AUSTRALIAN MEDICAL ASSOCIATION REPORT CARD SERIES 2008 Aboriginal and Torres Strait Islander Health

AMA

ENDING THE CYCLE OF VULNERABILITY THE HEALTH OF INDIGENOUS CHILDREN

"Ampe Akelyernemane Meke Mekarle – Little Children are Sacred" – In our Law children are very sacred because they carry the two spring wells of water from our country within them. (Wild & Anderson 2007)

"The true measure of a nation's standing is how well it attends to its children – their health and safety, their material security, their education and socialization, and their sense of being loved, valued, and included in the families and societies into which they are born" (UNICEF 2007)

Aboriginal and Torres Strait Islander children throughout Australia are in urgent need.

The Australian Medical Association's 2008 Aboriginal and Torres Strait Islander Health Report Card – the AMA's seventh annual Report Card – reveals the plight confronting these most vulnerable of citizens. This Report Card presents a snapshot of the health of Indigenous children, using the most recent and relevant data. It also maps out a range of solutions and measures to assist in the public effort to improve the health of Indigenous people and, in turn, their life prospects and opportunities.

Poor access to the basic socio-economic and environmental conditions for good health, inadequate health services and infrastructure, a history of under-resourcing in Indigenous health and, until recently, a lack of strong political commitment at a national level, have all contributed to a disturbing picture of health conditions and outcomes more commonly associated with the Third World than with a wealthy nation such as ours.

Tackling the poor health outcomes experienced by Indigenous children is essential if Australia is to significantly reduce the health gap between Indigenous and non-Indigenous Australians. This is a matter of human rights.

2008 began with a renewed commitment in Australia to 'close the gap' in Indigenous health. The Council of Australian Governments (COAG) has agreed to work with Indigenous communities to close the 17-year life expectancy gap within a generation and halve the mortality gap for children under five within a decade. The Prime Minister has committed to work to achieve Indigenous health equality by 2030. A coalition of Indigenous and mainstream organizations agreed at the 2008 HREOC National Indigenous Health Equality Summit to a comprehensive set of policy and program targets to achieve COAG's goals for Indigenous health.

The policies and programs recommended in this Report Card constitute significant steps that the Government and its partners can take to eliminate the health gaps experienced by Indigenous children. The benchmarks and health dimensions this Report Card focuses on also provide a framework for tracking national progress in addressing Indigenous child health. The AMA believes these benchmarks and health dimensions should also be central in the Federal Government's evaluation of the Northern Territory Emergency Response. This intervention is now in its second year, and we will watch closely at how its outcomes measure against the issues, benchmarks and recommendations the AMA highlights in the following pages.

The solutions proposed in this Report Card are not cheap; nor are they easy. Australia needs to develop a substantial national investment strategy in Indigenous health, involving proper resourcing, community support and social capital building. Ending the cycle of vulnerability among Australia's Indigenous children is necessary. It is also achievable.

Dama Capacingue

Dr Rosanna Capolingua President, Australian Medical Association

Compared with their non-Indigenous Australian counterparts, Indigenous children are:

- 2 to 3 times more likely to die in the first 12 months of life, and 11 times more likely to die from respiratory causes;
- more likely to be still-born, to be born pre-term, to have low birth weight, or to die in the first month of life;
- nearly 30 times more likely to suffer from nutritional anaemia and malnutrition up to four years of age;
- at a much higher risk of suffering from infectious and parasitic diseases, diseases of the respiratory and circulatory system, hearing loss, rheumatic fever, dental caries, injuries, and clinically significant emotional and behavioural difficulties; and
- cared for by significantly fewer adults, who are also at higher risk of premature death, serious illness, substance abuse, imprisonment, major social and emotional stress, lower household income, lower educational attainment, lower employment, and lower access to appropriate sanitary and household conditions, than other Australian adults.



PART 1 - THE HEALTH OF INDIGENOUS CHILDREN: THE FACTS

An Indigenous child born between 1996 and 2001 can, on average, expect to live approximately 17 years less than a non-Indigenous child born in this period (AIHW & ABS 2008). Indigenous child mortality and disease contribute to this gap. Part 1 of this Report Card draws together the most recent available data relating to the health and well-being of Indigenous children compared to non-Indigenous children.

