Overview of Aboriginal health status

Neil Thomson

Report to the Royal Commission into Aboriginal Deaths in Custody

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1 Introduction[1]

Aborigines and Torres Strait Islanders are the least healthy identifiable sub-population in Australia. The health problems of Aborigines[2] vary across the country, reflecting different circumstances, but the overall standard of health is low throughout Australia.

By virtually every health status measure, and for almost all disease categories, the health of Aborigines is much worse than that of other Australians. The extent of Aboriginal health disadvantages can be gauged from their overall mortality: roughly two to four times that of the total Australian population. As a result, Aborigines can expect to live many years less than other Australians: for males, between 12 and 20 years less, and, for females, between 14 and 21 years less.

The causes of the poor health of Aborigines are complex, but their social and economic disadvantages are of central importance (Health Targets and Implementation (Health for All) Committee 1988). These social and economic disadvantages, directly related to Aboriginal dispossession and characterised by poverty and powerlessness, are reflected in measures of education, employment, income and housing.

Far more Aborigines than non-Aborigines have never attended school, and the proportion of Aborigines who have achieved post-secondary qualifications is less than a third of the proportion of non-Aborigines.

The overall rate of unemployment among Aborigines is more than four times that of other Australians. In some parts of the country the difference between Aborigines and non-Aborigines is even greater.

Aborigines are disproportionately represented among those Australians living in poverty, and are much more dependent on social welfare payments than are other Australians.

In 1987, almost a third of all Aborigines were homeless or living in inadequate accommodation, and many were without access to those facilities taken for granted by other Australians.

To add to these substantial disadvantages, Aboriginal people probably experience the most discrimination of any identifiable sub-population in Australia, with Aborigines making more than a third of all complaints of discrimination. Underlying this discrimination is non-Aboriginal ignorance, intolerance and misunderstanding of Aborigines.

2 The Aboriginal population

According to the 1986 Australian Census of Population and Housing, the Aboriginal population was 227,645: 206,104 Australian Aborigines and 21,541 Torres Strait Islanders (Table 1).

The Aboriginal population is relatively young compared with the total Australian population. About 40 per cent of Aborigines are less than 15 years of age, compared with 23 per cent of the total population. Only 4 per cent of Aborigines are aged 60 years or over, compared with almost 15 per cent of the total population.

Two-thirds of Aborigines live in urban areas (centres with a total population of 1,000 or more), compared with 86 per cent of non-Aborigines. About 25 per cent of Aborigines live in remote areas of Australia: probably about 5 per cent in small groups in their traditional homelands, and the rest in Aboriginal towns and settlements on Aboriginal lands and reserves (see Smyth 1989 for a more detailed review of the Aboriginal population).

1. This report has been summarised from information collected by the Australian Institute of Health for publication in a monograph on Aboriginal health. Full references have not been included here, but are available from the author.

2. In this report, the term 'Aborigines' generally will be used to mean both Australian Aborigines and Torres Strait Islanders. Aboriginal identification is in accordance with the accepted 'working definition':

   > an Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he (she) lives (Department of Aboriginal Affairs 1981).

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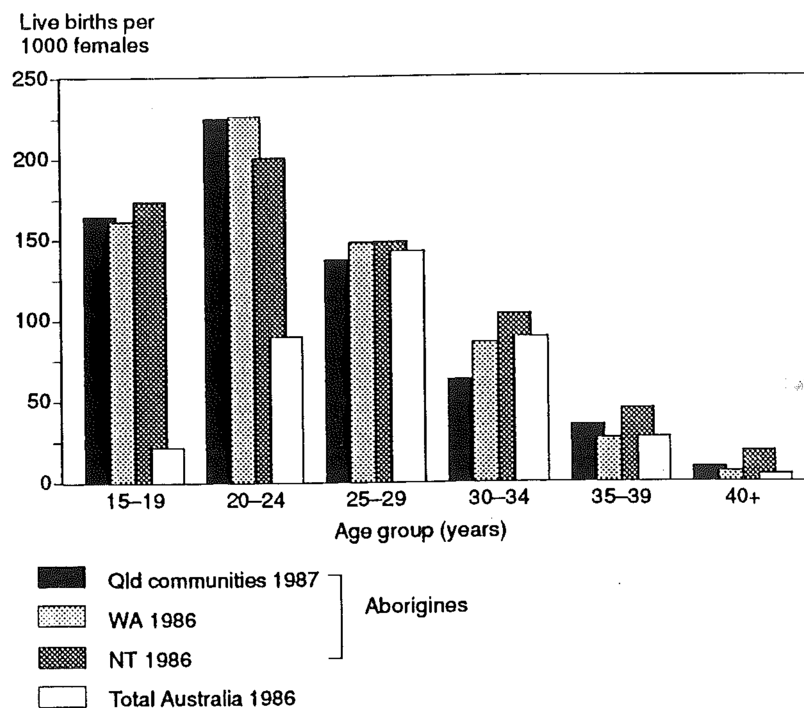
Table 1 Australian Aboriginal and Torres Strait Islander population, by States and Territories, 1986

