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Breastfeeding Support in Child Care: An International Comparison of Findings from Australia and the United States

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Abstract

Introduction: Many women in industrialized countries return to work while their children are infants. This is often associated with decreased breastfeeding duration or exclusivity. In order to better understand the breastfeeding support activities in childcare settings, studies were undertaken in settings with very different levels of infant mortality, breastfeeding, and breastfeeding support: Adelaide, Australia, and Wake County, North Carolina. The researchers collaborated to explore, contrast, and compare their baseline data.
Methods: Available data on breastfeeding rates and infant mortality rates were explored for the two settings. In addition, the two childcare datasets were explored for common questions, and descriptive and χ^2 analyses were carried out.
Results: Similarities were found between the response from childcare settings providers in Australia and the United States. Rates of having at least one breastfeeding infant (70.6% vs. 66.3%), a place to breastfeed (90.7% vs. 95%), and a refrigerator for storage (100% vs. 100%) were similar for Adelaide and Wake County, respectively. Qualitative data from Adelaide also mirrored Wake County data in that providers in neither setting were actively promoting breastfeeding. However, the Adelaide data reflected significantly higher rates of encouragement (95.3% vs. 21.7%), written policy (77.8% vs. 20.8%), resource/materials distribution (76.6% vs. 1% and 93.8% vs. 17%), and training (44.4% vs. 13.9%).
Conclusions: Childcare practices may reflect the environment of support, or lack thereof, for breastfeeding in the society as a whole. The similarities and differences seen in these settings may reflect both official guidance as well as the breastfeeding environment. There is much work to be done in the United States to come up to the same level of support for breastfeeding in child care and in other programs as is seen in Australia.

Introduction

Breastfeeding provides the healthiest start in life and a myriad of health benefits for mothers and children.[1] However, in the United States and abroad, breastfeeding practices continue to lag behind the World Health Organization/UNICEF recommendations of exclusive breastfeeding for 6 months and continued breastfeeding with age-appropriate complementary feeding for up to 2 years and beyond.[2]

In industrialized settings, there are multiple and unique barriers to continued breastfeeding, one of which is the separation that often occurs between working mothers and their babies due to formal workplace constraints. Studies have indicated that the anticipation of returning to work or school is associated with lower rates of breastfeeding.[3] In North Carolina, returning to work/school is one of the most commonly cited reasons mothers name for not initiating breastfeeding and for stopping breastfeeding.[4] In Australia, one in 10 mothers report weaning before 6 months to return to work.[5] There are many reasons why returning to work is associated with reduced breastfeeding, but it is likely that one of the contributing factors is mothers' expectations and experiences related to child care. When mothers place infants in the care of someone other than themselves, they are significantly less likely to breastfeed.[6] Therefore, it is not surprising that enrollment in child care is associated with decreased durations of breastfeeding.[7] The likelihood of continuing breastfeeding is further reduced by the finding that childcare providers have inadequate knowledge of breastfeeding and other up-to-date recommendations for feeding infants.[8]

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Although many government entities have policies related to breastfeeding in childcare settings, there are limited data available on the breastfeeding knowledge, attitudes, and practices within childcare centers. Therefore, it is especially interesting to find two studies that gathered similar data. In this study, we compared data collected from two very different geographic locations: Adelaide, Australia and Wake County, North Carolina. Adelaide is the urban capital of South Australia with approximately 1.2 million residents, about 74% of South Australians. Wake County contains Raleigh, the capital of North Carolina, as well as surrounding rural areas. It is home to about approximately 0.9 million residents, about 9% of North Carolinians. Australia and the United States are both considered developed countries economically, but they differ substantially in infant mortality rates and breastfeeding rates, with Australia comparatively better for all indicators. North Carolina, however, is below average for the United States for all indicators.[9–13] Also, there are significant differences in the level of Baby-friendly Hospital Initiative designation, an indicator of healthcare system attention to breastfeeding support. In Australia, at least 23% of the hospitals have received this designation, whereas in the United States, this is only about 3%.[14]

The purpose of this comparative study is to ascertain if these environmental differences are reflected in the practices reported by the childcare setting providers.

Materials and Methods

Surveys of childcare providers were carried out, using comparable but differing protocols. In Adelaide, researchers designed a questionnaire based on a previous set of qualitative interviews with childcare centers. An invitation letter to participate and survey questionnaire were distributed to all the childcare centers (limited to long-day centers) in Adelaide ($n = 293$) and were completed either in hard copy or online via SurveyMonkey. Two reminder letters (via post or e-mail) were sent after 2 and 4 weeks. Twenty-two percent ($n = 65$) of the surveys were completed and available for analysis.