BIRTH, INFANCY AND CHILDHOOD

Birth

Between 2001 and 2004, Indigenous women gave birth to pre-term babies at nearly twice the rate of non-Indigenous women (14% of births compared to 8% respectively) (Laws et al. 2007). Pre-term babies are significantly more likely to experience considerable illness and a higher risk of death in the neonatal period.

Between 2001 and 2004, 13% of all Indigenous births involved babies with low birth weight. This was more than double the proportion born to non-Indigenous mothers (6.1%) (Pink & Albion 2008), and mirrors the rate of low birth weight babies in developing countries such as Angola, Cambodia, Cameroon, Congo, Guatemala, Jamaica, Malawi, Nicaragua, Niger, Solomon Islands, Timor-Leste, and Uganda (UNICEF 2007).

In the period 2001-2004, approximately 23% of Indigenous females who gave birth were less than 20 years old compared with around 4% of non-Indigenous females (AIHW & ABS 2008).

Figure 1: % of premature and of low birth weight births, and risk ratio (RR) for Indigenous compared with non-Indigenous babies, 2001-2004



Infancy

Indigenous infants and children are 2-3 times more likely to die compared with non-Indigenous infants and children. The main causes of infant and childhood death are low birth weight and pre-term birth, infections (predominantly respiratory), accident and injury (Freemantle, C. J., et al. 2006a).

Figure 2: Death rate of infants <1 year, and relative risk (RR) for Indigenous compared with non-Indigenous infants, 2001-2005



Over the period 2003-2005, the rate of stillbirths and deaths of newborns in the first 28 days of life was 15.7 per 1000 births for Indigenous babies, compared with 10.3 per 1000 births for non-Indigenous babies (AIHW & ABS 2008). Between 2001 and 2005, Indigenous infants in Queensland, Western Australia and South Australia were 2-3 times more likely to die in the first year of life than non-Indigenous infants. An Indigenous boy was also 2.5 times more likely to die in the first year of his life than a non-Indigenous boy, and an Indigenous girl 3.5 times more likely to die than a non-Indigenous girl (AIHW & ABS 2008).

Data from Western Australia indicates that the post-neonatal death rate is higher than the neonatal death rate for Indigenous infants, and the disparity between Indigenous and non-Indigenous postneonatal mortality rates is increasing. This is a pattern found in less developed countries (Freemantle, et al. 2006a).

Childhood

Between 2001 and 2005, Indigenous boys aged 1-4 years were 2.5 times more likely to die than non-Indigenous boys. Indigenous girls of this age were 3.5 times more likely to die than non-Indigenous girls. In the 5-14 year age range, Indigenous boys were 2.2 times more likely to die than non-Indigenous boys, and Indigenous girls 2.4 times more likely to die than non-Indigenous girls (AIHW & ABS 2008).

Figure 3: Age-specific death rate, and relative risk (RR) for Indigenous compared with non-Indigenous children, 2001-2005



The Major Causes Of Death Compared

Between 2001 and 2005, Indigenous children died predominantly from infectious and parasitic diseases (such as septicaemia, meningococcal infection and congenital syphilis), and diseases of the respiratory and circulatory system at 4-5 times the rate of non-Indigenous children. Indigenous children were also 5 times more likely than non-Indigenous children to die from causes such as transport accidents, accidental drowning, assault, intentional self-harm and preventable diseases (AIHW 2005). Although the risk of Sudden Infant Death Syndrome (SIDS) among Indigenous infants has declined significantly since 1991, the rate of deaths from SIDS among Indigenous infants between 2004 and 2006 remains 5 times higher than for other Australian infants (AIHW 2008b). 71% of children under one year of age who were provided with child health checks in the Northern Territory in 2007-2008 were at risk of SIDS (AIHW & Dept. of Health and Ageing 2008).

CHRONIC HEALTH CONDITIONS IN CHILDHOOD

There is a continuing presence of Third World diseases among Indigenous children, including rheumatic fever, trachoma and otitis media. These conditions can, and do, impact on educational attainment and employment.

Ear Health

Indigenous children are twice as likely to experience ear and hearing problems compared with non-Indigenous children. This is due, in part, to the high rates of otitis media (middle ear infection) among children in many Indigenous communities (Couzos et al. 2001). The prevalence of hearing loss/diseases of the ear was 10% for Indigenous children aged 0-14, compared with only 3% of non-Indigenous children (ABS 2006).