State/Territory	Total	Australian Aborigines	Torres Strait Islanders	Proportion of total population (%)
Queensland	61,268	48,098	13,170	2.4
New South Wales	59,011	55,672	3,339	1.1
Western Australia	37,789	37,110	679	2.7
Northern Territory	34,739	34,197	542	22.4
South Australia	14,291	13,298	993	1.1
Victoria	12,611	10,740	1,871	0.3
Tasmania	6,716	5,829	887	1.5
Australian Capital Territory	1,220	1,160	60	0.5
Australia	**227,645**	**206,104**	**21,541**	**1.4**

Source: Australian Bureau of Statistics 1987

Figure 1: Age-specific fertility rates: Aborigines and total Australian population



Sources: Australian Bureau of Statistics 1987; Australian Institute of Health, unpublished, from data provided by the Queensland Department of Health, the Health Department of Western Australia and the Northern Territory Department of Health and Community Services

3 Fertility and pregnancy outcome

Fertility

The fertility[3] of Aboriginal women remains much higher than that of non-Aboriginal women, despite the fact that Aboriginal fertility has declined substantially since the late 1960s, largely in parallel with the decline in fertility in the total population (Gray 1983).

The higher present-day fertility of Aboriginal women is largely due to the great excess of births occurring at young ages, particularly in the teenage years (see Figure 1).

The great differences in maternal age mean that around 30 per cent of Aboriginal babies are born to mothers aged 19 years or younger, compared with less than six per cent for all Australian women.

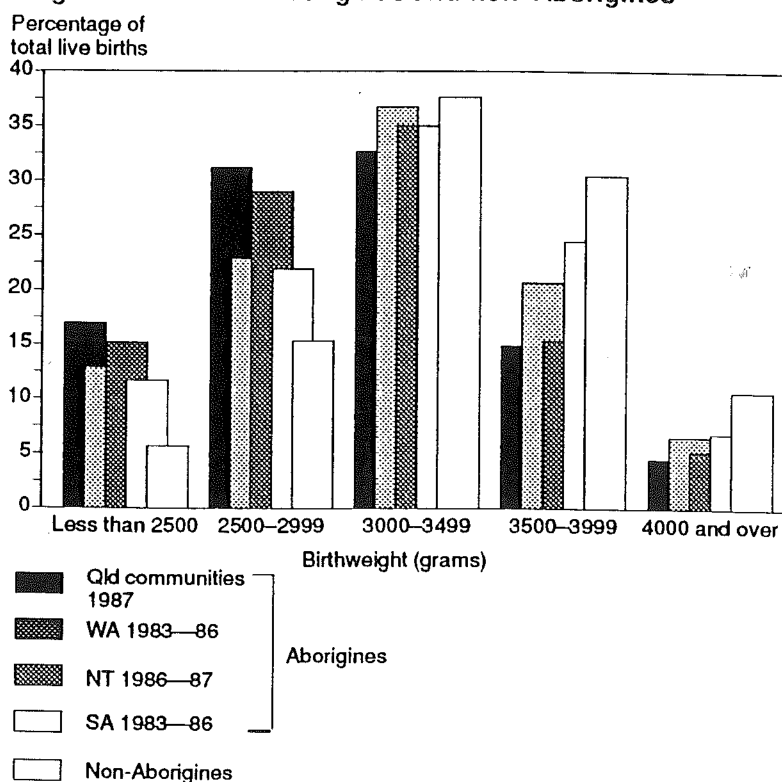
Compared with the total fertility rate of almost 1,900 children per 1,000 women for all Australian women in 1986, the rates for Aboriginal women are between about 3,200 and 3,400 per 1,000.

