the outcomes of the Breastfeeding Friendly Business initiative was that there are few businesses that offer supportive environments such as a comfortable couch or use of microwave facilities. A direction for future projects may be working with business owners to improve their facilities and create a more comfortable and welcoming environment to breastfeeding mothers. Another suggestion would be to increase positive media attention such as forming press releases on community work done to increase breastfeeding rates and running promotional breastfeeding campaigns.

The comments in regards to short hospital stays from both MCH nurses and mothers show that the average hospital stay is too short to properly establish good breastfeeding technique and there is an expressed need for longer hospital stays, however this issue needs to be addressed at a government level and alternate methods for providing breastfeeding support should be investigated. For example,

reducing inconsistencies in the messages from midwives and providing more effective antenatal education may be one way of achieving this.

The issue of sexualisation of breasts preventing women, especially in the younger age groups, from breastfeeding was been identified as an area of future research.

Secondary to health professionals stating that mothers under the age of 25 and socially disadvantaged mothers were more at risk of lower breastfeeding rates than CALD mothers, the original project objective was adjusted to focus on the newly identified 'at risk' groups. As a result, research and recommendations are centred around newly identified groups, and not CALD groups. The results of the research have identified many barriers and supports available to women in the Outer Eastern region, with an emphasis on 'at risk' groups. This meets the adjusted objective 1, to increase understanding for health promotion professionals of barriers to breastfeeding in socially disadvantaged groups by September 2009.

Upon researching the areas of Healesville and Yarra Junction, it was found that almost all businesses are in the main street of each town. For this reason, along with lack of space on the resource, a map was not produced. It is not felt that the resource is any less practical as the map would have resulted in reduced text or text size or replaced other important information in the brochure.

Breastfeeding Friendly Businesses

'Breastfeeding Welcome Here' Sticker

The Breastfeeding Friendly Business initiative had a strong response rate. A lesser quantity of businesses were contacted in comparison to other areas, however one of the strengths of this particular project was that the businesses were contacted in person, creating strong community links.
Additionally the ABA stickers were delivered and attached in person, meaning that all businesses registered online with the ABA are correctly displaying the sticker.
Future evaluation should address whether businesses are still displaying their sticker in the future. It is expected that there will be a strong adherence rate as there was no onerous on businesses to attach their stickers. Drop off rates may be due to change of ownership of businesses.

Questionnaire

The survey was designed to investigate reasons business owners may not want to have women breastfeeding on their premises. We had theorised business owners may feel that breastfeeding mothers may deter other customers or that prams may take clutter the vicinity. However all businesses we contacted were happy to have women breastfeed and supportive of breastfeeding. The business that

did say no to the Breastfeeding Welcome Here' sticker didn't want to advertise that they were breastfeeding friendly but were happy to have women breastfeeding if they chose to.

These results showed that there is community support for breastfeeding; however this is not being communicated to breastfeeding mothers. This is of concern especially in the 'at risk' groups this project aimed to target. The results from the interviews show these groups as less likely to breastfeed if they are unsure of the reception and less likely to stand up for their right to breast feed in public.
The supportiveness of local businesses is a positive step for similar initiatives that may be run in other areas.

Resource
Results from group consultations in the Healesville and Yarra Junction areas indicated a favourable reception for the resource. The resource stands out from other previous resources in regards to the quality of the design and inclusion of additional details such as opening hours, facilities available and cost of a coffee and sandwich. It was felt these details would be helpful to mothers when choosing a café. Future evaluation will need to be run to determine whether the resource has increased awareness of the 'Breastfeeding Welcome Here' sticker and whether mothers are visiting businesses displaying the stickers more often.

Parent Rooms
An unexpected outcome of the project was the opportunity to advocate for a parent room for Healesville to the mayor. This reflects the nature of community health and shows the importance of networking and building relationships to strengthen community links. This outcome was not originally included in the objectives but ties in with objective 2 (to increase the number of public places and businesses that are breast feeding friendly in the Outer East by 100% in the next 3 years, with the Sub-Objective to award at least 5 public places and businesses in the Healesville area that are breast feeding friendly by September 2009) and was added as a strategy.