In Wake County, data were collected as baseline for an intervention study. The pool of childcare centers was limited to facilities that accept childcare subsidies, and the sample excluded in-home childcare providers. Center directors were contacted by letter and then by phone to request study participation. Those who enrolled were then visited by the researcher to complete a breastfeeding self-appraisal questionnaire. (An additional knowledge, attitude, and practice survey was completed by childcare providers, and is reported elsewhere.[15]) Of the 154 eligible childcare centers, 101 enrolled by agreeing to participate and completed self-appraisal and provider surveys. The 101 centers were reasonably representative of the whole, in terms of percentage of clients receiving subsidies, number of children enrolled, and state quality ratings.

Both data collection instruments were reviewed for common questions. Qualitative data, including open comments in both surveys, were also reviewed for commonalities and differences. Descriptive findings from the common questions are presented, and findings are compared using χ^2 analysis (Epi Info version 3.5.1, National Institutes of Health, Bethesda, MD).

Results

Comparison of child center questionnaires

Significant differences were found in many of the childcare breastfeeding support parameters between the two different locations (Table 1).

The two settings showed similar results for the number of centers that had at least one breastfeeding infant, availability of a comfortable place for mothers to breastfeed, and the provision of a refrigerator/freezer to store the milk. However, significant differences were seen in encouraging mothers to breastfeed in the centers, availability of a written breastfeeding policy, provision of resources to the families, referral to community support, posters or pictures of breastfeeding displayed, and training in breastfeeding support. It is worth noting that for the most part, the training in both settings is on-the-job and informal, rather than formal training sessions. In Australia, it is reported that staff training tends to occur only when there is a breastfed baby in the center, whereas in the United States, training is, perhaps, more available, but such trainings are not available everywhere and not regularly. Rather, trainings are dependent on the context within which the childcare center is located and what is offered by that county or state. The settings also differed in the levels of

Table 1. Comparison of the Findings from Data Collected from Childcare Center Providers in Adelaide, Australia and Wake County, North Carolina

	Adelaide		*Wake County*		
	Total n	n *(%)*	*Total* n	n *(%)*	P *value*
Center has at least one breastfeeding infant	65	46 (70.6)	101	67 (66.3)	0.55
Mothers are encouraged to come to the center and breastfeed their baby[a]	65	62 (95.3)	101	22 (21.7)	< 0.01
The center provides a comfortable place for mothers to breastfeed	65	59 (90.7)	101	96 (95.0)	NS
The center provides a refrigerator/freezer to store human milk	65	65 (100)	101	101 (100)	NS
Center has a written breastfeeding policy that includes encouraging breastfeeding[a]	65	42 (77.8)	101	21 (20.8)	< 0.01
The center provides families with breastfeeding resources[a]	65	61 (93.8)	100	17 (17.0)	< 0.01
Center staff refers families to community resources[a]	60	46 (76.6)	101	1 (1.0)	< 0.01
The center has breastfeeding posters and pictures on the walls	65	35 (53.8)	101	3 (3.0)	< 0.01
Staff receives training in breastfeeding support and promotion[a]	63	21 (33.3)	101	14 (13.9)	< 0.01

[a]Statistically significant at $P < 0.01$.
NS, not significant (did not achieve statistical significance of $P < 0.05$).

availability of resources for parents and in referrals to community breastfeeding support.

One theme that emerged from the qualitative data from both settings is that infant feeding is the parents' choice and that the role of the childcare provider is support that choice, no matter what it is. The result is limited, if any, active support for breastfeeding. The Australian data reveal that, overall, most centers provide breastfeeding support in a passive way rather than actively promoting breastfeeding. The main theme came out of our interviews was that on both sides of the globe, childcare centers consider breastfeeding as a parental choice that should be supported.

