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**Analysis of Breastfeeding Policies and Practices in Childcare Centres in Adelaide, South Australia**

**Abstract**

*Objective* Breastfeeding policies and practices were analysed in childcare settings in the metropolitan area of Adelaide, South Australia. *Methods* Childcare centres were purposively selected based on their geographical location, type and socioeconomic score of the area. Qualitative inquiry approach was employed by undertaking interviews with childcare centres' director or baby house coordinator to explore their perception towards breastfeeding practice and support within their centre. Breastfeeding related policy documents, where available, were also collected during the interviews to triangulate data. *Results* A total of 15 face-to-face interviews were conducted. Six childcare centres had a written policy specifically on breastfeeding support, although the technical issues of handling breastmilk were included in most centres' food and nutrition guidelines. Most participants believed that decision to breastfeed is the personal choice of parents, and hence saw the childcare centre's role as supporting parental choice whether it is breastfeeding or not. The provision of physical space to breastfeed and facilities to store the expressed breast milk were the most common practices in support of parents who had chosen to continue breastfeeding. Participants perceived mothers' work-related issues such as distance from the centre, time, and unsupportive workplace the most important barriers that led to early introduction of bottle feeding or breastfeeding cessation. *Conclusions* Most childcare centres support breastfeeding in a more passive than active way. Breastfeeding promotion needs to be an integral part of childcare centres training, policy and practice if an increased rate of breastfeeding is to be achieved particularly amongst working mothers.

**Key words**

Breastfeeding support, policy and practice, childcare centre

**Introduction**

Strong evidence supports the health advantages of breastfeeding for mother and child [1-6], therefore the protection and promotion of breastfeeding is a global health issue. Australia has

a high rate of breastfeeding initiation, with almost 90% of mothers breastfeeding after birth [7]. However, rates decline significantly, with only 50% and 23% of infants still breastfeeding at 6 and 12 months respectively [7]. Comparing time-series National Health Surveys reveals that little improvement has been made in Australia's breastfeeding rates since 1995 [7].

Several programs and strategies have been developed to support breastfeeding in Australia, including the Baby-Friendly Hospitals Initiative (BFHI - a global effort launched in 1991 by UNICEF/WHO), and the Breastfeeding Friendly Workplace Accreditation initiative (BFWA - launched in mid 1990s by the Australian Breastfeeding Association (ABA)). In 2006 the Australian Commonwealth Government held an inquiry into the health benefits of breastfeeding and measures that may support increased breastfeeding rates [8] which resulted in the development of a National Breastfeeding Strategy. This strategy recognises the role of childcare centres and workplaces in the protection, promotion and support of breastfeeding, and set the goal of increasing the number of breastfeeding friendly environments [9].

In recent years Australia has experienced considerable growth in infant enrolment in early childhood care. The use of long day care among children aged 0-4 increased from 13% to 24% between 1996 and 2005, and in 2008 was around one quarter of children aged 0-5 years [10, 11], which is partly due to women's increased participation in the labour force [11]. Therefore, providing breastfeeding support in childcare settings seems crucial if breastfeeding rates are to increase, particularly among working mothers [12].

Providing breastfeeding-friendly childcare centres requires a scientific base of evidence to inform development. However, according to the ABA report on the Breastfeeding Friendly Childcare Accreditation scheme [13], the lack of evidence in this area remains a barrier to policy implementation and resource allocation.

This study aimed to fill this gap by critically analysing breastfeeding policies and practices in childcare centres in metropolitan Adelaide.

## **Methods**

This mixed method study gathered qualitative and quantitative data from childcare centres in Adelaide (the capital city of the state of South Australia), along with policy document reviews. The study had two phases, the first involving interviews with purposively selected centre directors or their nominees to ascertain issues related to breastfeeding support in childcare. From this qualitative phase a survey was developed and sent to all childcare centres

across the metropolitan area. This paper reports on phase one. Additionally, breastfeeding related policy documents, where available, were collected during the interviews to triangulate data.