Limitations and Strengths

One of the limitations of the project was the small range of MCH nurses contacted. MCH nurses were contacted from all 3 Shires of the Outer Eastern Area in order to obtain the largest range of responses; however difficulties arose in contacting MCH nurses and arranging interview times. The low response rate suggests that future projects involving contact with MCH nurses needs to be thoroughly planned and follow up to be essential.

Another limitation of the 'Breastfeeding Friendly Business' initiative was contacting the business owners as they were often busy during the middle of the day with customers, or only open certain days of the week. This was overcome by being flexible and persistent with approaching businesses, and future projects would be advised to approach businesses in off-peak times in order to best establish rapport.

The project differed to other breastfeeding friendly businesses in that students were persistent in contacting businesses. Because businesses were contacted in person and not over the phone, relationships with each business were established and a greater success rate for attaching 'Breastfeeding Welcome Here' stickers achieved.
A further strength of the project was the professional and attractive resource design. Including details such as opening hours, facilities available and cost of a sandwich and coffee is unique to this project.

One outcome not anticipated when setting objectives for the project was being in touch with the Mayor of Yarra Ranges directly in regards to advocating for parent rooms. This outcome highlighted the importance of being involved with the community and networking, as the meeting was arranged due to previous student community involvement. Another unexpected outcome was the high positive response rate of businesses, with none of the businesses contacted unhappy to have women feed on their premises.

Recommendations

Recommendations based on the results of the 'Barriers to Breastfeeding' research and 'Breastfeeding Friendly Business' objectives include:

- Continued advocacy for parent rooms in Healesville and Yarra Junction as well as in other breastfeeding facility desert areas in the Outer East.
- Evaluating the success of the 'Breastfeeding Friendly Business' initiative and if successful long term implement in other regions.
- Advocate for more flexible breastfeeding clinics, or a home visit lactation consultant – this will require more funding and resources to be feasible
- Provide peer support education in antenatal classes, with a greater focus on breastfeeding techniques and potential issues.
- Continue research into the sexualisation of breasts, and the link between post-natal depression and community support/social connectedness.
- Work with businesses to create a more comfortable environment for breastfeeding, for example by providing microwave facilities or comfortable couches.

Implications

The project research revealed that there is an expressed need for strong support systems, community acceptance and adequate facility provision and implementation of strategies to reduce barriers involve both the community and health professionals in order to reduce barriers to breastfeeding and improve breastfeeding rates in the Outer East.

Recommendations for future project direction have been made, however many will place pressure on community resources and funding which may impact on future feasibility.

The 'Breastfeeding Friendly Business' initiative has a high success rate and should be considered for implementation in other local areas. The project would be less demanding on community resources and funding, however outcome evaluation is still yet to be completed. It is anticipated that evaluation of the success of the Breastfeeding Welcome Sticker area of the project will be completed towards the end of the 3 year OEHSCA's strategic food security plan.

Conclusions

The initial objectives of the project have been achieved in addition to some unexpected outcomes such as the opportunity to advocate for a parent room in Healesville's town hall redevelopment to the mayor.

The 'Breastfeeding Friendly Business' initiative had a high success rate, with 86% of businesses contacted agreeing to take part in the initiative. This is a positive indicator for future projects however long term success will need to be evaluated.

The results of the research show the major barriers to breastfeeding in the outer east area to be physical barriers, inconsistencies in post natal care, lack of adequate facilities for breastfeeding and poor public support for breastfeeding. Barriers that were specific to the 'at risk' groups included lack of support from peers, and wanting to maintain a normal outward appearance and social life. There was adequate provision of support services for women experiencing difficulties breastfeeding and women knew where to access these facilities.

Suggestions to improve breastfeeding rates in the Outer East included improving antenatal education to include more peer education and breast feeding education prior to birth, increasing facilities available to breastfeeding mothers and offering more flexible breastfeeding support services.

The project has used research into barriers of breastfeeding and implementation of the ABA's Breastfeeding Welcome Here sticker and resource production in the local community, which are

methods relevant to meeting the long term goal of increasing breastfeeding rates in the Outer East regions of Melbourne.

