# The Western Australian Aboriginal Child Health Survey: findings to date on adolescents

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## ABSTRACT

- This state-wide Aboriginal community child health survey, the first of its kind in Australia, describes physical and mental health and their antecedents in Western Australian Aboriginal children and young people.
- Aboriginal young people had significantly more physical and mental health problems and were more likely to engage in lifestyle risk factors than non-Aboriginal young people.
- Aboriginal young people tend to be caught up in a cycle of disadvantage that includes family and community factors as well as recent history, facilitating their making less optimal life choices, thereby perpetuating the cycle.
- A coordinated approach will be required to break this cycle, in which appropriately and sympathetically provided medical attention is necessary but not sufficient.


MJA 2005; 183: 433–435

Despite considerable evidence that Australian Aboriginal children and young people have more health problems than their non-Aboriginal counterparts,[1] there has, until now, been no comprehensive survey of the factors that may account for this difference. The Western Australian Aboriginal Child Health Survey (WAACHS) is the first descriptive survey of physical and mental health and their antecedents in Aboriginal and Torres Strait Islander children and young people. (The survey used the term "Aboriginal" to encompass both Aboriginals and Torres Strait Islanders, and "children" included all those under 18 years at the time of the survey.) The survey was conducted between May 2000 and June 2002. At 30 June 2001, there were 29 817 Aboriginal children under the age of 18 years in Western Australia, representing about 6% of the WA population for this age group (and 45% of the total WA Aboriginal population).

The objective of the WAACHS was to identify developmental and environmental factors that support positive physical, social, emotional and developmental health outcomes in Aboriginal children aged 0–17 years. Planning for the WAACHS, which involved extensive Aboriginal community consultation and collaboration, took 8 years, but this long process was rewarded by high response rates. Personal, family and community data were collected from the carers of 5289 Aboriginal children in WA. To allow estimates for the entire WA Aboriginal population aged under 18 years, each observation was weighted by sex, age and level of relative isolation (LORI) of residence (a measure of remoteness designed specifically to describe the circumstances of Aboriginal people living in remote areas).

Of five planned reports arising from the study, the first on physical health was published in 2004,[2] and the second on social and emotional wellbeing was published in April 2005.[3] These reports give details of the survey methodology. Subsequent reports on education, family and community health, and justice are planned.

In the 1993 Western Australian Child Health Survey (WACHS),[4-6] Aboriginal children were largely excluded on logistical grounds. The data from the WACHS can now be used to provide appropriate comparisons for many of the observations of the WAACHS. On the other hand, several factors that are more prominent in Aboriginal populations are likely to influence health and wellbeing. Those identified in the WAACHS include:[2,3]

***Remoteness:*** Ten per cent of all Aboriginal children lived in areas of extreme isolation, 44% lived in areas with some level of isolation, and 34% lived in Perth (no isolation);
***Forced separation or forced relocation:*** Just over two in every five children were in households affected by forced separation or forced relocation of at least one primary or secondary carer or grandparent;
***Major life stressors:*** The lives of a high proportion of Aboriginal children were affected by death, separation and divorce, with 6% of children aged 0–3 years, increasing to 20% of those aged 12–17 years, being cared for by someone other than their original parent(s); and
***Financial strain:*** Many Aboriginal families were coping with financial strain, with 44% reporting that they only had enough money to get through to the next payday, and only 5% being able to save consistently.

## Summary of findings for the age group 12–17 years

Of the 5289 children studied, 1480 were aged 12–17 years. Carer reports were obtained for 1399 and self-reports from 1073. Among those completing self-reports, 81 did not have a carer report. Carer reports show that young people who completed a questionnaire differed from those who did not with respect to age, sex, LORI and social and emotional wellbeing. Data were again weighted for age, sex and LORI to obtain rates applicable to the 9100 Aboriginal 12–17 year olds estimated by the Australian Bureau of Statistics to reside in WA in June 2001.

Key findings for Aboriginal young people 12–17 years old related to physical health (Box 1), health risk factors (Box 2), sexual knowledge and experience (Box 3), and emotional and behavioural wellbeing (Box 4) are shown. If comparable data were available, comparisons are made with results of the WACHS.

