

The general health of a cohort of Aboriginal children (0–7 years) in Sydney

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In both urban and rural locations, the health of Indigenous children is worse than that of non-Indigenous Australian children.¹ General data on the health of urban Indigenous children are scarce.² Here we describe reports by parents about specific common childhood illnesses in urban Aboriginal children and parental responses to these illnesses.

The data were collected from a birth cohort of 149 Aboriginal children and their parents (Gudaga Study, recruited 2005–2007),³

using best practice methods for research in an Aboriginal community.⁴ During semi-annual structured interviews with an Aboriginal project officer, parents provided information about respiratory tract infections (“a cold, runny nose, cough, bronchitis, or chest infection”), gastrointestinal conditions (“vomiting and/or diarrhoea”), ear health (“problems with his/her ears”), asthma/wheeze, and tonsillitis that had been experienced by their child in the preceding month. The parent’s response to these conditions was coded as “gave medication” or “sought professional advice”;

Summary of the number of children with illness in previous month and parent report of actions taken to treat, by condition and child's age

Age group	Children assessed [†]	Reported illness in previous month		Reported parental response to illness*			
		Children affected by illness	Total reports of illness	Any action taken	Gave medication	Sought professional advice	Other
Respiratory tract infections (recorded from 6 months)							
0.5–1.0 year [‡]	141	126 (89%)	200	—	—	—	—
1.5–3.0 years	137	135 (98%)	374	241 (64%)	158 (42%)	125 (33%)	3 (1%)
3.5–5.0 years	133	123 (92%)	288	222 (77%)	236 (82%)	174 (60%)	2 (1%)
5.5–7.0 years	127	72 (57%)	124	94 (76%)	80 (64%)	51 (41%)	5 (4%)
Ear health (recorded from 6 months)							
0.5–1.0 year	141	28 (20%)	33	18 (54%)	16 (48%)	16 (48%)	0
1.5–3.0 years	137	50 (36%)	70	64 (91%)	55 (79%)	59 (84%)	2 (3%)
3.5–5.0 years	133	47 (35%)	59	49 (83%)	41 (70%)	48 (81%)	3 (5%)
5.5–7.0 years	127	18 (14%)	22	18 (82%)	16 (73%)	17 (77%)	2 (9%)
Gastrointestinal tract conditions (recorded from 6 months)							
0.5–1.0 year [‡]	141	78 (55%)	101	—	—	—	—
1.5–3.0 years	137	91 (66%)	148	52 (35%)	19 (13%)	46 (31%)	3 (2%)
3.5–5.0 years	133	59 (44%)	81	38 (47%)	13 (16%)	35 (43%)	2 (2%)
5.5–7.0 years	127	27 (21%)	33	20 (61%)	11 (33%)	11 (33%)	3 (9%)
Asthma/wheeze (recorded from 2 years)							
0.5–1.0 year	—	—	—	—	—	—	—
1.5–3.0 years	134	46 (34%)	68	59 (87%)	54 (79%)	42 (62%)	1 (2%)
3.5–5.0 years	133	45 (34%)	69	62 (90%)	62 (90%)	40 (58%)	0
5.5–7.0 years	127	21 (16%)	37	34 (92%)	33 (89%)	23 (62%)	0
Tonsillitis (recorded from 2.5 years)							
0.5–1.0 year	—	—	—	—	—	—	—
1.5–3.0 years	129	11 (8.5%)	12	12 (100%)	11 (92%)	9 (75%)	1 (8%)
3.5–5.0 years	133	25 (19%)	31	24 (77%)	22 (71%)	21 (68%)	0
5.5–7.0 years	127	10 (7.9%)	13	11 (85%)	11 (85%)	9 (69%)	0

* Percentages are relative to the total number of illnesses reported (may contain several reports from a single child). For example, between the ages of 5.5 and 7 years, 72 children reported 124 separate instances of respiratory tract infections; action was taken on 94 occasions (76% of 124). “Sought professional advice” included “saw the doctor/GP”, “went to the chemist” and “went to hospital/emergency”. “Gave medication” included prescription and non-prescription medications. “Other” included seeking advice from family and friends. † The numbers vary by condition because of variations in the number of interviews. ‡ Parents were not asked during the 6- and 12-month interviews about what actions were taken. ◆

96% of those who sought professional advice reported having seen their doctor or general practitioner. Parents were also asked to rate their own general health and that of their child on a 5-point Likert scale. Data were analysed according to the child's age group at interview. We did not attempt to verify parental responses or to justify the responses reported.

The general characteristics of the cohort have been described elsewhere.³ About 65% of mothers were of Indigenous heritage, 22% were less than 20 years old when they first gave birth, 11% had post-school qualifications, and 58% had a partner.

Parents frequently reported the listed childhood illnesses, and that they had given medication or sought professional advice (Box). While ear health problems, asthma or wheeze, and tonsillitis were less frequently reported than respiratory tract infections and gastrointestinal problems, they were more likely to elicit a parental treatment response. The mean parental score for their children's general health ranged between 3.6 (standard deviation [SD], 1.2) and 4.6 (SD, 0.7) across the 7 years each child was followed; scores for the parents' own health ranged between 3.3 (SD, 1.2) and 3.7 (SD, 1.0). Child and own health scores at each interview were associated (linear mixed model, $P < 0.001$), and the overall means were correlated (Pearson's $r = 0.52$; $P < 0.001$).

This is one of only a few reported studies to systematically track the prevalence of common childhood illnesses in a cohort of urban Aboriginal children, and to explore their general health and that of their parents. Although it was a small cohort study, its strength lies in its recruitment of a population of urban Aboriginal children, the high rates of follow-up, and the systematic description of a range of

general child health problems across early childhood. The reported problems varied over time, reflecting the development of the survey and the children.

Our findings indicate that parents responded to their children's health problems by seeking professional advice or giving medication. Although the poorer general health of Indigenous Australian adults is recognised,^{1,2} the correlation between parent-rated adult and child health scores highlights the importance of ongoing programs for improving the general health of Indigenous Australian families. National programs that support local organisations and community development, such as Close the Gap,⁵ require sustained support in both urban and rural communities.

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Ethics approval: This study was approved by the Human Research Ethics Committees of the Aboriginal Health and Medical Research Council (references, 621/07 and 679/11) and the South West Sydney Local Health District (references, 04/009 and HREC/10/LPOOL/202). Parents provided written consent at recruitment and 12 months after study completion. Access to the original data requires consent from the Tharawal Aboriginal Community and Aboriginal Health and Medical Research Council Human Research Ethics Committee.

Competing interests: No relevant disclosures. ■

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