

Original Article

Breast-feeding and weaning practices of an urban community of indigenous Australians

Noel Hayman¹ MMBS, MDH, Jessie Kanhutu¹ MCN, Samantha Bond¹ and Geoffrey C. Marks² PhD

¹ *Indigenous Health Program, Brisbane, Queensland Health, Queensland, Australia*

² *Nutrition Program, University of Queensland, Brisbane, Queensland, Australia*

The aim of this survey was aimed to determine current breast-feeding and infant-feeding practices among a community of urban indigenous Australians in Brisbane, the largest city of Queensland, in Australia. In mid-1998, a questionnaire was administered to 61 mothers with infants up to the age of 2 years. Breast-feeding had been initiated by 59% (95% CI: 46.7–71.3) of the mothers; however, by 4 months after birth only 24.6% (95% CI: 13.8–35.4) of the mothers were breast-feeding. Only 19.7% (95% CI: 9.7–29.7) of the infants were solely breast-fed during their first 4 months of life. Of the infants in the survey who were older than 6 months, only 25% (95% CI: 18.2–31.8) had been introduced to solid food after 6 months. The current diet of 80% (95% CI: 44.9–100) of infants aged 4–6 months and 37.5% (95% CI: 13.8–61.2) of infants aged 0–3 months included solids. This survey has indicated the need to appropriately promote breast-feeding as the best source of nutrition for new babies. The initiation rate of breast-feeding is low compared with other Australian rural indigenous and urban indigenous communities. Barriers to continued breast-feeding should also be addressed, as well as appropriate weaning practices.

Key words: Aborigines and Torres Strait Islanders, breast-feeding, infants, urban, weaning practices.

Introduction

Traditionally, Aboriginal mothers breast-fed their babies exclusively for at least 6 months and continued to breast-feed for up to 4 years.¹ The prevalence and duration of breast-feeding in more traditional communities are still very high.² Recently, a survey of indigenous mothers in Melbourne has indicated a high rate of breast-feeding initiation, but also a high rate of early cessation of breast-feeding.³

The aim of this survey was to describe current breast-feeding and weaning practices and to identify factors related to these among indigenous families in an Australian urban community. The ultimate purpose was to inform the development of appropriate interventions by using community participation to improve infant-feeding practices.

Methods

The survey was conducted in Inala, a suburb of Brisbane which is located in south-east Queensland on the east coast of Australia. The total population of Inala is 13 284, of which 993 (8%) are identified as indigenous Australians.

The survey was conducted from March to June 1998 and was supported by Aboriginal and Torres Strait Islander community groups in the area. Ethics approval for the survey was granted by the Behavioural and Social Sciences Research Ethics Committee (University of Queensland). The survey aims and requirements were explained to each participant and a signed consent form was required before participation.

With the collaboration of the Inala Community Health Centre, and community support service centres, a register of all known indigenous households in Inala was compiled. An indigenous community worker who had lived in the commu-

nity for most of her life identified eligible subjects from the register. To be eligible, a mother was required to have at least one child less than 2 years of age, whom she identified as an indigenous Australian. Where a mother had more than one child who was less than 2 years of age, questions relating to a child focused on her youngest child as the reference. A total of 68 mothers were identified as eligible from the register.

The collection of data was conducted by a project officer (JK) and an indigenous community worker (SB). A questionnaire was formulated and modified according to the findings of pilot-testing. The questionnaire took approximately 20 min to administer face-to-face.

Data analysis was conducted using EpiInfo Version 6.0 (Centers for Disease Control and Prevention, Atlanta, GA, USA, 1996) and 95% confidence intervals were calculated after estimation of the standard error of each proportion.⁴

Results

The total number of participating mothers was 61. Three mothers declined to be interviewed and four mothers could

Correspondence address: Noel Hayman, Department of Social and Preventive Medicine, Centre for General Practice, University of Queensland, Herston Road, Herston, Queensland 4029, Australia.
Tel: 61 7 3275 5444; Fax: 61 7 3879 1018
Email: n.hayman@SPMED.uq.edu.au
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Table 1. Characteristics of study subjects

	<i>n</i> (%)
Ethnic background of mother	
Aboriginal	49 (80.3%)
Torres Strait Islander	4 (6.7%)
Other	8 (13.3%)
Age group	
< 20 years	9 (14.8%)
20–29 years	38 (62.3%)
30–39 years	14 (23.0%)
40+ years	–
Marital status	
Single	29 (47.5%)
De facto	19 (31.7%)
Married	8 (13.1%)
Separated	5 (8.2%)

Table 2. Current feeding practice by age of the youngest infant

Feeding practice	Age (months)				
	0–3	4–6	7–12	13–24	All ages
Breast milk only	4	0	0	0	4 (6.6%)
Breast milk + solids + drinks	3	1	0	0	4 (6.6%)
Breast and cow's milk + solids + drinks	0	0	0	1	1 (1.6%)
Cow's milk + solids + drinks	0	0	5	21	26 (42.6%)
Cow's milk + formula + solids + drinks	1	1	1	3	6 (9.8%)
Formula only	2	1	0	0	3 (4.9%)
Formula + solids	0	1	1	0	2 (3.3%)
Formula + drinks	4	0	0	0	4 (6.6%)
Formula + solids + drinks	2	1	6	2	11 (18.0%)

The percentage numbers are calculated using the total number of infants in the study (61).

not be located at their last known address, despite at least three attempts to do so. Nine of the mothers in this study (14.8%; 95% CI: 5.9–23.7) were teenagers and three of these had at least two children aged less than 2 years. More than 50% of the mothers in this study lived in households with more than six members. Just over half of the mothers (55.7%; 95% CI: 43.2–68.2) were single or separated.