Our survey confirms that the physical health of Aboriginal young people lags behind that of their non-Aboriginal peers. The

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### 1 Health of Aboriginal young people aged 12–17 years

- *Infections:* Recurring infections involving the ear, skin and/or gastrointestinal tract occurred in 23.6% (95% CI, 20.7%–26.6%) of young people
- *Sequelae of recurrent ear infections:* Abnormal hearing occurred in 6.9% (95% CI, 5.5%–8.4%), unintelligible speech in 4.8% (95% CI, 3.3%–6.5%), difficulties in saying certain sounds in 4.3% (95% CI, 3.4%–5.5%), and learning difficulties in 9.6% (95% CI, 7.7%–11.9%) of young people
- *Asthma:* Ever having asthma was reported by 24.4% (95% CI, 21.4%–17.6%) of young people, of whom 12.9% (95% CI, 10.8%–15.3%) used medication, and these rates were inversely related to geographic isolation. This compared with 17.3% in non-Aboriginal 12–16 year olds, of whom 8.7% used asthma medication, with no association with area of residence
- *Vision:* 11.3% (95% CI, 9.1%–13.9%) of Aboriginal young people had abnormal vision and 7.8% wore contact lenses or glasses, compared with 20.7% and 16%, respectively, in non-Aboriginal 12–16 year olds. The prevalence of abnormal vision decreased as the level of relative isolation increased
- *Oral health:* 45.6% (95% CI, 42.1%–49.2%) of young people had decayed, missing or filled teeth. The prevalence of poor oral health decreased with increasing isolation of residence
- *Contact with health care:* Compared with non-Aboriginal children, Aboriginal young people had less contact with all types of health professionals except Aboriginal health workers, Aboriginal medical services and nurses, and were half as likely to use Medicare or the Pharmaceutical Benefits Scheme ◆

only exception is eyesight. Furthermore, a comparison of emotional and behavioural wellbeing showed higher rates of conduct difficulties and recent suicide attempts in Aboriginal young people. While there were associations between particular causes of poor health and individual risk factors (for example, between multiple types of recurring infections and financial strain as perceived by the carer; asthma and abnormal vision and living in less isolated areas; and recurrent ear infections and living in more isolated areas), there was no compelling evidence that, overall, the brunt of poor health was borne by a particular segment of the Aboriginal community. In particular, indicators of poor health were not related to the educational attainment of the carer.

When considering immediate risk factors, alcohol use of Aboriginal young people does not differ significantly from that of their non-Aboriginal peers, and there is room for improvement in both groups. However, more Aboriginal young people smoke both tobacco and marijuana, and fewer participate in strenuous exercise. Use of all these substances — alcohol, tobacco and marijuana — was confirmed in this survey to be associated with less optimal physical and emotional outcomes. Residence in extremely remote areas appears to be protective against many of these lifestyle health risks.

Some of the difference in rates of sexual activity between Aboriginal and non-Aboriginal young people may be accounted for by the intervening 8 years between the surveys in non-Aboriginal and Aboriginal young people. However, the early sexual initiation of many Aboriginal young people is likely to reflect their earlier social maturity, in that they tend to finish their education and leave home at an earlier age. Thus, particularly in the older girls in this survey, not using contraception may reflect a socially acceptable desire to start a family, rather than irresponsible sexual behaviour.

From the results of the survey, we believe that the increased health risk behaviours of our respondents are more likely to be coincident outcomes of deep-seated family and community problems than primary causes of physical or mental ill health. We investigated the effects of two of the factors mentioned as particularly affecting Aboriginal children — more frequent major life stressors and forced removal from the family or culture. The families of Aboriginal children and young people were routinely exposed to a far greater frequency of major life stressors than reported by non-Aboriginal families. Over one in five Aboriginal young people lived in families that had experienced seven or more significant life stress events in the 12 months preceding the interview, compared with only 0.02% of non-Aboriginal young people. The experience of three or more life stress events in 12 months has been associated with a range of poor outcomes;[8] this level of stress was experienced by 69.6% of Aboriginal children and 13.8% of non-Aboriginal children.

The forced removal of the parents of the current generation of Aboriginal children from their family and culture was shown in this survey to be associated with arrests, alcohol and gambling problems, poorer mental health and social skills in the parent(s), and with increased risks of emotional and behavioural difficulties in their children.

## Discussion

This is the first time that many of the factors affecting health and wellbeing have been measured in a representative sample of Aboriginal young people. However, the origins of the problems facing these young people cannot be determined from a cross-sectional survey alone.

Our conclusions, which are derived from the total study observations, are compatible with, but cannot be derived solely from, the necessarily brief and selective summary of findings presented here. There appears to be a cycle of disadvantage to which poor health and poor community and family resources contribute to

### 2 Health risk factors reported by Aboriginal young people

- *Smoking:* The proportion of young Aboriginal people who regularly smoked cigarettes peaked at 58% (95% CI, 49.3%–66.5%) in 17 year olds compared with about 41% in 15-year-old non-Aboriginal young people. Adjusted for age, sex, level of relative isolation and parental smoking, smoking was inversely associated with school attendance and adequacy of parenting style
- *Marijuana:* 40.8% (95% CI, 34.9%–46.9%) of Aboriginal 15–16 year olds had tried marijuana compared with 33% of non-Aboriginal young people of the same age. Using marijuana was associated with parental use of drugs, poor school performance and, adjusted for age, with school attendance
- *Alcohol:* Alcohol consumption peaked in Aboriginal 15–16 year olds, and almost half of those consuming alcohol had drunk to the point of vomiting in the past 6 months, similar to the pattern seen in non-Aboriginal 15–16 year olds
- *Insufficient physical exercise:* Of Aboriginal 12–16 year olds, 21.6% (95% CI, 17.2%–26.5%) of males and 33.0% (95% CI, 28.2%–37.9%) of females had not exercised strenuously in the previous week compared with about 6% and 11% of non-Aboriginal male and female 12–16 year olds, respectively ◆