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Appendixes

Appendix 1: MCH nurses and peer support worker interview questions

To establish procedures for the area:

1. What is the process in the area for breastfeeding education/supports (prior to birth, day of birth, post birth)
2. How often/when will a mother see a MCH nurse in your area?
3. What other support does the mother receive re: breastfeeding?
4. What resources are given to mothers? New mum's Packs? (Can we have one)

To investigate barriers and supports:

5. What groups do you feel are most at risk of reduced breastfeeding duration?
6. What do you feel are the barriers to mothers breastfeeding in your local area?
7. What resources/support/facilities do you feel are lacking in your local area?
8. What would be useful to the Maternal Healthcare nurses that we or further projects can assist with? (eg: resource development etc)
9. If we produce a resource detailing the locations of breast feeding friendly businesses in the area would you be happy to distribute these with other resources? If not who would you suggest would be best to distribute it.

Appendix 2: Focus Group Questions

1. What has been your experience breastfeeding in public?
2. Do you think breastfeeding is supported amongst the general community?
3. What barriers have you encountered in regards to continued breastfeeding?
4. What do you find supports you to continue breastfeeding?
5. Do you know what the ABA 'Breastfeeding Welcome Here' Sticker means?
6. Would you be more likely to breastfeed in a café/restaurant displaying the sticker?

Appendix 3: Literature Review

Literature Review

Investigating Benefits, Facilitators and Barriers to Breastfeeding Duration

Part of the "Breastfeeding: Supporting a natural choice project." by Kirrilee Taylor and Louise Cato through Outer East Health and Community Support Alliance and Monash University.

Introduction

The evidence that shows that breastfeeding is the best source of nutrition for babies is well documented by numerous prominent organisations and research papers. Recommendations by the World Health Organisation (WHO), The United Nations Children's Fund, National Health and Medical Council and Dietetics Association of Australia all suggest that babies should be exclusively breastfed until the age of six months.[1,2,3,4] Breast milk provides adequate nutrition for an infant up to six months of age[5,6], and breastfeeding has numerous physical, emotional, social and psychological benefits for both mother and child[7].

Low breastfeeding rates in the Outer Eastern area of Melbourne have been identified as a nutritional priority[8]. Recent research shows that exclusive breastfeeding rates in the Eastern Metropolitan region were 56.6% at three months of age and 44% at six months. Breastfeeding rates in Yarra Junction were 53% at three and 39% at six months[9]. The state targets for exclusive breastfeeding are 56% of babies at three months and 43% at six[10] which areas in the Outer Eastern areas of Melbourne fail to meet. The WHO target of 50% of babies being exclusively breastfed at six months and should always aim to be increased[1].

Most women plan to breastfeed or intend to try[11].While rates of breastfeeding initiation are relatively high, rate of exclusive breastfeeding drops sharply over the time before the infant reaches six months of age.

The purpose of this literary review is to increase understanding of what causes are common for early cessation of breastfeeding and what barriers commonly result in a shortened breastfeeding duration.

Benefits of Breastfeeding

The benefits of breastfeeding are demonstrated through a great range of research. There are vast amounts of literature that describe the many benefits of breastfeeding for both mother and child which include physical, emotional and social benefit areas.

Physical Benefits

Various studies have found that breastfed babies are at a reduced risk of becoming obese, particularly when they are younger adolescents[12,13]. Breastfed babies are more responsive to hunger and satiety cues[14] and tend to self regulate their own intake, while bottle fed babies have a lower ability to self regulate. This can lead to better continued eating habits and self regulation into adulthood[15].Babies who are breastfed also have a lower level of circulating insulin which normally promotes fat storage[15] compared to those who are formula fed[14]. For mothers, breastfeeding relates to a faster return to pre-pregnancy weight as fat stores are used in producing breast milk for the baby[16].

