

The role of ethnicity in determining access to and acceptability of home visiting for early childhood health and wellbeing

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Abstract

This paper explores access to and acceptability of home visiting for early childhood health and wellbeing among the New South Wales population. The study examined demographic and social characteristics of children and their families to identify the factors that predicted home visiting by a community health nurse or volunteer, as well as the level of acceptability of home visiting as a strategy for improving child health. The data were extracted from the 2001 NSW Child Health Survey and a total of 3570 respondents who reported having a child aged 4 years or under were included in the study. The results show that culturally and linguistically diverse populations were less likely to be visited by a nurse or volunteer (adjusted odds ratio (OR), 0.78; 95% CI, 0.64–0.97), and when they were visited were more likely to find the visit “uncomfortable” or “very uncomfortable” (adjusted OR, 1.54; 95% CI, 1.19–1.99). Other factors associated with acceptability included the age of both children and mothers, education levels of parents and home smoking status. For home visiting to be effective in promoting child health, these factors must be considered.

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What is known about the topic?

Home visiting for disadvantaged families is widely promoted as a strategy to improve child health. However, little is known about the factors that affect access to home visiting in Australia.

What does this paper add?

The study found that while home visiting has been generally well received, non-English speaking families reported a lower participation rate in the home visiting program with a higher proportion showing some negative attitudes.

What are the implications for practitioners?

Differences in access to home visiting have important implications for the quality of health care received by children and their families, potentially increasing the utilisation of other health care services and health inequities.

HOME VISITING PROGRAMS during the antenatal period and first 2 years of life have been widely promoted as a strategy for improving the health and wellbeing of disadvantaged infants, children and families. When targeted appropriately, home visiting programs are a cost-effective method of preventing many health and social problems.^{1–4}

Reflecting the high regard in which it is held by policy makers and academics, the New South Wales Government, through the Families First Initiative, is committed to providing universal home visiting programs to achieve statewide goals in child health and development.⁴ This involved introducing programs through all area health services and other family and community agencies, providing early childhood nursing support and advice to all new parents within each area health service jurisdiction.

However, studies have found that programs that aim to achieve universal access, such as the NSW initiative, often fail to reach at-risk groups

I Questions asked in the survey about the home visit and respondents' feelings towards the visit

Have you ever had someone, such as a nurse or a volunteer, visit you in your home to provide you with support or advice in caring for child?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

If yes: Which of the following best describes how you feel about having people visit you in your home to provide support and advice? (read options)

- ☐ I was happy to have someone visit me in my home
- ☐ I found having someone visit my home uncomfortable at first but later I found it OK
- ☐ I was uncomfortable having someone come to my home
- ☐ Don't know
- ☐ Refused

If no: How comfortable would you feel about having people visit you in your home to provide support and advice in caring for child? Would you feel: (read options)

- ☐ Very comfortable
- ☐ Comfortable
- ☐ Uncomfortable
- ☐ Very uncomfortable
- ☐ Don't know
- ☐ Refused

which are arguably the populations that are most in need of these types of interventions.^{5,6} Yet the factors that inhibit or facilitate access to home visiting are not well understood, and, thus, how access to home visiting can be maximised is not clear. To inform the process of achieving universal access to home visiting, this study sought to identify barriers to access by examining the level of access and acceptability in culturally and linguistically diverse (CALD) populations in NSW. The level of access and acceptability of CALD populations to home visiting is important, as it has been found that CALD groups often have different patterns of health care utilisation⁷ and receive poorer levels of care than the broader population.⁸ In addition, they are more likely to

attend acute rather than primary care,⁹ often present late in disease¹⁰ and have lower levels of health care utilisation.¹¹ With regard to factors that facilitate access to health care services, home visiting interventions may be especially vulnerable to ethnic barriers, as CALD groups can be difficult for health services to engage and home visits may be perceived as intrusive by CALD communities.¹² Hence, lower rates of home visiting might be expected when the broader population is compared with CALD groups and the accessibility of home visiting for CALD groups raises important issues with regard to access for the whole population.

In this study we explored the utilisation and acceptability of home visiting by nurses and volunteers for ethnic groups in NSW. This was to determine whether there were ethnic differences in levels of utilisation, and if so, whether this was related to a lack of acceptability. If home visiting programs are to improve their reach and accessibility, factors that determine access need to be better understood.