Discussion

Given the differences in child health and breastfeeding rates between Adelaide, Australia, and Wake County, North Carolina, significant differences in breastfeeding support in child care were expected. Those identified are most likely a reflection of the overall breastfeeding environments of the two countries, rather than a reflection of guidance or rules, per se. There are other important policy differences by setting: Women in Australia now have up to 18 weeks paid at federal minimum wage,[16] whereas in the United States there is none mandated. (Australia has introduced a comprehensive Paid Parental Leave scheme for new parents who are the primary caretakers of a child born or adopted after January 1, 2011. An eligible person receives taxable payments at the federal minimum wage, currently $543.78 a week, for a maximum period of 18 weeks. In most cases, the person will receive the payment through his or her employer. The Paid Parental Leave was not in place when the data analyzed in this document were collected.) Once they leave maternity care, Australian women receive home visits and lactation support free of charge through the national health system; in the United States, home visits are rare, and most lactation support in the United States is not covered by private or public insurance agencies.

Other differences that may impact childcare practices include aspects of national infant feeding strategies. In Australia there is a national breastfeeding strategy[17] that has led to implementation of supportive interventions. One such activity is the Australian Breastfeeding Association helpline, which receives about 6,000 calls per month.[18]

The new U.S. *Surgeon General's Call to Action to Support Breastfeeding*[19] recommends action on many of the same issues addressed in the Australian document, but it is unclear at this stage how many of the 20 actions suggested will be implemented in the near future. Furthermore, the U.S. national strategy, as reflected in the Women, Infants and Children program, offers free formula to many women, which may influence parental feeding plans.

As a consequence, perhaps, the contents of the national childcare guidance documents reflect different priorities. The Australian Quality Improvement and Accreditation System Quality Practices Guide, published by the National Childcare Accreditation Council, states that breastfeeding is beneficial and encourages providers to have the training and knowledge to support the choice of parents.[20] This contrasts with the U.S. "Caring for Our Children,"[21] which takes a stronger position that breastfeeding is a public health imperative and that childcare providers should take the role of advocating for breastfeeding. The differences may reflect that breastfeeding is normative in Australia and therefore is not seen to merit the strength of language used in the U.S. documents.

Given the above, it is not surprising that the direction of the differences seen in breastfeeding supportive activities in the childcare centers studied seems to be reflective of the national environment of breastfeeding support.

The United States has no guarantee of paid maternity leave, or of breastfeeding support in the health system, as evidenced by the rarity of third-party reimbursement for board-certified lactation consultants. The United States might benefit from the recognition that these national and state policies[22] are less supportive of breastfeeding than those of other industrialized countries. This is especially salient as the documented impact of breastfeeding on infant survival may account for some of the differences seen in infant mortality rates in the two settings. Children born in North Carolina are nearly twice as likely to die in infancy as Australian children and are about half as likely to be breastfed at 6 and 12 months or to be exclusively breastfeeding at 3 months of age, and many of these deaths are caused by illnesses that are reduced in incidence and severity by breastfeeding. Although, certainly, other factors contribute to these mortality figures, given current estimates of the impact of breastfeeding on infant survival, increasing breastfeeding in the United States has the potential to decrease the disparity between settings in infant mortality.[23,24]

In terms of recommendations for action, perhaps it is of note that the most striking commonality across the two settings is the rather passive support, reflected in the fact that child care in both settings (1) provides a place and refrigeration for expressed milk feeding and (2) feels that their role is to support the parent's choice, which is generally made prior to child care accommodation. We posit that, in fact, childcare settings may be an appropriate site for breastfeeding intervention in terms of education and accommodation of breastfeeding families because supportive activities for other healthy behaviors are already considered appropriately placed in the childcare settings.[25]

Limitations

The two sites are not entirely comparable: North Carolina lags behind the United States in terms of breastfeeding and infant mortality, whereas South Australia has breastfeeding rates similar to the rest of the country. In addition, the two surveys were designed independently and for different purposes. Nonetheless, the similarity of construct allows for reasonable discussion of similarities and differences and of related policy implications. Finally, the response rate in South Australia was low at 22%; however, this is not out of line with expectations for an e-mail solicitation of this sort. One recent meta-analysis found a median response rate in such surveys of 26.45%,[26] and another found a mean response rate of 34% with an SD of 22%.[27] Although not unexpected, this level of response will limit generalizability within Australia.

Conclusions

Despite similar GDP and level of development, Australia and the United States present very different pictures of breastfeeding support. Given the U.S. *Surgeon General's Call to Action to Support Breastfeeding* action point 16, "Ensure that all

child care providers accommodate the needs of breastfeeding mothers and infants,"[19] perhaps it is time to recognize the need for increased breastfeeding support throughout the social structures that support mothers in the United States and consider not only how they might support breastfeeding, but also what barriers they create for those who wish to more optimally feed their children.

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Disclosure Statement

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