Breastfed infants are less likely to acquire illnesses than those that are bottle fed[17]. They tend to have an increased immunity to disease[18] and illnesses that are contracted are generally milder. This is due to the immunological factors which are passed to the baby via the breast milk that cannot be synthesised outside of the body[17]. Mothers who breastfeed have been shown to have a decreased risk of developing cancer, particularly cancer of the breast[16].

A systematic review by Horta and WHO found that into adulthood, subjects in various studies who were breastfeed as infants had lower blood pressure, lower mean total cholesterol, were less likely to be overweight or obese, less likely to present with Type 2 diabetes and performed better on intelligence tests than those who were not breastfed[7]. These results relate to a lower chance of morbidity and mortality in breastfed subjects due to knock on effects of high blood pressure, cholesterol, overweight and diabetes which relate in particular to high levels of heart disease.

Other physical benefits of breastfeeding include prolonged lactation related amenorrhea for the mother, which can promote birth control and reserve iron stores for breast milk production[19], and prevention of Helicobacter pylori infection, particularly in low and middle income nations[20].

Emotional and Social

Breastfeeding promotes bonding between mother and baby and stimulates release of endorphins in the brain[18]. It also has economical benefits for the family, community the health system and following on to the nation[17].

Factors Influencing Breastfeeding Duration

The initiation and duration of breastfeeding is affected by many different factors. These factors can be described as demographic, biological, social and psychological factors which act together to determine the likelihood of continuation of breastfeeding.

Demographic factors:

Demographic factors which have been found to influence duration of breastfeeding include a woman's race, maternal age, marital status, level of education, socioeconomic status and number of other infants or children under the mothers care[21.22.23].

Other demographic factors can include programs such as the special supplemental nutrition program for women which the woman may be involved in[21].

Biological factors:

Biological factors which have been shown to influence breastfeeding duration include milk supply efficiency or amounts, infant health problems, maternal obesity, physical challenges of breastfeeding such as latching ability, engorgement of breasts, nipple condition, presence of thrush or mastitis, maternal smoking, parity and method of delivery[21]. These factors have the strongest effect ability and physical comfort of breastfeeding and are very strong determinants when difficulty in breastfeeding arises.

Social:

Paid work and the number of working hours weekly are social factors which have been found to influence breastfeeding duration[17,21]. Further, work environment supportiveness, facilities and child care options impact on breastfeeding[24].

Consistency and appropriateness of healthcare provider and professional support, family support and support from friends can have an effect on breastfeeding decisions and duration[21,25]. Utilisation of support groups, if such groups are available facilitate lactation as does lack of long term mother-infant separations[17].

These social factors appear to determine the flexibility and available time of the mother to breastfeed, particularly upon returning to work along with the ability to access the baby and facilities during the working day. Also, support is a clearly important influence as mothers with high levels of support tend to breastfeed for longer periods.

Psychological:

Distinguishing characteristics in women who breastfeed identified in literature are:

a) Confidence in the process of breastfeeding
b) Confidence in their ability to breastfeed
c) Commitment to making breastfeeding work despite obstacles.[11,17,26]

Women who are confidently committed breastfeeders are more likely to succeed longer term than those who are unsure of themselves[11].Breastfeeding self-efficacy, faith in breastmilk, breastfeeding expectations, anxiety, planned duration of breastfeeding, and time of the infant feeding decision are all associated with breastfeeding duration[11].

Commitment to breastfeeding goals is also important[26], as well as women's preparedness for breastfeeding and experiences in establishing breastfeeding[24]. Other psychological factors include prenatal intention, interest in breastfeeding and personal attitudes towards breastfeeding.[21,25]

Increased knowledge of factors influencing breastfeeding will assist in identifying women at risk of early weaning[26]. This also indicates the importance of building mothers confidence in self and breastfeeding process as well as ensuring an understanding of breastfeeding attitudes, intention and interest, preferably prior to birth.

Barriers to Continued Breastfeeding

e not to breastfeed or discontinue prior to the recommended six months due to a range of barriers in breastfeeding.