Methods

The 2001 NSW Child Health Survey was conducted using computer assisted telephone interviews with a representative sample of households that included children aged 0–12 years.¹³ The survey aimed to provide information on health behaviour, health status and access to health services for children in NSW. A total of 9425 respondents completed interviews; 84.3% were mothers. Interviews were conducted between March and September 2001. The study achieved a response rate of 84.2% of all eligible respondents. A full description of the methods has been published previously.¹³

Study sample and variables

We extracted a component of the NSW Child Health Survey data through the Health Outcomes and Information Statistical Toolkit (HOIST) database for this investigation (NSW Department of Health, Epidemiology and Surveillance Branch, Sydney). The data consist of the responses of

2 Distribution of the study respondents and comparison of characteristics between the families that had a home visit and those that had never had one

Characteristic	Respondents (weighted) (n=3570)	Whether families had a visit or not		
		Yes (n=1186)	No (n=2384)	P value*
Age of child (years)				<0.001
<1	18.8%	25.1%	15.7%	
1	19.4%	23.5%	17.3%	
2	19.9%	19.2%	20.3%	
3	21.6%	19.0%	22.9%	
4	20.2%	13.2%	23.7%	
Sex of child				0.77
Boys	51.8%	51.4%	51.9%	
Girls	48.2%	48.6%	48.1%	
Age of mother (years)				<0.001
≤25	10.7%	14.0%	9.1%	
26–30	24.7%	26.5%	23.8%	
31–35	31.9%	32.9%	31.4%	
36–40	25.1%	21.3%	27.0%	
>40	7.5%	5.2%	8.6%	
Education level of mother				0.11
Up to Year 10	28.9%	28.3%	29.3%	
HSC/TAFE	38.8%	42.9%	37.3%	
Tertiary	32.2%	30.9%	33.1%	
Education level of father				0.51
Up to Year 10	27.1%	26.2%	27.5%	
HSC/TAFE	41.2%	42.9%	40.4%	
Tertiary	31.7%	30.9%	32.1%	
Employment status of mother				0.45
Full time	14.4%	13.1%	15.0%	
Part time	28.7%	28.0%	29.0%	
Unemployed	2.0%	2.0%	1.9%	
Home duties	51.2%	52.5%	50.5%	
Other	3.8%	4.4%	3.6%	
Employment status of father				0.34
Full time	86.2%	84.3%	85.2%	
Part time	3.7%	3.3%	3.8%	
Unemployed	3.9%	4.1%	3.9%	
Home duties	1.3%	1.4%	1.2%	
Other	4.9%	6.9%	5.9%	
Received parenting payment				0.25
Yes	38.5%	39.7%	37.8%	
No	61.5%	60.3%	62.2%	
Aboriginal child				0.38
Yes	3.4%	3.8%	3.2%	
No	96.6%	96.2%	96.8%	
Language spoken at home				0.02
English	79.5%	81.8%	78.4%	
Other	20.5%	18.2%	21.6%	
Area of residence				0.21
Urban	78.8%	77.6%	79.4%	
Rural	21.2%	22.4%	20.6%	
Smoke-free home				0.64
Yes	67.3%	66.8%	67.5%	
No	32.7%	33.2%	32.5%	

*Based on χ^2 tests.

3570 participants, who reported having children aged 0–4 years. Box 1 lists the survey questions used in assessing access and attitudes to the home visiting in our analysis. Two dichotomous variables were the major outcome variables for the statistical analysis. The first variable was created from responses to a question about whether parents had received a home visit from a nurse or volunteer during the first months after their child was born. A second variable concerned whether participants had found the visit acceptable.

The accessibility and acceptability of home visiting was examined by demographic characteristics, which included Aboriginality, age of child(ren), mothers' age, education qualifications, employment status, language spoken at home, area of residence, whether parents were in receipt of Parenting Payment, and if they had a smoke-free home.

In a previous study Parenting Payment was found to be strongly associated with socio-economic status as measured by the Socio-Economic Index For Areas (SEIFA).¹⁴ Since Parenting Payment is means tested, it may be used as a proxy indicator of socio-economic status.