Birthweight

At birth, Aboriginal babies are around 150-350 grams lighter than non-Aboriginal babies, in terms both of mean and median birth weight.

Of particular significance is the proportion of Aboriginal babies of low birth weight, that is, less than 2,500 grams. Compared with 5.7 per cent of non-Aboriginal babies, 13.5 per cent of Aboriginal babies are of low birth weight (see Figure 2).

Figure 2: Birthweight distribution: Aborigines and non–Aborigines



Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia, the South Australian Health Commission and the Northern Territory Department of Health and Community Services; Australian Bureau of Statistics 1987

Note: The non–Aboriginal figures represent the combined data for Western Australia 1983–1986, South Australia 1983–1986 and the Northern Territory 1986–1987

3. Note: 'fertility' is used in the technical sense, denoting actual, rather than potential, reproductive performance

4 Mortality

Expectation of life

The extent of Aboriginal health disadvantage is reflected in their expectation of life at birth, markedly lower than that of other Australians, and poor even by international standards.

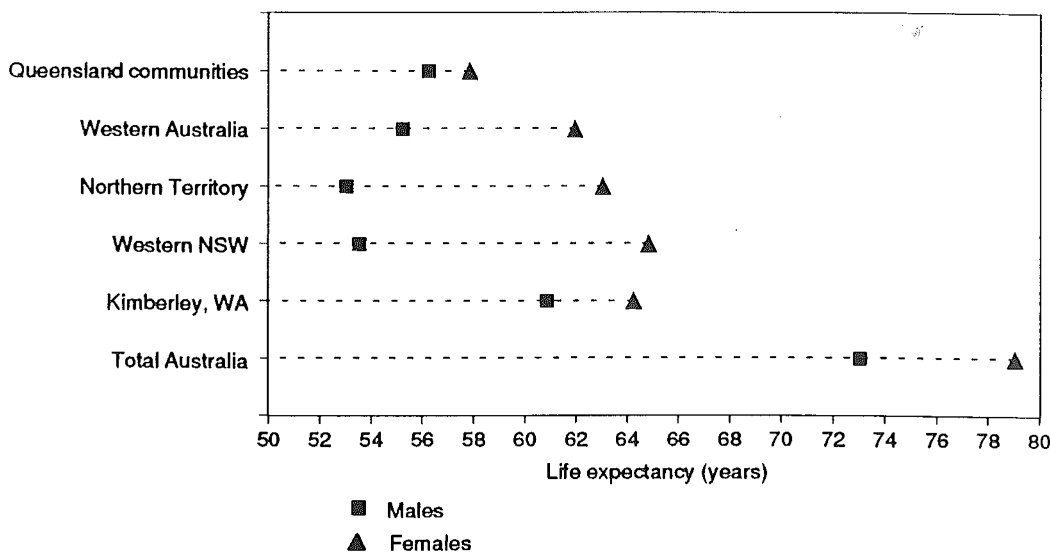
For males, the calculated life expectancies at birth range from 53 years for Aborigines living in the Northern Territory in 1985 to 61 years for those living in the Kimberley region of Western Australia in 1983–1984 (see Table 2 and Figure 3). For females, the range is from 58 years for Aborigines living in the Queensland communities in 1985–1986 to 65 years for those living in the western areas of New South Wales in 1984–1987. Even the highest expectations of life at birth for Aborigines are well below those of the total Australian population in 1986, 73 years for males and 79 years for females.

Table 2 Expectation of life at birth: Aborigines for selected regions, by sex

	Male	Female
Queensland communities, 1985–1986	56.2	57.8
Western Australia, 1985–1986	55.2	61.9
Northern Territory, 1985	53.0	63.0
Western New South Wales, 1984–1987	53.5	64.8
Kimberley, WA, 1983–1984	60.8	64.2

Sources: Holman and Quadros 1986; Gray and Hogg 1989; Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia and the Northern Territory Department of Health and Community Services

Figure 3: Expectation of life at birth: Aborigines by selected region and total Australian population, by sex



Sources: Holman and Quadros 1986; Gray and Hogg 1989; Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia and the Northern Territory Department of Health and Community Services

For Aborigines living in those parts of Australia where separate details of deaths are not available, an intercensus survival analysis has been applied to population figures from the 1981 and 1986 Australian Censuses (see Table 3). This analysis reveals the striking similarity of Aboriginal mortality throughout Australia.