Eye Health

Australia is the only developed country in the world to still have blinding endemic trachoma. Trachoma is a disease of early childhood and, if untreated, leads to significant vision impairment and blindness. One study indicates that rates of active trachoma in Indigenous communities in northern and western Australia in 2003 were similar to those of 30 years ago (Taylor, V et al. 2003). Studies have also identified that 20% to 30% of Indigenous children in rural and remote areas have active trachoma, despite the fact that trachoma is treatable with antibiotics and is preventable through health education and promotion regarding facial cleanliness, and through improved environmental health conditions and health hardware (Taylor, H.R. 2008).

Oral Health

A higher percentage of Indigenous children between 4 and 14 years experience dental caries than other Australian children. Most affected are those living in rural/remote areas. Indigenous children also had consistently higher levels than their non-Indigenous Australian counterparts of dental caries in the deciduous (extensive in many remote communities) and permanent dentition. The prevalence of caries is rising, particularly in the deciduous dentition (AIHW 2007).

On average, 6 year old Indigenous children had 2.5 times as many decayed, missing or filled teeth than non-Indigenous children, and 12 year old Indigenous children had 1.8 times as many decayed, missing or filled teeth (AIHW 2008c).

Figure 4: Percentage of children 0-14 years with hearing loss or diseases of the ear, 2004-2005



Mental Health

The Western Australian Aboriginal Child Health Survey, conducted in 2001 and 2002, found that 24% of Aboriginal children were at

high risk of clinically significant emotional or behavioural difficulties compared with 15% of non-Indigenous children (Zubrick et al. 2005). This survey also identified that 9% of females and 4.1% of males between 12-17 years who were surveyed had attempted suicide in the previous 12 months (Zubrick et al. 2005).

AMA

Injuries

Indigenous children aged 0-14 years had a 2.5 times higher average injury mortality rate than other children between 2001 and 2003 (AIHW 2005). In 2004-05, Indigenous children under 4 years were nearly 1.5 times more likely to be hospitalised as a result of injuries, poisoning and other external causes than non-Indigenous children (SCRGSP 2007). Indigenous children had a higher hospitalisation rate for injuries from burns and scalds (approximately 2.3 times higher), for assault, and traffic-related pedestrian injury (2 times higher) compared with other Australian children (AIHW 2005).

Other Health Conditions

Indigenous children are more likely to suffer from asthma (14% compared to 11% in 2004-05) and/or bronchitis (2% compared to 1%). Diseases of the respiratory system were the major cause of admission to hospital in 2005-06 for Indigenous children aged 1-14 years. In the same years, there were 3-4 times more admissions of Indigenous infants to hospital for skin diseases, respiratory conditions, and infectious and parasitic diseases, than for non-Indigenous infants (SCRGSP 2007). There also continues to be a high rate of acute rheumatic fever among Indigenous children (Currie & Brewster 2002).

Figure 5: Rates of children <4 years hospitalised for injuries, 2004-2005



Nutritional anaemia and malnutrition were also prominent in Indigenous children under 4 years admitted to hospital. They suffered from these conditions at 29.6 times the rate for non-Indigenous children (3.6/1,000 compared with 0.1/1,000) (Laws, et al. 2007). Indigenous children are also more than twice as likely as other children to be hospitalised for diabetes (AIHW 2008c).

Figure 6: Percentage of children 0-17 years with high risk of emotional behavioural problems (WA), 2001-20002

3





PART 2 - CONTEXT & CAUSES

These disturbing facts about Indigenous child deaths and illness occur in the context of an array of environmental, social, economic and family factors that associate with poor health outcomes. Many Indigenous children experience multiple risk factors, and their effect compounds with each additional risk (Daly & Smith 2005). The following describes the particular factors that are very likely to sustain the Indigenous child health gaps detailed in the first part of this report.

Smoking and Alcohol Use

Smoking during pregnancy is associated with poor perinatal outcomes such as low birth weight, pre-term birth and perinatal death. For the period 2001-2004, 51% of all Indigenous women reported smoking during pregnancy. Indigenous mothers were about three times more likely to smoke in pregnancy compared with non-Indigenous mothers (AIHW 2005). The recent 2008 progress report on the Northern Territory Emergency Response indicated that 77% of the 7,733 children provided with child health checks lived in a household with a smoker (AIHW & Dept of Health and Ageing 2008). Exposure to environmental tobacco smoke, commonly referred to as passive smoking, increases children's risk of ear infections and respiratory illnesses such as asthma. In 2004-05, 66% of Indigenous children aged 0-14 years lived with a regular smoker.