Statistical analysis

In order to control for differences in the age structure between the survey sample and the NSW population, weighted data were used in this analysis. The weights were calculated based on the probability of an individual being selected for a sample from the population of NSW in 2001, according to household size and age and sex characteristics as determined by the ABS Census.¹⁵ This is a common standardisation technique used to calculate population parameters in studies that use samples.¹³

In the bivariate analysis, χ^2 tests were used to compare indicators between those who received home visiting and those who did not. Similar analyses were conducted for exploring acceptability. Logistic regression analyses were conducted to determine which factors were the strongest determinants of access to home visiting, and its acceptability. In these analyses all variables that were significant at the $P < 0.1$ level in univariate analysis

were entered into models in a single step. Adjusted odds ratios (ORs) with 95% confidence intervals were calculated as a measure of the strength of association, and all data were analysed using SPSS for Windows, release 12.0 (SPSS Inc, Chicago, Ill, USA).

Results

The study investigated a sample of 3570 parents with children aged 0–4 years in 2001. Most respondents interviewed were women (86.9%) who were aged 32 years on average. Education qualifications were found to be the same for both men and women, with a third being tertiary educated. For women, 14% worked full-time and 29% part-time (Box 2), while 86% of men were employed full-time. Seventy-nine per cent of respondents lived in urban areas; one-fifth spoke a language other than English at home; 37% received Parenting Payment; 3% identified as Aboriginal; and 67% reported that they had smoke-free homes.

Access to home visiting

Among the sample, one third reported having had a home visit by a nurse or a volunteer related to an infant's development. Box 2 compares demographic characteristics of those who had received a home visit to those who did not over the recall period. Differences were found in the age of children, the age of parents and language spoken at home. Younger women, parents with younger aged children, or those who spoke only English at home were significantly more likely to have received a home visit by a nurse or volunteer than other groups. There were no statistically significant differences in education qualifications, employment status, area of residence, home smoking status or Aboriginality, with regard to access to home visiting.

The logistic regression analyses showed that after adjusting for other potential confounding factors, age of child and language spoken at home were associated with whether parents received a home visit. In this regard, parents with children aged 4 years were less likely to report having ever

3 Factors associated with acceptability of the home visit among respondents who had never had a visit, using logistic regression analysis

Characteristic	% of respondents who reported feeling "uncomfortable" or "very uncomfortable" about the home visit (n=524)	Adjusted odds ratio (95%CI)*	P value
Age of child (years)			0.01
<1	17.5%	1	
1	18.3%	0.99 (0.66–1.49)	
2	21.8%	1.50 (1.04–2.17)	
3	24.8%	1.23 (0.85–1.79)	
4	28.3%	1.65 (1.14–2.37)	
Age of mother (years)			<0.001
≤ 25	36.8%	1	
26–30	25.0%	0.83 (0.56–1.24)	
31–35	18.5%	0.58 (0.39–0.86)	
36–40	17.0%	0.46 (0.30–0.70)	
>40	18.4%	0.62 (0.37–1.01)	
Education level of mother			0.06
Up to Year 10	30.3%	1	
HSC/TAFE	22.8%	1.11 (0.84–1.47)	
Tertiary	13.7%	0.74 (0.52–1.05)	
Education level of father			0.007
Up to Year 10	30.5%	1	
HSC/TAFE	19.0%	0.65 (0.49–0.86)	
Tertiary	14.8%	0.66 (0.47–0.94)	
Employment status of father			0.55
Full time	20.0%	1	
Part time	30.8%	1.43 (0.84–2.44)	
Unemployed	33.3%	1.31 (0.76–2.25)	
Home duties	25.9%	0.95 (0.33–2.72)	
Other	30.2%	1.23 (0.73–2.16)	
Received parenting payment			0.94
No	20.3%	1	
Yes	25.7%	1.12 (0.78–1.26)	
Aboriginal child			0.45
No	21.9%	1	
Yes	32.7%	1.29 (0.66–2.56)	
Language spoken at home			0.001
English	21.2%	1	
Other	26.3%	1.54 (1.19–1.99)	
Smoke-free home			0.003
Yes	19.0%	1	
No	29.1%	1.42 (1.13–1.80)	

* Adjusting other variables in the table.

had a visit (adjusted OR, 0.54; 95% CI, 0.35–0.71), as were those who spoke a language other than English at home (adjusted OR, 0.36; 95% CI, 0.21–0.57).