Table 3 Expectation of life at birth: Aborigines for States/Territories, based on intercensal survival estimates (years)

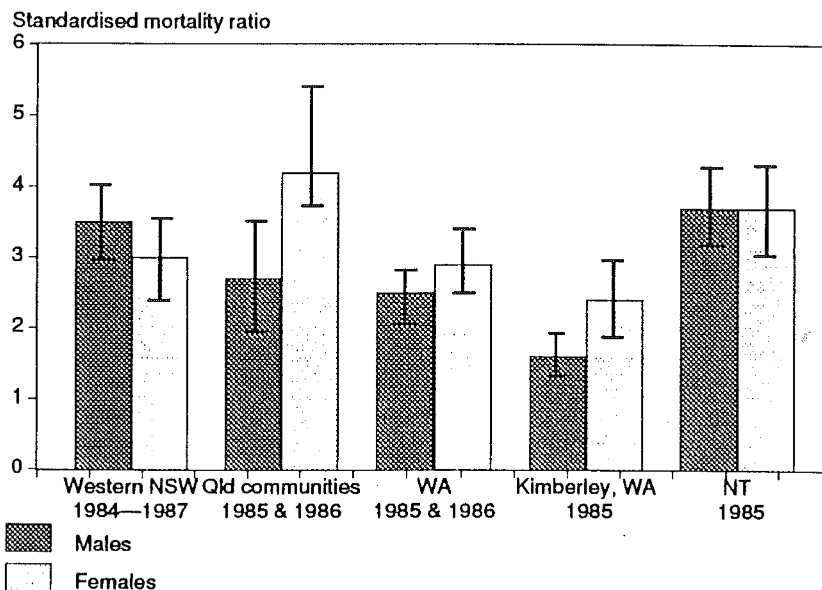
	Male	Female
New South Wales/Australian Capital Territory	57.3	65.4
Victoria/Tasmania	58.1	67.6
Queensland	55.8	64.0
Western Australia	55.0	63.5
South Australia	56.2	65.3
Northern Territory	54.7	62.2

Source: Gray 1988

Standardised mortality

After adjustment is made for differences in the age structures of the Aboriginal and non-Aboriginal populations,[4] generally Aboriginal death rates are between two and four times those of the total Australian population. Table 4 shows the number of observed and expected deaths for Aborigines in a number of regions, along with the standardised mortality ratios (including 95 per cent confidence intervals) (see also Figure 4).

Figure 4: Standardised mortality ratios: Aborigines compared with total population



Sources: Data provided by the Queensland Department of Health, the Health Department of Western Australia, the Northern Territory Department of Health and Community Services; Gray and Hogg 1989; Australian Bureau of Statistics, Deaths Australia 1985, Cat. No. 3302.0.

Note: The vertical lines indicate the 95% confidence range for each SMR.

4. A technique known as indirect standardisation is used to provide an estimate of the number of deaths expected by the various Aboriginal sub-populations if they experienced the same age-specific death rates as the non-Aboriginal population. The ratio of the number of deaths observed to the number expected is known as the standardised mortality ratio (SMR).

Table 4 Aboriginal observed and expected number of deaths, and standardised mortality ratios