#### *Participant recruitment*

Since no official body was identified that could provide a complete, accurate and up to date database of all childcare centres in metropolitan Adelaide, a list of long day care centres (centre-based child care providing all-day or part-time care for children) was constructed from sources including the South Australian Department of Education, the National Childcare Accreditation Council, and the Community-based Childcare Centres Association, supplemented by a thorough search of the South Australian business telephone directory (Yellow Pages). The list contained a total of 315 childcare centres with the name, address, postcode, telephone number, email, type (i.e. community-based, non-for-profit, educational-based such as university, and private), and the Socio-Economic Index for Areas (SEIFA) score, which indicates an area's degree of relative 'disadvantage' [14]. Since breastfeeding rates differ by socio-economic status [7, 15], it was important to identify the socioeconomic status of the area where each centre was located.

Childcare centres were then categorised based on Adelaide's Major Statistical Regions (North, South, East, West) [16]. Based on the size of each region, between 3 and 6 childcare centres were purposively selected to provide geographic (and hence socioeconomic) diversity. Type of childcare centre and SEIFA score were also considered to provide a broad range of centres. A total of 36 centres were invited to participate. Twenty one centres declined or did not respond to the invitation, resulting in a sample size of 15 childcare centres.

#### *Procedures*

An information pack posted to the selected centres included an Information Sheet, Letter of Introduction and Consent Form. An incentive of AUS\$30 cash was offered for participation. Interested parties contacted the primary researcher (SJ) to arrange an interview time. Following data collection and analysis of the first 15 interviews a level of theoretical saturation was achieved, so no further participants were approached and the interview phase was closed.

Following informed written consent, in-depth face-to-face interviews were conducted to explore participants' perceptions towards breastfeeding practice and support within their centre. Interviews were conducted by the first author (SJ) and held in the childcare centres, which provided an opportunity to also collect any written breastfeeding policies and to

observe existing facilities. A semi-structured interview schedule was developed by the research team and included open-ended questions to explore infant feeding practices in the centre, facilities to support breastfeeding, breastfeeding policies, communication with staff and parents, breastfeeding knowledge and attitudes, and barriers to and facilitators of breastfeeding support.

### *Data analysis*

Interviews were audio recorded and transcribed by the principal researcher (SJ). The qualitative content analysis approach was used, as outlined by Rice and Ezzy [17]. Interview files were imported into NVivo qualitative analysis software [18] and coded by the principal researcher using both pre-determined and inductive categories. Codes were generated using a combination of key research questions and participant-generated constructs. Four interviews were randomly selected and double-coded by two other members of the research team (LS, LN), and emerging themes were compared with those of the principal researcher. Overall, we found similar coding structures that ensured the rigour of data analysis.

## **Results**

The characteristics of the 15 centres in this study are summarised in Table 1.

**Table 1 Characteristics of childcare centres interviewed**

<b>ID</b>	<b>Type</b>	<b>SEIFA score<sup>1</sup></b>	<b>Position of person interviewed</b>
1	University childcare centre	218	Baby room coordinator
2	Community-based	46	Centre director
3	Private (chain centre)	121	Associate director
4	TAFE childcare centre <sup>2</sup>	288	Centre director
5	Private (chain centre)	197	Centre director
6	Private (chain centre)	243	Centre director
7	Community-based	18	Baby room coordinator
8	Private (chain centre)	267	Centre director
9	Private (chain centre)	169	Centre director
10	Community-based	238	Centre director
11	Private (chain centre)	319	Baby room coordinator
12	Private (chain centre)	273	Baby room coordinator
13	Hospital childcare centre	294	Baby room coordinator
14	Private (non-chain centre)	315	Baby room coordinator
15	Private (non-chain centre)	217	Centre director

1 Areas with higher SEIFA score are relatively more advantaged

2 TAFE are publicly funded colleges of Technical and Further Education

Data analysis showed the key issues emerging were actual breastfeeding practices, policies, attitudes, and barriers/enablers to support breastfeeding.