Alcohol use in pregnancy is associated with an increased risk of foetal alcohol syndrome and perinatal death. The Western Australian Aboriginal Child Health Survey reported that the mothers of an estimated 23% of Indigenous children reported they drank alcohol during their pregnancy (Zubrick, et. al. 2004)). Risky alcohol consumption has not abated for men and has increased for women.

Nutrition

A good diet and nutrition in the early years can have a significant effect on childhood development, growth, functioning and health (Tomkins 2001). In 2004-05, among Indigenous children aged 12-14 years in non-remote areas, only 24% met the recommended daily fruit intake of three or more serves and 59% met the recommended daily vegetable intake of three or more serves.

Poor Environmental Conditions

A poor living environment with low or no access to clean water, functional sewerage systems or appropriate housing conditions, has been reported to be associated with tuberculosis, rheumatic heart disease, respiratory diseases, urinary tract diseases, intestinal worms, trachoma and intestinal infections (Pholeros et al. 1993). Many rural and remote Indigenous communities still do not have access to the basic level of environmental health experienced by the rest of the population. Overcrowded housing, in particular, remains a significant problem. In 2006, an estimated 25% of Indigenous people lived in overcrowded accommodation (AIHW 2008).

Poor Social and Emotional Well-being

The mental well-being of children is closely associated with the emotional and physical well-being of their parents (British Medical Association 2006). The Western Australian Aboriginal Child Health Survey found that more than one in five Indigenous children aged 0-17 years lived in families in which a number of major life stress events (such as family break-up, arrests, death of a family member, job loss, financial difficulty) had occurred in the 12 months prior (Silburn et al. 2006). The Western Australian survey has also identified certain intergenerational health effects of forced removal. Indigenous children whose carers had themselves been forcibly separated from their family were more likely to be at high risk of clinically significant emotional and behavioural problems, and had twice the rate of alcohol and other drug use than those who had not been forcibly separated. Indigenous Australians were twice as likely as non-Indigenous Australians to report high or very high levels of psychological distress (AIHW 2008).

Early Loss of Adult Carers

The premature death, higher morbidity and higher imprisonment rates of Indigenous adults impact on the health and well-being of Indigenous children. For every Indigenous child in 2001, there were 1.19 Indigenous adults. For every non-Indigenous child, there were nearly three times as many non-Indigenous adults (2.95). Compared with other Australian children, Indigenous children were less likely to be living with a parent. Incarceration rates for adults have increased, and the gap between Indigenous and non-Indigenous juvenile detention rates is substantial. In 2006, Indigenous youths between 10 and 17 years were nearly 21 times more likely to be in juvenile detention than non-Indigenous youths of the same age (Taylor, N 2007). The difference between Indigenous and non-Indigenous juvenile detention rates has also increased since 2001 (SCRGSP 2007).

Abuse and Neglect

Indigenous children are significantly over-represented in most statutory child protection systems. From 1999-2000 to 2005-06, the rate of substantiated notifications of child abuse or neglect increased for both Indigenous and non-Indigenous children. In 2005-06, Indigenous children were nearly four times as likely as other children to be the subject of substantiation of abuse or neglect (SCRGSP 2007). Indigenous children are also six times more likely to be removed from their families than other Australian children (Edwards & Madden 2001). Figure 7: Rates of children 0-16 years subject to substantial notifications of abuse/neglect between 1999-00 and 2005-06



Family Poverty, Economic Dependence, and Low Educational Attainment and Employment

Compared with other Australian families, the families of Indigenous children had significantly lower weekly household incomes, and were more than twice as likely to rely on income support. Indigenous children were also more than twice as likely to have parents who left school early, and significantly less likely to have a parent in paid employment (In 2006, 42% of Indigenous children lived in jobless families, which was 3 times higher than non-Indigenous children) (AIHW 2008c). Children of educated mothers appear to experience lower mortality than do children of uneducated mothers (Caldwell 1979). Investments in women's education may be important for improving the health of children and for preventing childhood and infant deaths (The World Bank 1993).