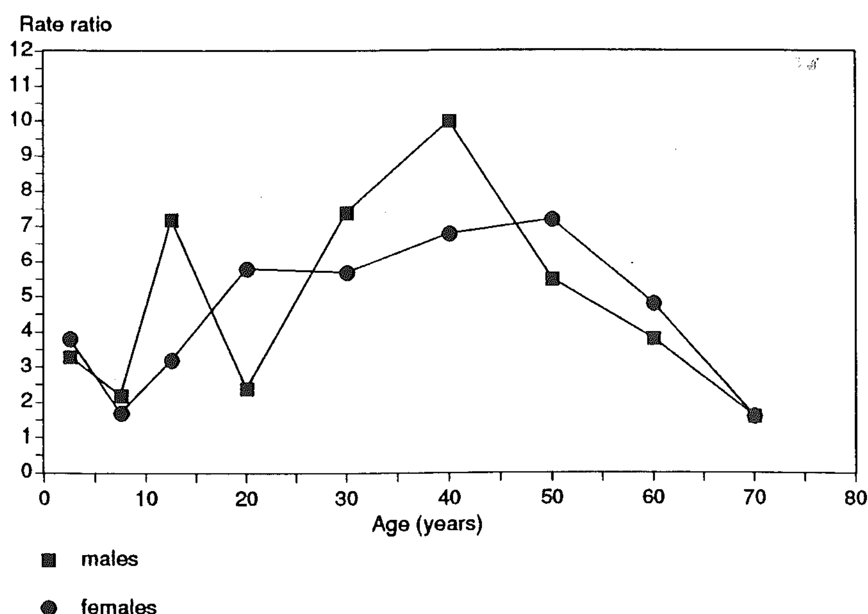
Male	Observed No.	Expected No.	SMR
Queensland communities, 1985–1986	113	41.2	2.7 (2.0–3.5)
Western Australia, 1985–1986	404	163.0	2.5 (2.1–2.8)
Northern Territory, 1985	209	56.1	3.7 (3.2–4.2)
Western New South Wales, 1984–1987	205	59	3.5 (3.0–4.0)
Kimberley, WA, 1983–1984	108	68.0	1.6 (1.3–1.9)
Female	**Observed No.**	**Expected No**	**SMR**
Queensland communities, 1985–1986	95	22.5	4.2 (3.7–5.4)
Western Australia, 1985–1986	285	96.9	2.9 (2.5–3.4)
Northern Territory, 1985	151	40.3	3.7 (3.1–4.3)
Western New South Wales, 1984–1987	110	37	3.0 (2.4–3.5)
Kimberley, WA, 1983–1984	81	34.1	2.4 (1.9–2.9)

Sources: Holman and Quadros 1986; Gray and Hogg 1989; and Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia and the Northern Territory Department of Health and Community Services

Age-specific death rates

The most striking aspect of Aboriginal mortality is the much higher death rates experienced by young adults, with the ratio of Aboriginal to total Australian age-specific death rates being highest for young and middle aged adults (see Figure 5). The combined age-specific death rates, for 1985, for Aborigines in the Queensland communities, and in Western Australia and the Northern Territory are shown in Figures 6 and 7, along with the rates for the total Australian population.

Figure 5: Age-specific death rate ratios: Aborigines to total Australian population, 1985