*Breastfeeding practices*

Most interviewees believed that the decision to breastfeed is the personal choice of parents, based on comfort level, lifestyle, work status, and medical considerations. Hence, most did not see the childcare’s role as promoting or supporting breastfeeding but as supporting parental choice in infant feeding practice:

*“As far as breastfeeding, we don’t give opinions; it’s a parent’s choice. Whatever the parent’s choice is, whether it is breastfeeding, bottle feeding, expressing, whatever it is... we don’t pick a side. The thing is, we are here to support parents and their choices, that’s all we are about” (Interview #10)*

With this perception of their role being to support parental choice, breastfeeding encouragement was perceived to be an inappropriate practice for childcare centres. There was a sense that this stance was taken to limit feelings of guilt and anxiety for parents who had not been able to, or had chosen not to continue breastfeeding:

*“I think it is very important not to pressure parents and put untold guilt upon someone. Because some people it’s not gonna work for... you’ve got to be flexible and you can’t play a guilt trip on a parent like that” (Interview #2)*

However, most centres had practices and provisions for parents who did continue breastfeeding including welcoming mothers to breastfeed in the centre, providing physical space to breastfeed and breastfeeding information such as brochures and pamphlets. Table 2 details practices which interviewees considered supportive of breastfeeding.

**Table 2 Examples of breastfeeding support provided by childcare centres**

PRACTICE	EXAMPLE
Welcoming parents to come to the centre and breastfeed	<ul style="list-style-type: none"> <li>• Encouraging parents to come to the centre as often as they prefer</li> <li>• ‘Breastfeeding is welcome’ sign</li> <li>• Contacting mothers by phone or asking parents to phone the centre when an infant requires breastfeeding</li> </ul>

Providing physical space to breastfeed	<ul style="list-style-type: none"> <li>• Couch in baby room for nursing mothers</li> <li>• Staff room/meeting room for breastfeeding if mother requests private area</li> <li>• Lounge area for parents</li> </ul>
Having fridge/freezer to store expressed breast milk	<ul style="list-style-type: none"> <li>• Labelling and storing expressed breast milk with date and child's name</li> </ul>
Providing breastfeeding information if requested	<ul style="list-style-type: none"> <li>• Breastfeeding brochures and pamphlets available to parents</li> </ul>
Referring parents to breastfeeding organisation or websites	<ul style="list-style-type: none"> <li>• Providing the phone number of Australian Breastfeeding Association or referring to health centres</li> <li>• Relevant websites</li> </ul>

All centres accepted expressed breast milk and had appropriate storage facilities. Staff members were also trained in thawing and warming expressed breast milk appropriately. However, most participants identified bottle feeding as the most convenient means to feed expressed breastmilk and, hence, parents were often advised to introduce feeding their child breast milk in a bottle before starting childcare. In a few centres, staff even emphasised benefits of feeding breastmilk in a bottle, seeing it as important to allow fathers to share the child's feeding, preventing the child developing undue attachment to the mother, and facilitating settlement into the childcare centre:

*"What I often explain to parents is that the best thing is to breastfeed, but allow your partner to feed a bottle of breast milk at certain times as well. So encouraging the baby to have a bottle from another person... It also encourages the baby to bond a little bit with the father really... honestly we have children who have only breast milk from the mother and never feed from anybody [else] - we have a very hard time with that child's feeding." (Interview #6)*

Interviewees mentioned concerns that prevented them feeding breastmilk in a cup or spoon, including sterilisation, cross-contamination and difficulty in using a cup particularly for young babies. One centre reported cup feeding to be time consuming which, due to their staff ratio, was not a feasible approach even if parents requested this:

*"She [the mum] wanted us to pour the expressed milk into the cap of the bottle and like sip it to him. Breast milk everywhere!! It was just horrible. And he was spitting it back to us.... Oh, little cup, it didn't work." (Interview #1)*

*“The problem is that, depending on the age of the child, there are sterilisation issues that I have... sometimes we've got milk out, splashes, it is a cross-contamination concern.”*

*(Interview #5)*

### *Breastfeeding attitudes*

Overall, most participants had a positive attitude about breastfeeding and recognised benefits for babies and mothers, including disease protection, bonding, convenient feeding practice, and being an inexpensive feeding option. Supporting breastfeeding was also seen as giving centre credibility:

*“My perception is, you know, “Breast is Best” and there is a bit of a campaign about that. So my understanding is that the longer the child can be breastfed the better it is overall for their health and nutrition, ... and that’s certainly based on current research as well” (Interview #11)*

Interviewees also reported various personal experiences with early infant feeding which seemed important in shaping their breastfeeding attitudes within their childcare work roles:

*“I was a breastfeeding mother myself. My two children were fed up to 12 months, so I know the value of it, the satisfaction and the attachment and so that's why the policies, everything that reflects, I would do anything for the mother... I'm a strong believer in breastfeeding.”*