Childhood Literacy, Numeracy and School Retention

Positive relationships have been observed between level of educational attainment and positive health outcomes (Bauert, P et al. 2001). Between 2001 and 2007, on average, 78% of Year 3 Indigenous students met the reading benchmark and 79% on average met the numeracy benchmark. However, at Year 7 level in the same period, an average of 65% of Indigenous students met the reading benchmark, and 49% met the numeracy benchmark. Between Year 3 in 2003 and Year 7 in 2007, the rate of attainment of the numeracy benchmark had almost halved among Indigenous students, from 80.5% to 46%. Rates of attainment of the reading benchmark dropped from 79% to 65% among these students (MCEETYA 2008).

Figure 8: Proportion of Year 3 students who achieve the numeracy benchmark



AMA

Figure 9: Proportion of Year 7 students who achieve the numeracy benchmark



Incomplete Data and Information on Indigenous Health

Substantial gaps in the data describing Indigenous health, particularly child health, is a critical issue when it comes to appropriately funding, developing and targeting policies and programs. Currently, Indigenous mortality data from only Western Australia, South Australia, the Northern Territory and (for a limited period) Queensland, are available to inform policy Australia-wide. This constitutes only 59% of Australia's Indigenous population. Given the acknowledged heterogeneity of that population, individual state data cannot be taken as representative of the total Australian Indigenous population. As Indigenous health policy is increasingly formulated and funded federally, complete data becomes even more important (Freemantle et al. 2007).

The expertise and assistance of Associate Professor Jane Freemantle and Professor Sandra Eades have been greatly appreciated.

5



ENDING THE CYCLE OF VULNERABILITY

RECOMMENDATIONS

RECOMMENDATIONS

Addressing the Indigenous child health gap is not just a matter of child-specific health checks and follow-up interventions. It is a long-term matter of comprehensively addressing the broader contextual factors and intergenerational health influences in Indigenous children's lives. This cannot be achieved without the engagement and participation of Indigenous communities and Indigenous health organisations in the development of health policy and programs.

- 1. The AMA believes that the health of Australia's Indigenous children will be improved through the establishment of a national network of Aboriginal community controlled primary health care services specifically for Indigenous mothers and children. Through this, universal access to a comprehensive range of services can be provided, including:
 - · antenatal services;
 - childhood health monitoring, screening and access to specialists;
 - early childhood outreach and family support interventions, including home visiting, and nutritional risk identification;
 - health promotion and interventions targeting smoking and substance abuse in mothers and pregnant women;
 - dental and oral health services;
 - immunisation and affordable medicines; and
 - parenting education and life skills, including for teenage parents.

The AMA acknowledges and strongly supports the first steps being taken by the Federal and State Governments to establish Indigenous child and maternal health services. The AMA would also encourage State, Territory and Federal Governments to partner with Indigenous health organisations and representative bodies in the design and implementation of these services, and to maximise the use of knowledge and capacities already available within Indigenous communities. The influence of women elders, for example, can be used effectively with younger women around early teenage pregnancy prevention, antenatal care, and ensuring that younger women have access to health care services.

The AMA believes that appropriate Indigenous mother and child-specific services should be made available in all areas of need throughout Australia as soon as possible.

There are other measures that the AMA believes COAG needs to adopt in consultation with the Indigenous and mainstream health sectors, to end the cycle of vulnerability.

- 2. Culturally appropriate services addressing mental health and social and emotional well-being should be established within 2 to 5 years in urban, regional and remote locations, to identify and respond to the mental health needs of Indigenous children and adult carers. These services should be tied to referral pathways to specialised services such as drug and alcohol, family violence, trauma and grief counselling, psychiatric services and suicide prevention programs. Funding should also be targeted to initiatives which build capacity within Indigenous communities to understand and respond to mental health issues and to promote well-being.
- 3. The AMA recognises that health and medical care is often best delivered to Indigenous people through an Indigenous medical and health workforce. Developing this workforce will inevitably be a long-term process. A strategy needs to be developed to maximise the engagement of the mainstream medical and health workforce. This strategy should include a focus on closing the salary gap between doctors working in Aboriginal Medical Services and doctors employed in state systems.
- 4. A national audit of the living environment conditions in Indigenous communities should be conducted by the Federal Government, to measure housing conditions, access to clean water, sanitation facilities and the conditions for safe and healthy living. Based on the audit, programs of housing and community maintenance should be implemented to ensure that within five years critical health living conditions exist in 75% of all housing, and that appropriately-sized housing is available where needed. These programs should be coupled with sanitary and environmental health education and promotion in Indigenous communities.