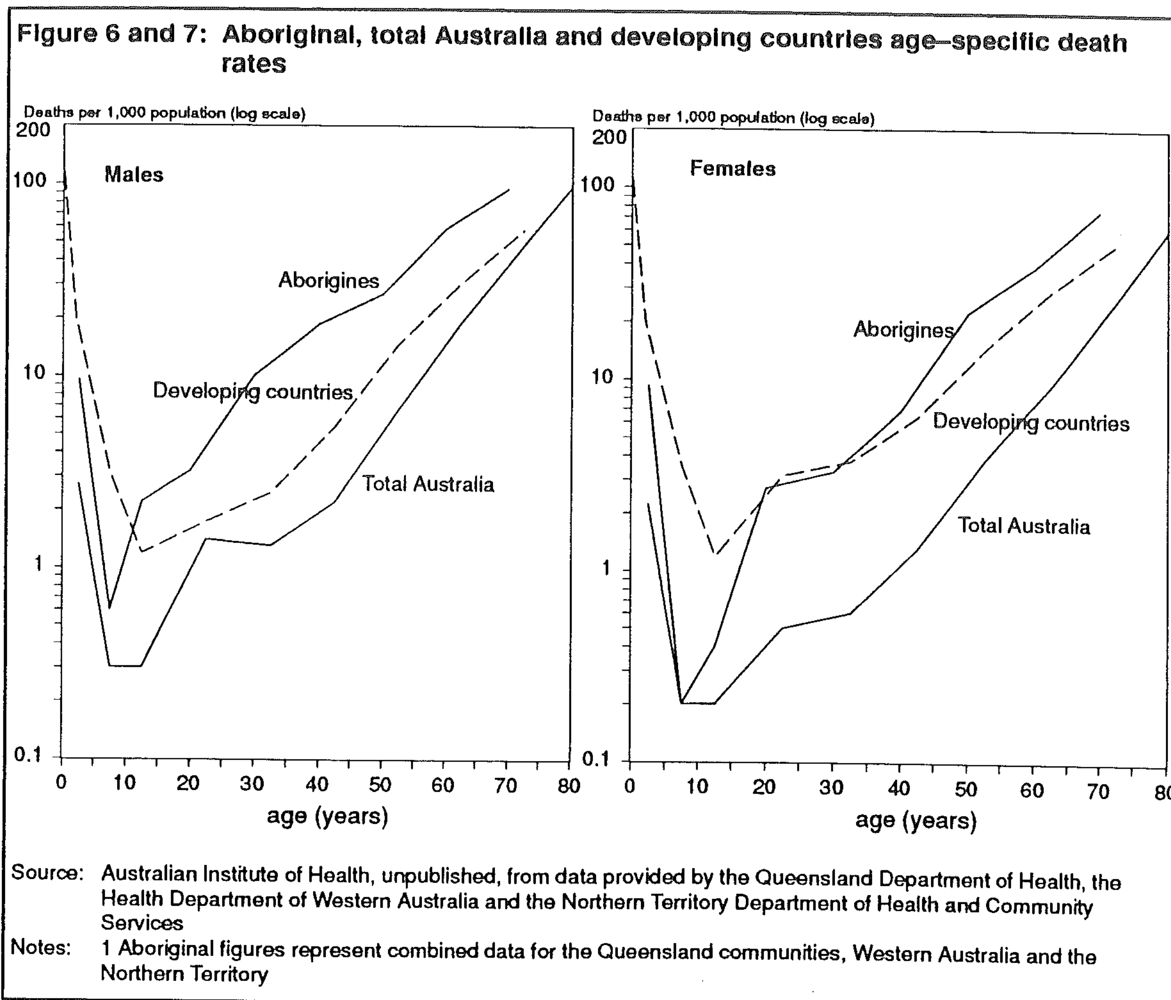


Source: Australian Institute of Health, unpublished, from data provided by the Queensland Department of Health, the Health Department of Western Australia and the Northern Territory Department of Health and Community Services

Notes: 1 Aboriginal figures represent combined data for the Queensland communities, Western Australia and the Northern Territory

The pattern of Aboriginal age–specific death rates is highly unusual, even compared with the rates typical of a developing country, also shown in these Figures. While Aboriginal death rates in infancy and early childhood are much lower than those in developing countries, beyond the teenage years the position is reversed, with death rates for young and middle aged Aboriginal adults, particularly males, being higher.

Figure 6 and 7: Aboriginal, total Australia and developing countries age–specific death rates



Source: Australian Institute of Health, unpublished, from data provided by the Queensland Department of Health, the Health Department of Western Australia and the Northern Territory Department of Health and Community Services

Notes: 1 Aboriginal figures represent combined data for the Queensland communities, Western Australia and the Northern Territory

Causes of death

Throughout the country, the major cause of Aboriginal deaths, for both males and females, is disease of the circulatory system (see Figure 8). Overall, death rates from these diseases, including ischemic and other heart disease, are more than twice those of other Australians. Age–specifically, the peak difference between Aboriginal and non–Aboriginal death rates occurs in the 25 to 44 year age groups.

For Aborigines, the second most frequent cause of death for males, and third for females, is the ICD group "External causes of injury and poisoning", which includes motor vehicle and other accidents, suicide and self–inflicted injury, and homicide and injury purposefully inflicted by others. Deaths from these causes are about four times more frequent than expected from total Australian rates.

Disease of the respiratory system is the second leading cause of death for Aboriginal females, and third for Aboriginal males, with death rates six to eight times those expected.

Suicide and self–inflicted injuries do not feature highly in the official death statistics for Aborigines, but it is likely that such causes are under–reported for Aborigines (Hunter 1988a, Hunter 1988b, Reser 1989), and for the general community.