*(Interview #8)*

*“My son was born in the breastfeeding frenzy, when he came out in that time and I was on pethidine and they were forcing me to breastfeed my baby while I was on pethidine and he was passing out ... so I feel very strongly about [not] putting my opinions on anybody's face.” (Interview #10)*

### *Breastfeeding policies*

Although most centres followed certain practices to support breastfeeding, only 6 centres had a written breastfeeding guideline mainly in the form of general statements that were included within the food and nutrition policy documents, such as *“the centre encourages and supports the provision of breast milk and baby formula for babies at the centre”*, and *“staff will support and encourage breastfeeding at the centre”*. However, in almost all policy documents more emphasis was placed on technical procedures and handling of expressed breast milk (storing, thawing, warming) than on other aspects of breastfeeding support, advocacy or training:



*“There is only one thing [document] here which is for breast milk, nothing else. I looked at the whole lot [of documents], I can't find anything else on breast milk except suitable fluid for babies. That was it.” (Interview #1)*

*“Our policy is more related to storage and precedures rather than how inclusive we are” (Interview #14)*

The main driving forces for breastfeeding practices in centres were therefore less likely to be a written policy and more likely to be parents' demand and the centre director and staff's attitude to breastfeeding. One participant highlighted the importance of policy translation into practice:

*“You can have things written down and nothing happens. That's very easy to write a document and it doesn't get followed through on, so I think it really has to pertain to personal philosophies of the staff, their willingness to embrace this sort of thing, goes over the board, the whole board takes leadership, supervision, and feedback from parents...” (Interview #2)*

Interviews and policies revealed that little formal or informal training existed to enable staff to provide breastfeeding support and information. Childcare staff were only informed of breastfeeding procedures and routines if there was a breastfed baby in the centre:

*“You can't train everybody on everything and you just wouldn't have the time to do, so it's all about on the job training” (Interview #10)*

Almost all centres had strategies to communicate policy content or policy changes with staff and parents by using staff meetings, newsletters, feedback sheets, and parents' notes.

### *Barriers to supporting breastfeeding*

During the interviews participants spoke spontaneously of barriers to their ability to encourage and support breastfeeding in the childcare environment. The barriers they identified were related to: a) the particular childcare centre's environment including physical space, budget, and staff attitude; and b) the broader contextual environment that affects mothers attitudes and choice. Table 3 details the most common barriers to breastfeeding support identified by interviewees.

**Table 3 Barriers identified to supporting breastfeeding in order of importance**

Lack of demand from parents
Long distance between childcare centre and mother's workplace
Lack of time for working mothers
Early start of bottle feeding or shifting to formula before enrolment in childcare centre
Societal attitudes towards breastfeeding
Lack of breastfeeding specific policies
Lack of knowledge
Time constrains to handle expressed breast milk/cup or spoon feeding
Lack of positive attitudes towards breastfeeding among centre's leadership
Lack of positive attitudes towards breastfeeding among centre's staff
Seeing breast milk as a bodily fluid
Budget constraints
Lack of appropriate space for breastfeeding mothers

From the viewpoint of participants, factors beyond the control of the childcare centre lead to the lack of parental demand for breastfeeding support. Examples offered included time constraints for working mothers, unsupportive workplaces, distance between childcare and mother's workplace, problems in expressing milk, early introduction of feeding by bottle, and negative advice from friends:

*"The only barrier that I think comes actually from the parents themselves in that they can't come down and breastfeed because of their working life, they are so busy, they're having lunch time meetings. The barrier doesn't so much come from us not encouraging or allowing or permitting a parent to breastfeed." (Interview #4)*

*"The only barrier that I could think of more tends to be when parents are working, whether it's conveniently close, because while we get a lot of families from the local area here we also get a lot of people who might be working in the city or other places. So, yeah, this distance could be, also whether the employer is flexible to allow families to come and go and, you know, we have a couple of families who can do that, but it's pretty rare." (Interview #11)*

*"More from parents' side of it, mothers work, let's say at [a supermarket] for 7.5 hours and she wants to go and express her milk. Maybe people are not happy with that." (Interview #7)*

Mother's employment was a particularly prominent issue in centres located in more advantaged areas with a higher percentage of working mothers:

*“I would say our parents are all highly professional parents... I think they have to run their lives very rigidly and their time schedule is very rigid and that's where we found a lot of them choose not to breastfeed. They do it for the first few months but because they are in very high positions, I don't think their employers are very flexible. I mean high power jobs, you suffer in many ways. And time is one...” (Interview #9)*

In all centres the number of breastfed children was very low, with only 1 or 2 out of an average of 20 children under age 2 being currently breastfed, while four centres had no breastfed babies at the time of interview. Long waiting lists and mothers staying longer off work after birth were seen to result in predominantly older children using childcare centres and hence having already started formula or solid food. While there is no national data on trends in return to work, the latest data shows that the average mother takes approximately 6 months off work after birth (27 weeks), while 40% of mothers who return to their pre-pregnancy employment recommence work before the child is 4 months old [19].

*“I think in general parents stay longer at home these days so yes, by the time the child comes here they have started bottle or solid. For that reason we are seeing less children being breastfed because by the time they [come here] they are about 6 months, the earliest between 6 to 12 months ...” (Interview #13)*

Less common barriers related to the childcare centre included staff attitudes, physical space, handling expressed breast milk, time constraints, and lack of breastfeeding specific policies:

*“In a way heating the breastmilk bottles takes a bit longer because you normally pop just the formula bottle in the microwave and that's pretty easy and simple. If they are on demand feed, to put breast milk in the water and heat, it takes some time” (Interview #15)*

*“I think it depends a little bit on the director. If you have a really young director that hasn't had any children, won't understand, then you might get a different view point coming up” (Interview #13)*

#### *Enablers to support breastfeeding and recommendations for breastfeeding-friendly childcare*

The most common factors cited as facilitators to breastfeeding support included close proximity between the centre and mother's workplace, having a written breastfeeding policy, awareness among childcare workers, resources for parents, open communication between

staff and parents, and long term staffing. Centres located within a workplace (eg university, hospital) had higher rates of mothers' visiting the centre to breastfeed their children. Another facilitator was having access to reliable breastfeeding resources via online sources or relevant organisations:

*"We are in a very good situation here. 80% of our parents are working nearby so they can come here [to breastfeed] as long as they have a good supervisor. (Interview #2)*

*"It's nice to have long term staffing, you know like, we all are around for a while so we are very familiar with the environment" (Interview #3)*

Interviewees were keen to offer suggestions and recommendations of ways in which to improve encouragement and support to breastfeeding, and create more breastfeeding friendly environments. Table 4 lists interviewees' recommendations for the best approaches for a breastfeeding-friendly environment in childcare settings.

**Table 4 Recommendations to enhance breastfeeding support in order of importance**

Recommendations
Having breastfeeding-friendly workplaces, environment and society
Having more breastfeeding resources available for parents
Increasing staff awareness by organising training courses on breastfeeding
Incorporating breastfeeding topics on childcare centre training courses in TAFE*
Having breastfeeding policies
Collaboration with breastfeeding organisations such as Australian Breastfeeding Association
Organising mothers group to support breastfeeding
Having more convenient places specific for breastfeeding within childcare centres

Most centres saw a mother's decision to continue breastfeeding as influenced by the broader environment, including workplace and the whole society, so that they felt increasing support from family, employers and society would increase parental demand for breastfeeding support in childcare centres:

*"I think workplaces need to be more supportive, allowing them to express during the day as well, and it makes it a lot easier because parents going back to work, it's a lot of pressure (Interview #14)*

Increasing breastfeeding awareness among childcare staff and parents was a common factor recommended, along with training courses by breastfeeding support groups and organisations, providing information to parents, and including breastfeeding topics in childcare training courses:

*“Getting someone from the Breastfeeding Association to come and have a chat for parents and staff, I’d probably like to see it for staff who just start. It’s pretty hard to support breastfeeding for someone who hasn’t breastfeed herself” (Interview #7)*

*“Maybe putting something in the enrolment pack a bit more detailed about breastfeeding and how we can help and facilitate that for parents to continue breastfeeding”. (Interview #7)*

*“Whether it can be part of the studying course, I’m not sure how much they really address breastfeeding in childcare courses as part of their studies, and where students can get extra information and resources.” (Interview #14)*

Having breastfeeding policies and facilities were also reported as strategies that enhance breastfeeding support in childcare:

*“Breastfeeding policy pushes staff to move in a specific direction. If staff aren’t following that policy then we have to sit and talk about the reasons behind that, so having policy definitely supports parents” (Interview #15)*

## **Discussion**

As with all research, our study has some limitations, particularly as we do not know whether centres or staff members who chose not to participate differ in some way from those who did participate. An overall positive view about breastfeeding may also be due to the fact that people with a positive attitude to breastfeeding or successful personal breastfeeding experiences were more likely to want to participate in a study on breastfeeding. This means that the policies, practices and attitudes detailed in this paper may reflect those centres which are already *most* supportive of breastfeeding.

With an increasing trend of young children enrolled in child care, childcare centres can play a vital role in health promotion and child health through breastfeeding support.[20] This study aimed to critically analyse current breastfeeding policy and practice in childcare settings as a

basis for developing evidence-informed strategies to increase breastfeeding rates, particularly among working mothers.

Having a written policy can provide organisations with a framework for decision-making and allow employees to understand their roles and responsibilities [21], although establishing conditions that then facilitate the intended implementation is critically important. Our study found that few childcare centres had a written policy specifically on breastfeeding, in spite of the Australian National Breastfeeding Strategy that has given high priority to early childhood initiatives [9]. While the technical issues of handling breastmilk are included in some centres' food and nutrition guidelines, childcare centre based breastfeeding support currently relies more on the attitude and beliefs of the centre's director and the personal experience of individual staff. This has implications for sustainability and continuity of breastfeeding support, and consistency in approaches in different settings if we are to promote breastfeeding friendly environments.

Our study suggests that many childcare centres support breastfeeding in a more passive than active way. Most participants had both staff attitudes and facilities that are supportive of breastfeeding when it occurs, yet most centres and staff do not actively promote breastfeeding. The positive attitude of our participants, particularly centre directors, towards breastfeeding and its benefits, as revealed in our study, is likely to have implications on how breastfeeding is encouraged by other staff members. However, the finding cannot be generalised to all staff within one centre or other childcare centres. Indeed, the discourse of supporting "parental choice" in infant feeding, rather than supporting one particular feeding method (ie breastfeeding) was a major theme to emerge across all centres. Most childcare workers and directors did not see the pro-active promotion of breastfeeding as part of their role or service, but rather saw a childcare centre's role as supporting the infant feeding practice chosen already by parents. Further research on mothers' perception of the role of childcare centres in breastfeeding practice and success seems essential. Despite the fact that childcare centre workers did not see their role as the health promotion of breastfeeding, in Australia there is room for state health promotion authorities to look for ways to work with childcare centres to achieve a more proactive encouragement and greater support for breastfeeding. This is because the benefits of breastfeeding for mother and child are supported by the research evidence and because this would be consistent with the National Breastfeeding Strategy.

A particularly common practice we found in the participating childcare centres was the recommendation by staff for parents to introduce feeding expressed breastmilk in a bottle prior to commencing childcare. This was rationalised as a means to support a smoother transition to childcare by the baby adjusting to being fed by someone other than their mother and bonding with the father. However, encouraging the feeding of breastmilk in a bottle is counterproductive to continuing breastfeeding and can cause nipple confusion in younger babies and undermines the mothers lactation and the baby's ability to continue breastfeeding [22]. Studies suggest that cup-feeding is as safe as bottle feeding and a good alternative when direct feeding from the breast is not possible [23].

This issue is of particular concern in the context of limited availability of childcare places (ABS 2006), where first-time mothers often contact childcare centres during pregnancy, and if recommended that feeding breastmilk in a bottle prior to commencing childcare will ease their infant's transition to childcare, then mothers may not think it worthwhile to start breastfeeding at all. While cup and spoon feeding are viable and safe alternatives to a bottle for feeding expressed breastmilk [23], we nevertheless found childcare staff reluctant or without the time to do this.

Whilst espousing a supportive attitude towards breastfeeding, or having written policies which say they encourage and support breastfeeding, these practices lack research evidence and undermine the protection and promotion of breastfeeding.