THE HEALTH OF INDIGENOUS CHILDREN

- 5. The Federal Government should coordinate national improvements in data management to ensure that comprehensive information is recorded and made available regarding Indigenous identification and health within the Indigenous populations of all Australian jurisdictions.
- 6. The AMA believes that a major focus in closing the Indigenous child health gap should be capacity building within Indigenous communities to promote good health, to identify and monitor emerging health issues and to develop local responses. Many of the success stories about improvements in Indigenous people's health are stories about local initiatives that have been developed and sustained by Indigenous people in their local communities. Some of these successes are reflected in the *Good News and Best Practice 2008* insert with this Report Card.

The AMA believes that, in pursuing these recommendations and other reforms, Australian Governments should set and achieve the following targets for improved Indigenous child health (Close the Gap Campaign Steering Committee 2008):

- a 50% reduction in the difference between Indigenous and non-Indigenous Australians' rates of premature birth and low-birth weight within 10 years;
- a 50% reduction in the difference in hospital rates for acute respiratory infections, and more than 90% of Indigenous children diagnosed with those infections receiving full treatment and follow-up within 10 years;
- 70% of Indigenous children by aged 2 years have a child health assessment within 10 years;
- 90% of Indigenous children have a hearing assessment prior to entering school within 10 years;
- Immunisation rates sufficient to achieve herd immunity and national targets within 10 years;
- a 20% reduction in child hospitalisation rates for gastroenteritis within 5 years;
- more than 90% of Indigenous families to access a standard healthy food basket at a cost of less than 25% of their available income within 5 years;

- a reduction in smoking rates to parity with non-Indigenous Australians within 10 years, with a 4% annual reduction among pregnant women;
- Indigenous communities with a population of more than 1,000 to have a fluoridated water supply within 7 years, and communities with a population of between 500 and 1,000 to have fluoridation within 12 years; and

AMA

 specified levels of completeness of identification in health records, and recording of Indigenous status in every jurisdiction to achieve 80% accuracy within 5 years.



REFERENCES

ABS (Australian Bureau of Statistics) 2006, *National Aboriginal and Torres Strait Islander Health Survey, 2004-2005*, Cat.no. 4715.0, ABS, Canberra.

AlHW (Australian Institute of Health and Welfare). 2008a Australia's Health 2008, AlHW cat. no. AUS 99, Australian Institute of Health and Welfare, Canberra.

AIHW 2008b, National Mortality Database

AIHW 2008c, *Making Progress: the health, development and well-being of Australia's children and young people.* Cat. no. PHE 104, Canberra: AIHW.

AIHW 2007, Dental Statistics and Research Unit, Jamiespon, L.M., Armfield, J.M.,

Roberts-Thomson K.F. Oral Health of Aboriginal and Torres Strait Islander Children. Canberra. AIHW 2005 A picture of Australia's children, AIHW cat. no. PHE 58, Australian Institute of Health and Welfare, Canberra.

AIHW & ABS 2008, *The health and welfare of Australia's Aboriginal and Torres Straight Islander Peoples*, AIHW cat. no. IHW 15; ABS cat. no. 4704.0.55.001, AIHW & ABS, Canberra. Australian Government Department of Health and Ageing.

AlHW & Department of Health and Ageing, 2008. Progress of the Northern Territory Emergency Response Child Health Check initiative: Health Conditions and Referrals.

Bauert, P., Brown, N., Collins, B., and Martin, C., 2001 "Indigenous Australian Children: educating for health", *Medical Journal of Australia*, Vol. 174, pp. 488-499

British Medical Association, 2006, *Child and adolescent mental health: A guideline for healthcare professionals*, British Medical Association, UK.

Caldwell, J.C., 1979, "Education as a factor in mortality decline: an examination of Nigerian data", *Population Studies*, vol. 33, pp. 359-413.

Close the Gap Campaign Steering Committee, 2008, National Indigenous Health Equality Summit Outcomes (unpublished document)

Couzos, S., Metcalf, S. & Murray, R. B. 2001, *Systematic review of existing evidence and primary* care guidelines on the management of otitis media in Aboriginal and Torres Strait Islander populations, Office of Aboriginal and Torres Strait Islander Health, Commonwealth Department of Health and Aging, Canberra.

Currie, B. J. & Brewster, D. R. 2002, '[Editorial] Rheumatic fever in Aboriginal children', *Journal of Paediatrics and Child Health*, vol. 38, pp. 223-225.