It is likely that the impact of alcohol on Aboriginal mortality is under–reported also. Alcohol–related conditions are not frequently reported in official statistics, but

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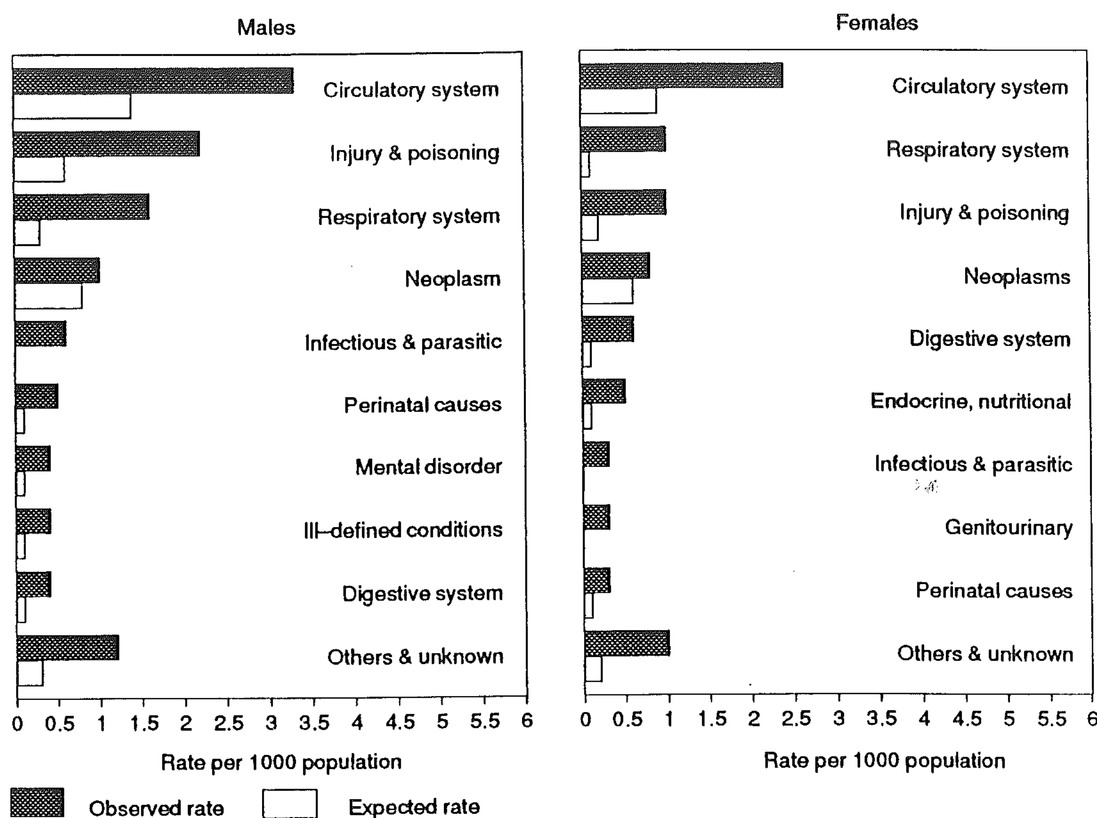
supplementary information provided by Aboriginal health workers suggested that alcohol was a significant contributory factor in 27 per cent of all deaths (34 per cent of male deaths, and 15 per cent of female deaths) occurring in country areas of New South Wales in 1980–1981 (Thomson and Smith 1985). The impact of alcohol was particularly important in the 35–44 year age group, the age group for which the ratios of Aboriginal death rates to those of the total population were highest.

Fetal and infant mortality

The infant mortality rate (deaths in the first year of life per 1,000 live births) has declined significantly over the past 15 to 20 years, but remains around three times that of other Australians (see Figure 9).

The key indicator of fetal outcome is the perinatal mortality rate, including late fetal deaths and deaths of live born infants within the first 28 days of life. Aboriginal perinatal mortality rates have also declined substantially since the early 1970s (see Figure 10), but the Aboriginal:non-Aboriginal rate ratio has remained virtually unchanged.

Figure 8: Leading causes of death: Aborigines – observed and expected rates



Source: Australian Institute of Health, unpublished, from data provided by the Queensland Department of Health, the Health Department of Western Australia and the Northern Territory Department of Health and Community Services

Notes: 1 Aboriginal figures represent combined data for the Queensland communities, Western Australia and the Northern Territory.