Physical

Physical barriers that affect duration of breastfeeding include pain on feeding due to sore nipples or other conditions, perception of not enough milk produced, latching difficulties, positioning problems[27] and babies who appear unsatisfied or appear to prefer bottle to the breast[11,24,27]. Some mothers prefer to see how much food the baby is receiving by bottle feeding as breastfeeding is not easy to measure[11].The practice of breastfeeding does not fit well within the current society which values order, objectified measurement and time-structure in all matters.(McBride-Henry 2009) Formula intake is able to be measured more precisely and easily, while the baby gains weight more quickly, satisfying the impatient need to see progress[27].

Other physical barriers include the concerns of some women who are afraid that breastfeeding will ruin the shape of their breasts[27] or have negative early breastfeeding experiences, resulting in discontinuation[11]. Stress and anxiety in the mother, including stress brought about by feeding problems, have been shown to limit the milk supply[11].

Social

Mother's choice to continue to breastfeed is affected by her environment and social setting. People who do not want to be 'exposed' to seeing breastfeeding occurring may discourage mothers from feeding[11]. Breastfeeding may become too embarrassing or restricting to mothers leading them to find more flexible or less exposing ways of feeding which do not involve the breast[27]. This is especially noticed when life circumstances such as going back to work or work environment lead to cessation of breastfeeding due to reduced flexibility[27].

Also, a lack of prenatal information and lack of support when establishing breastfeeding have been found to attribute to early discontinuation of breastfeeding[24]. Mothers need both consistent information and regular support in order to feel confident and able to continue breastfeeding practice.

Health care/professional support

Babies who are given supplementation while in hospital, free samples of formula to take home and babies given pacifiers too early tend to have poorer breastfeeding levels[11,28]. These babies are less likely to breastfeed successfully long term.

Mothers may be given advice to wean babies upon starting medications when in fact many are not harmful to the breastfeeding baby considering age, frequency and duration of feeds & gastric emptying time of breastfed infants which is considerably shorter than bottle fed infants[29].

A study by Mcarter-Spaulding found that women who are being treated for post natal depression need nurses to assist and inform them about the best treatments and educate on the small risks versus the benefits[23.] In a study of 1745 Australia women, those who experienced depression were significantly more likely to stop breastfeeding than nonaffected mothers, typically weaning post symptoms occurrence[30].

Post natal depression poses risk to quality of maternal infant interaction therefore hamper the breastfeeding relationship[23]. This reinforces the importance of good information around medications for illness such as depression to help assist mothers to carry on with breastfeeding and life in general.

McLeod found that women were less likely to be feeding fully at 6-10 wks if they believed they needed more breastfeeding information prior to delivery or had experienced breastfeeding problems[24]. This can relate to poor professional support as mothers are either not receiving adequate information or assistance at time when breastfeeding issues arose.

Sexualisation and Objectification of Breasts

Sexualisation of breasts has become a topic of interest in regard to the way it effects the perception of breastfeeding. Johnston-Robledo found that women who score more highly on measures of self-

objectification are more likely to view public breastfeeding as indecent. They are likely to be concerned that breastfeeding would be embarrassing and would negatively impact their bodies and sexuality[31] Women who have a higher level of self-objectification and score more highly on levels of body shame and self-surveillance tend to find menstruation and breastfeeding as shameful reproductive functions[32]. Alternatively, women with a higher self-concept have a higher likelihood of exclusively breastfeeding and are more dedicated to lactation[33].

McBride-Henry describes in her study that certain understandings about the body and breasts are passed down through cultures. The understanding of the body being separate from the mind objectifies the body and sees the breast as a tool or object rather than embodying the breastfeeding experience. Post birth, mothers come to realise that while breastfeeding is natural it is not an effortless process and that rather the breast becomes something to be manipulated with tools such as pumps, shields and medications. Confidence is negatively impacted and breastfeeding is more likely to be ceased[34].

Health care providers may me able to alter attitudes of shame and breast objectification or minimise its negative impact on women's health behaviour[32].

Low Income

Low income mothers are at particular risk reflected in low rates of breastfeeding duration in the community[27]. Most mothers believe "breastfeeding is an infant feeding method that provides superior nutrition, protection from disease and psychosocial benefits to the baby." [27]. In Guttman's study it was observed that despite being in the low income bracket, monetary cost of formulas was not important to most formula feeders in choice between formula and breast, but mattered to those who breastfed, even in low income groups[27].