Acceptability of home visiting

Among those who had received a visit, 87% found the visit to be acceptable, while 10% felt “uncomfortable” with it at the time, but on reflection found the visit to be beneficial.

Of the 67% who reported not having received a visit, 22% said that they would feel “uncomfortable” or “very uncomfortable” about being visited by a nurse or volunteer in their home. In bivariate analyses, the acceptability of home visiting was related to the child(ren)’s age ($\chi^2 = 103.3$; $df = 4$, $P < 0.001$), the age of mothers ($\chi^2 = 48.2$; $df = 4$; $P < 0.001$) and Aboriginality ($\chi^2 = 4.9$, $P = 0.03$). Education levels, language spoken at home, and smoke-free home status were also found to be significantly associated with the acceptability of home visiting.

A logistic regression analysis of the acceptability of home visiting is presented in Box 3. Factors that were found to be significant were the age of female parents, education qualifications of male parents, smoke-free home status and language spoken at home. In particular, younger aged female parents and men with lower education qualifications were associated with visiting being unacceptable. In addition, parents from households that were not smoke-free, and those who spoke a language other than English at home were more likely to find home visiting unacceptable (adjusted OR, 1.42; 95% CI, 1.13–1.80; and adjusted OR, 1.54; 95% CI, 1.19–1.99, respectively).

Discussion

This study found that home visiting by nurses and volunteers has been well received in NSW since its introduction, with most respondents finding the visits acceptable. However, access was poorer for CALD group and they were more likely to find home visiting less acceptable. The lower level of access by CALD groups could be a result

of the lack of availability of culturally appropriate services, which may make CALD groups less likely to seek out or receive home visiting interventions. With regard to the level of acceptability, this may be a reflection of a lack of familiarity with health services in Australia, or a suspicion about the purpose of the visit.

The age of children and the age of parents were also found to be important in the level of acceptability. These findings suggest that while most women appreciated the support of home visitors when the child was first brought home, as the child grew parents felt they had less need for professional outside support in their parenting.¹⁶ For younger women, the stigmatisation of young motherhood may have made the home visiting less acceptable.¹⁷

In addition, the study found that parents with lower levels of education were less accepting of home visiting. This may relate to suspicion in lower socio-economic groups of home visiting, perhaps related to their own experience of child development or child protection professionals (who are more commonly encountered in disadvantaged populations).¹⁸ Home visiting was also less welcome in smoking households, which may reflect the increasing general social taboo about smoking around children that makes home visiting potentially problematic for these parents.

Since these data were collected, the NSW Government has embarked on an ambitious plan to provide home visiting to all new parents on a universal basis.⁴ These findings suggest that if the program is to be successful the institutional and other barriers related to home visiting that lead to poor levels of access for CALD groups and other disadvantaged populations must be addressed.

An interesting finding was the higher prevalence of smoking in households in the study than in the NSW population.¹⁹ At first glance, this may be pointing towards a relationship between parenthood and smoking. However, this may be more a reflection of the age of new parents in NSW than of a causal relationship between parenting and smoking, as younger people are more likely to smoke and to be new parents.²⁰ This points to the need for tobacco control and

smoke-free environment messages to be incorporated into home visiting interventions.

With regard to the limitations of the study, the data were collected in 2001 and significant changes in home visiting programs have occurred in the region since the study was conducted.⁴ Most importantly, the size of the home visiting program has grown considerably, leading to greater accessibility. In the process of increasing reach, some of the barriers to more frequent home visiting to CALD families discussed here may have been addressed. Secondly, the study was not able to differentiate among CALD populations. Thus, the lower rate of utilisation may not be a characteristic of all CALD populations.

Policy implications

The lower participation in home visiting of CALD populations in NSW highlights the importance of addressing parent and health care system factors associated with access to home visiting. Programs that are culturally appropriate and less intrusive or confronting may be more successful in reaching parent and infant populations.

Conclusion

The study suggests that early childhood home visiting programs have been generally well received in NSW. However, lack of access as a result of a lack of acceptability needs to be addressed if home visiting is to reach the total target population. Differences in access and acceptability for CALD groups have important implications for health as the failure to obtain support during infancy could lead to health or behavioural problems in later life.

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Competing interests

The authors declare that they have no competing interests.

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