Daley, A. Smith, D. 2005. "Indicators of risk to the well-being of Australian Indigenous children", *Australian Review of Public Affairs*, 6 (1) pp. 39-57

Edwards R. W., Madden, R., 2001, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* Australian Institute of Health and Welfare and Australian Bureau of Statistics.

Freemantle J., Officer, K., McAullay, D., Anderson I., 2007. Australian Indigenous Health Within an International Context. Cooperative Research Centre for Aboriginal Health, Darwin.

Freemantle C.J., Read, A. W., de Klerk, N. H., McAullay, D., Anderson I. & Stanley, F. J. 2006a, 'Patterns, trends and increasing disparities in mortality for Aboriginal and non-Aboriginal infants born in Western Australia, 1980-2001: population database study', *Lancet*, vol. 367, pp. 1758-1766. Freemantle C.J., Read, A. W., de Klerk, N. H., McAullay, D., Anderson I. & Stanley, F. J. 2006b, 'Sudden Infant Death Syndrome - Aboriginal and non-Aboriginal disparities among infants born in Western Australia from 1980-2001 inclusive.' *Journal of Paediatrics and Child Health*, vol. 42, pp. 445-451.

Laws, P. J., Abeywardana, S., Walker, J. & Sullivan, E. A. 2007, *Australia's mothers and babies 2005*, Perinatal Statistics Series no. 20. Cat. no. PER 40, AIHW National Perinatal Statistics Unit, Sydney.

MCEETYA (Ministerial Council on Education, Employment, Training and Youth Affairs) 2008. 2007 national report on schooling in Australia: national benchmark results reading, writing and numeracy Years 3, 5 and 7. Melbourne: MCEETYA.

Pholeros, P., Rainow, S. & Torzillo, P. 1993, *Housing for health: toward a healthy living environment for Aboriginal Australia*, Health Habitat, Sydney.

Pink, B. & Allbon, P. 2008, *The health and welfare of Australia's Aboriginal and Torres Straight Islander Peoples*, AlHW cat. no. IHW 15; ABS cat. no. 4704.0.55.001, AlHW & ABS, Canberra.

Ring, I. T. & Wenitong, M. 2007, 'Interventions to halt child abuse in Aboriginal communities', MJA, vol. 187, no. 4, pp. 204-205.

Silburn, S. R., Zubrick, S. R., de Maio, J. A., Shepherd, C., Griffin, J. A., Mitrou, F. G., Dalby, R. B., Hayward, C. & Pearson, G. 2006, *The Western Australian Aboriginal Child Health Survey: Strengthening the Capacity of Aboriginal Children, Families and Communities.*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2007, Overcoming Indigenous disadvantage: Key indicators, Productivity Commission, Canberra.

Taylor, V., Ewald, D., Liddle, H., Warchiver, I., Sherwood, J., Brian, G., 2003 *Review of the implementation of the National Aboriginal and Torres Strait Islander Eye Health Program,* Alice Springs: Centre for Remote Health.

Taylor, H. R., 2008 A Blinding Scourge from the Bronze Age to the Twenty-First Century. East Melbourne: Centre for Eye Health Research.

Taylor, N., 2007, *Juveniles in detention in Australia, 1981-2006*, Technical and Background Paper, No. 22, Australian Institute of Criminology, Canberra.

Tomkins, A. 2001, Vitamin and mineral nutrition for the health and development of the children of Europe', *Public Health Nutrition*, vol. 4, no. 1A, pp. 91-9.

UNICEF 2007, Child poverty in perspective: an overview of child well-being in rich countries, Innocenti Research Centre, Florence.

Wild R, Anderson P. 2007 *Little Children are Sacred*. Report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse. Darwin: Northern Territory Government; 2007

World Bank, 1993. World Development Report 1993: Investing in health, The World Bank, New York.

Zubrick, S. R., Silburn, S. R., Lawrence, D. M., Mitou, F. G., Dalby, R. B., Blair, E. M., et. al., 2004 The Western Australian Aboriginal Child Health Survey: the health of Aboriginal children and young people, Telethon Institute of Child Health Research, Perth.

Zubrick, S. R., Silburn, S. R., Lawrence, D. M., Mitou, F. G., Dalby, R. B., Blair, E. M., et. al. . 2005, The Western Australian Aboriginal Child Health Survey: the social and emotional well-being of