It is also notable that the effects of social support programs around breastfeeding for low income women positively effect breastfeeding duration[21].

Discussion - Effective Barrier Reduction

One reason women wean before the recommended six months post partum is because of perceived difficulties with breastfeeding rather than due to maternal choice[22].

Prenatal breastfeeding education appears to be both highly important and lacking in informing women prior to birth of the benefits and technique of breastfeeding. Women who attended prenatal breastfeeding classes had significantly increased breastfeeding rates at six months when compared to controls[16]. Breastfeeding education is worthwhile on many different levels[16, 35].

Useful measures in aiming toward increasing rates and duration of breastfeeding include improvements of lactation management, caregivers counselling skills, initiatives for protecting, promoting and supporting breastfeeding at a community level. These changes should relate to increasing rates of women exclusively breastfeeding at six months[36].

It is also important to create realistic expectations about breastfeeding, ensuring access to consistent information, enduring quality, ongoing support from partners, families, friends, professionals, and the community[24,37].

Women Who Chose Not or are Unable to Breastfeed

The push of mothers towards breastfeeding initiation and duration, while having many community benefits, can have other effects which should be considered. Breastfeeding is viewed to be the action of a "good mother"[27] and attitude may impact on the community views of breastfeeding, or more so mothers that do not or cannot breastfeed.

In Guttman's Study, mothers who did not breastfeed but would have liked to breastfeed may be subjected to feelings of guilt and deprivation[27]. Similarly in McLeods's study women who stopped breastfeeding earlier than they had intended reported feelings of guilt and failure[24]. Mothers must navigate a 'moral minefield' of health professionals and social groups in the hope of being a 'good mother'. Breastfeeding is unquestionably related to these attitudes within the community and health professionals care[38].

It is important to consider these women in breastfeeding promotion as women feel forced to breastfeed and may not be offered appropriate support if they choose or are unable to breastfeed.

Conclusions

There are a large number of factors which impact on women continuing to breast feed, or ceasing exclusive breastfeeding prior their babies reaching six months of age.

There are numerous clear benefits to breastfeeding, such as lower risks of obesity, Type II diabetes, high blood pressure, high total cholesterol, infection and illness in the infant and faster return to pre-pregnancy weight and decreased cancer risk in the mother. Benefits are also present in mother child bonding and decreased costs on the family and economy. Unfortunately knowledge of benefits alone does not relate to high rates of breastfeeding initiation and duration.

Many factors have been demonstrated to effect duration of breastfeeding such as demographics (gender, maternal age, socioeconomic status, level of education and other infants or children), biological

(baby's ability to feed, latching. nipple problems, milk supply, smoking and maternal obesity), social (support from health professionals, family and friends, work hours and environment) and psychological factors (breastfeeding planning, commitment and self efficacy, personal opinion of breastfeeding and previous information).

Barriers are widespread and include physical problems with feeding such as pain and difficulty, little support from health professionals, work, family or friends, mixed information by health providers, sexualisation of breasts, low income and many more.

In order to promote and increase rates and duration of breastfeeding, some of the following interventions would be useful:

- Increased antenatal education around breastfeeding and high level of breastfeeding support from nursing staff post birth.
- Increased access to consistent information and quality care.
- Consistent and appropriate support from health care providers.
- High level of support from partners, families, friends and the workplace.
- Improvements in community acceptance and support of breastfeeding as a natural, healthy action rather than the viewing the breast as a sexual object.
- Specialised support groups for low SES or young mothers.

While these interventions would result in costs for the health care system in community health funding, the benefits attained from increased breastfeeding would reduce costs in the future related to obesity and lifestyle related disease. It is important for health professionals to understand what the influences and barriers are to women continuing to breastfeed in order to better identify and support women who are at risk of early cessation of breastfeeding. It is also important to offer consistent and considerate support regardless of a woman's choice to breastfeed or not. In this way women can remain in touch with care, remain supported and together with their baby, and remain healthy.