### 3 Sexual knowledge and experience reported by Aboriginal young people

- ***Sexual experience:*** 74.5% (95% CI, 66.2%–81.6%) of Aboriginal 17 year olds had had sexual intercourse, and in half of these (48.6% [95% CI, 39.5%–57.4%]) this occurred before the age of 16 years. Of Aboriginal young people, 33.4% (95% CI, 24.6%–42.4%) of 15 year olds and 43.9% (95% CI, 36.2%–51.9%) of 16 year olds had had sexual intercourse. Comparable 1993 estimates for non-Aboriginal youth were 16.0% (95% CI, 8.7%–26.6%) and 23.5% (95% CI, 16.7%–32.2%), respectively
- ***Associations with sexual experience:*** Independent of age, ever having had sexual intercourse was independently associated with having left school, drinking alcohol and using marijuana at least weekly
- ***Sexual knowledge:*** 73.9% (95% CI, 70.5%–77.2%) of Aboriginal 12–17 year olds had received information about how to prevent pregnancy and sexually transmitted diseases, with school being the source most frequently reported, (62.6% [95% CI, 58.9%–66.2%])
- ***Contraception:*** Of those who were sexually active, 70.1% (95% CI, 63.8%–75.8%) relied on condoms to prevent pregnancy; this proportion declined with age and was lower (59.0% [95% CI, 50.3%–67.1%]) in females
- ***Pregnancy:*** One in 10 girls had been pregnant at least once: 33.7% (95% CI, 23.6%–44.3%) of 17 year olds and 21.9% (95% CI, 14.9%–28.2%) of 16 year olds ◆

Aboriginal young people making less than optimal lifestyle choices, and thereby perpetuating the cycle of disadvantage.

The main objective of the WAACHS was to identify the factors supporting healthy child development. We found that these included low levels of major life stress, good family functioning, good speech development and care of the child by the original parents (ie, an absence of the risk factors for mental and physical disadvantage). Achievement of these conditions for healthy child development is, of course, dependent on a wide range of antecedent factors.

### 4 Emotional and behavioural wellbeing of Aboriginal young people

- ***Emotional or behavioural difficulties:*** A Strengths and Difficulties Questionnaire (SDQ)7 completed by carers indicated that 20.5% (95% CI, 17.7%–23.6%) of Aboriginal young people were at high risk of clinically significant emotional or behavioural difficulties. This compared with 7% (95% CI, 4.8%–9.2%) of a contemporaneous sample of non-Aboriginals 12–17 years old
- ***Conduct difficulties:*** The greatest difference between Aboriginal and non-Aboriginal SDQ scores related to conduct difficulties, with 31.4% (95% CI, 28.0%–34.7%) of Aboriginal young people being at high risk of clinically significant conduct problems compared with 13.1% (95% CI, 10.1%–16.0%) of the non-Aboriginal sample
- ***Suicide attempts:*** Of the Aboriginal young people surveyed, 9.0% (95% CI, 6.7%–11.9%) of females and 4.1% (95% CI, 2.6%–6.3%) of males had attempted suicide in the past 12 months. A high SDQ score, low self-esteem, having friends who had attempted suicide, exposure to family violence, and exposure to racism, were each independently associated with suicidal ideation ◆

No single approach is likely to have a significant impact on the health and wellbeing of Aboriginal young people. Medical attention to improve physical health is necessary, but not sufficient. Attempts to improve medical services must ensure that the services are geographically available and culturally acceptable. This is most likely to be achieved by the upskilling of Aboriginal health workers and Aboriginal medical services.

However, the scope of the emergent findings of the WAACHS, and the gravity and breadth of the physical and mental health morbidities, suggest that any improvements will depend on making fundamental changes in the circumstances of Aboriginal people in Australia. This can only be achieved through the expansion of human capabilities, which are central to human development models.[9] These models are based on empowering individuals and advancing and establishing Aboriginal equality, sustainability, and productivity. These are not merely ideals. They are mechanisms linked to the creation of human capital and the expansion of capability, resulting in a widening of choice and control. This coordinated approach is required to break the current cycle of disadvantage affecting Aboriginal young people.

## Ackowledgements

The WA Aboriginal Child Health Survey has been supported by grants from the Health Promotion Foundation of Western Australia, the Rio Tinto Aboriginal Foundation, and contract funding from Western Australian government departments and from the Australian Government.

## Competing interests

None identified.

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*(Received 20 Jul 2005, accepted 6 Sep 2005)* ❑