Mothers' employment and workplace issues are a major barrier that childcare staff perceived to lead to early cessation of breastfeeding or early introduction of formula, which negatively influenced the numbers of children being breastfed while in childcare. However, breastfeeding promotion and advocacy in childcare centres may encourage more mothers to return to paid work and continue breastfeeding while working, particularly since some of our interviewees already thought that being supportive of breastfeeding gave a centre additional credibility. Our finding is consistent with past studies on working mothers and breastfeeding [24-26], and this issue highlights the importance of building supportive environments for working mothers if successful breastfeeding practice is to be achieved.

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## References

1. Smitters, L. and E. McIntyre, *The impact of breastfeeding, translating recent evidence for practice*. Australian Family Physician, 2010. **39**(10): p. 757-760.
2. American Academy of Pediatrics, *Breastfeeding and the use of human milk*. Pediatrics, 1997. **100**: p. 1035-1039.
3. Angelsen, N.K., et al., *Breastfeeding and cognitive development at age 1 and 5 years*. Archives of Diseases in Childhood 2001. **85**: p. 183-188.
4. Bartle, C., *Breast milk, breastfeeding and the developing brain*. Childrenz Issues, 2002. **6**(2): p. 39-43.
5. Labbok, M., *Effects of breastfeeding on the mother*. Pediatrics Clinics of North America, 2001. **48**(1): p. 143-158.
6. Horta, B., et al., *Evidence on the long-term effects of breastfeeding: systematic review and meta-analysis*. 2007, World Health Organization: Geneva.
7. Amir, L.H. and S.M. Donath, *Socioeconomic status and rates of breastfeeding in Australia: evidence from three recent national health surveys*. Medical Journal of Australia, 2008. **189**(5): p. 254-256.
8. The Parliament of the Commonwealth of Australia, *The Best Start: Report on the inquiry into the health benefits of breastfeeding*, S.C.o.H.a.A. House of Representative, Editor. 2007: Canberra.
9. Australian Government Department of Health and Aging, *The Australian National Breastfeeding Strategy 2010-2015*, in *Australian Health Ministers' Conference 2009*. 2009: Canberra.
10. ABS, *Childhood Education and Care, Australia*. 2008: Canberra.
11. ABS, *Australian Social Trends*. 2010: Canberra.
12. McIntyre, E., et al., *Balancing Breastfeeding and Paid Employment - A project targeting Employers, Women and Workplaces*. Health Promotion International, 2002. **17**(3): p. 215-222.

13. Lording, R., *Breastfeeding Friendly Child Care Award Project*. 2008, Australian Breastfeeding Association.
14. ABS, *An Introduction to Socio-Economic Indexes for Areas (SEIFA)*. 2006: Canberra
15. Nolan, L. and V. Goel, *Sociodemographic factors related to breastfeeding in Ontario: Results from the Ontario Health Survey*. Canadian Journal of Public Health, 1995. **86**: p. 309-312.
16. ABS, *Australian Standard Geographical Classification (ASGC)*. 2001.
17. Rice, P. and D. Ezzy, *Qualitative research methods: a health focus*. 1999, Oxford: Oxford University Press.
18. Walsh, M., *Teaching Qualitative Analysis Using QRS NVivo*. The Qualitative Report, 2003. **8**(2): p. 251-256.
19. ABS, *Pregnancy and Employment Transitions, Australia*, C.o. Australia, Editor. 2006: Canberra.
20. Hayden, J. and J.J. MacDonald, *Health promotion: A new leadership role for early childhood professionals*. Australian Journal of Early Childhood, 2000. **25**(1): p. 33-39.
21. Michigan Municipal League, *Handbook for General Law Village Officials*. 2006, Michigan Municipal League: Michigan.
22. Neifert, M., R. Lawrence, and J. Seacat, *Nipple confusion: toward a formal definition*. The Journal of pediatrics, 1995. **126**(6): p. S103-S134.
23. Riordan, J., *Breastfeeding and Human Lactation*. 2005, Mississauga: Jones and Barlett Publishers.
24. Murtagh, L. and A.D. Moulton, *Working Mothers, Breastfeeding, and the Law*. American Journal of Public Health, 2011. **101**(2): p. 217-223.
25. Kurinij, N., et al., *Does maternal employment affect breast-feeding?* American Journal of Public Health, 1989. **79**(9): p. 1247-1250.
26. Statistics, A.B.o., *Breastfeeding in Australia*. 2003.