The participating mothers had a total of 72 children less than 2 years of age. Characteristics of the participating mothers are shown in Table 1.

Breast-feeding was initiated by 36 of the mothers (59.0%; 95% CI: 46.7–71.3). Only 50% (95% CI: 23.8–76.2) of mothers who were 30 years or older initiated breast-feeding compared to 61.7% (95% CI: 47.8–75.6) of those younger than 30 years of age.

Of the 36 mothers who commenced breast-feeding their youngest child, eight (22.2%; 95% CI: 8.6–35.8) stopped breast-feeding within 14 days and a further six (16.7%; 95% CI: 4.5–28.9) stopped breast-feeding by 3 months. At 4 months after birth, only 15 mothers were breast-feeding (24.6% of the mothers; 95% CI: 13.8–35.4). Only 12 (19.7%; 95% CI: 9.7–29.7) of the infants surveyed were solely breast-fed during their first 4 months of life.

The current food intake by age of the youngest children of the 61 mothers is shown in Table 2. Of the 40 infants older

than 6 months, 10 (25.0%; 95% CI: 11.6–38.4) were introduced to solid food after the age of 6 months. Confectionery and pacifiers with sweetener were used by 13 (21.3%; 95% CI: 11.1–31.5) of the mothers to settle their children. The children of 45 (73.8%; 95% CI: 62.8–84.8) of the mothers were fed with a bottle containing milk or juice just before bed. The children of 37 (60.7%; 95% CI: 48.4–73.0) of the mothers were allowed sweet drinks.

Discussion

This study was supported by the community and conducted from the community health centre, which shows that this study was strengthened by community support. A community member was part of the interviewing team for all interviews. The community is geographically well-defined and the list of eligible mothers was constructed with the help of the community.

The rate of breast-feeding initiation in this survey was 59%. In other studies of Australian indigenous populations in urban areas, the rate is much higher; for example, 82% in an older study from Perth⁵ and 85% in a more recent survey in Melbourne.³ According to data from the 1995 National Health Survey which examined feeding practices for children less than 2 years of age, almost 82% of Australian mothers were breast-feeding on discharge from hospital.⁶ A study of a single Brisbane maternity hospital in 1997 found that 91% of new mothers had breast-fed their babies at least once.⁷

Although the initiation rate of breast-feeding was low in the reported survey, 42% of the mothers who commenced breast-feeding were still breast-feeding at 3 months. In the Melbourne Aboriginal community survey, 50% of the babies were being breast-fed at 3 months and 32% were being breast-fed at 6 months (that is, 38% of those who commenced breast-feeding).³ From analysis of the 1995 National Health Survey, 63% of children were receiving breast milk at 3 months and 46% of children were receiving breast milk at 6 months (56% of those who commenced breast-feeding).⁶ Of a sample of children born in a Brisbane maternity hospital in 1997, 50% were still being breast-fed by the age of 6 months (55% of those who commenced breast-feeding).⁷ While encouraging an appropriate duration of breast-feeding is an important part of a breast-feeding promotion campaign, for the indigenous community we surveyed it seems that raising the rate of infants beginning on breast milk is an important aim.

The early introduction of solids was common for the infants in our survey. Only 25% of children were introduced to solids after the age of 6 months. Of those infants who were currently aged 0–3 months, 37% were regularly fed solids, and of those aged 4–6 months, 80% were regularly fed solids. The Melbourne indigenous community survey also found that the early introduction of solids was common. A total of 51% of the infants in their sample had received foods other than breast milk or formula when they were younger than 4 months of age.

The high proportion of infants who were allowed sweet drinks generally and given bottles of milk or juice immediately prior to bed suggests that promotional activities to avoid dental caries would be useful in this community.

Unlike the indigenous community of Melbourne, special efforts are needed in this community to persuade women that

breast-feeding is best for their children. The rates of breast-feeding initiation are low, although it is not known whether they are falling or have been low for some time. Barriers to continued breast-feeding should also be addressed, as should appropriate infant-feeding practices. To have the highest chance of success, breast-feeding and infant-feeding promotion programs should be developed within the community with due consideration given to attitudes and knowledge of the community members. The results of this survey provide baseline data that can be used to assess the effectiveness of programs to improve infant feeding. Importantly, this survey has indicated the value of local information collection and that the generalisation of survey results from other urban indigenous populations in Australia may be misleading.

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