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Appendix 4: Businesses Questionnaire

Breastfeeding: Supporting a Natural Choice

An OEHSA breastfeeding friendly business initiative

The Outer East Health and Community Support Alliance (OEHSA) is an alliance of agencies across the Outer East of Melbourne that are committed to collaborative thinking, planning and action, which improves the experiences and outcomes of people who access the primary care system. The OEHSA aims to improve and sustain the quality of life of residents in the Outer East of Melbourne, and the health and wellbeing of the community as a whole.

The Healesville and Yarra Junction areas have been identified as having lower rates of breastfeeding than the national average. This is of concern because breast milk is the best source of nutrients for a growing child, and breastfeeding is the natural and normal form of delivery. Benefits of breastfeeding include:

- Protecting the child from illness and infection
- Providing the correct nourishment for the growing infant
- Aids the development of eyesight, speech and intelligence
- Promotes a special bond between mother and child
- Babies who are not breastfed have a high risk of SIDS (Sudden Infant Death Syndrome)
- Lowers risk of developing childhood allergies

One of the reasons women prefer not to breastfeed is that they feel uncomfortable breastfeeding in public. Social interaction and community participation is important in breastfeeding mums to help prevent post-natal depression.

The 'Breastfeeding: Supporting a Natural Choice' initiative is designed to promote community support for women breastfeeding in public by enabling local businesses to become breastfeeding friendly. It is the aim of the initiative enable mothers to encourage mothers to continue to breastfeed by making it an easier thing to do.

As a local business, we are encouraging you to participate in the 'Breastfeeding Welcome Here' campaign, supported by the Australian Breastfeeding Association. Becoming registered as a breastfeeding friendly business is easy – all you have to do is be willing to have new mums breastfeeding in your business and become registered on the website (no cost involved).

This questionnaire is designed to help you through the process of becoming breastfeeding friendly, provide you with information on the importance of breastfeeding and help continue research into barriers to breastfeeding in the local community. Your thoughts and opinions can help to build a supportive community environment and your time is greatly appreciated.

Healesville/Yarra Junction 'Breast Feeding Friendly Business' Questionnaire	
1. Are you happy to have mother's breastfeeding on your premises?	Yes / No
2. Do you have room to manoeuvre a pram?	Yes / No
3. Are you smoke-free?	Yes / No
If Yes to all of the above, continue to Q4. If No, continue to Q14 over the page	
4. What facilities do you have available for breastfeeding mothers (eg bathroom, change table, private area to breastfeed)?	
5. Would you consider adding to these facilities? (eg. Change table, kettle)	Yes / No
6. Do you have a bathroom on your premises?	Yes / No
7. Are you happy to display a "Breastfeeding Welcome Sticker"?	Yes / No
8. Are you happy to be included on a list and map of breastfeeding friendly locations in the local community?	Yes / No
9. Are you happy to be included as a "Breastfeeding Welcome business" on the ABA (Australian Breastfeeding Association) website?	Yes / No
10. What are your hours of operation?	
11. What conditions apply to the use of your facilities? (eg. Customers, students)	
Cafes/restaurants only:	
12. What is the cost of an average coffee/sandwich at your café?	
Coffee:	$
Sandwich:	$
13. Do you offer water free of charge?	Yes / No

As part of our research we are interested as to reasons why businesses may elect not to become "breastfeeding friendly". We would appreciate your opinions and reasons as to why you prefer not to take up a "breastfeeding friendly" status.

14. What are the reasons you prefer not to become a "breastfeeding friendly business"?
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15. Have you previously had mothers breastfeeding on your premises?

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16. Do you think you might be open to becoming breastfeeding welcome in the future?
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17. What do you think prevents women from breastfeeding in public places?

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18. Do you think breastfeeding is the best choice for babies?

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Thank you completing the questionaire. Your time is grealty appreciated and will contirbute towards increasing breastfeeding rates in the Outer Eastern Region.

Appendix 5: ‘Breastfeeding Welcome Here’ Resource