Figure 9: Infant mortality rates, Aboriginal and total population

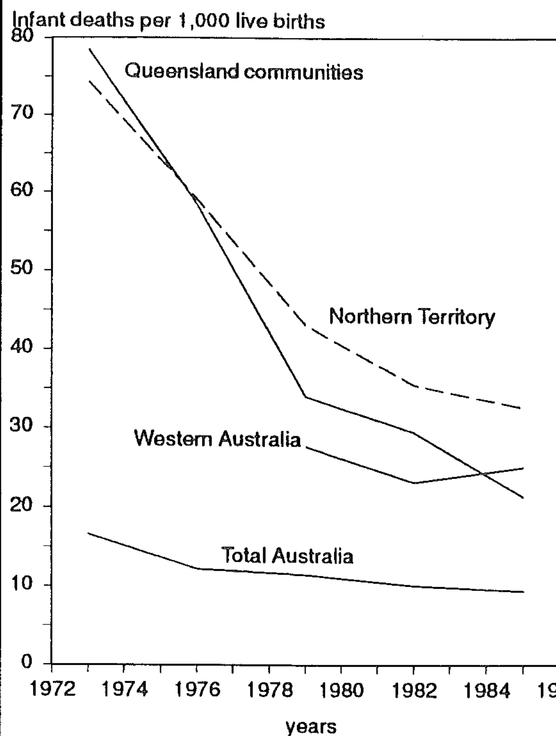
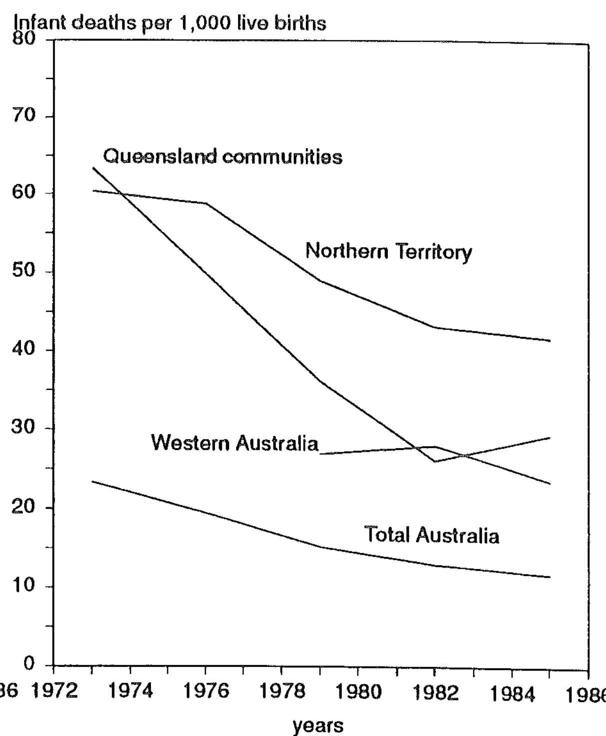


Figure 10: Perinatal mortality rates, Aboriginal and total population



Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia and the Northern Territory Department of Health and Community Services

Notes: 1 Rates are infant deaths per 1,000 live births
2 The Queensland data apply to the Aboriginal reserve communities

Maternal mortality

For 1982–1984, 8 Aboriginal deaths were identified among the total of 94 maternal deaths occurring in Australia (NHMRC 1988). Based on a rough estimate of the total number of Aboriginal confinements, it is likely that Aboriginal maternal death rates were 3 to 5 times those of non-Aborigines.

Summary

The most striking specific aspect of Aboriginal mortality is the very high rate of deaths in young and middle aged adults. These high death rates for young Aboriginal adults, particularly males, are reflected in the deaths occurring in custody. Of the 103 deaths listed in the Royal Commission's Interim Report (1988), about two-thirds of the deaths reported to the Commission as being not self-inflicted occurred to people aged 40 years or less, with a further fifth occurring to people in their 40s.

Excluding those reported as self-inflicted, the reported causes of the deaths in custody also reflect the pattern in the general Aboriginal community. Of the 61 deaths occurring in custody (police custody and prison) which were reported as not self-inflicted, about a third were due to disease of the circulatory system (including heart disease and strokes), and about a quarter to "external causes of injury and poisoning". As with deaths in the general Aboriginal community, disease of the respiratory system was also an important cause of death for Aborigines in custody, being responsible for almost a tenth of the 61 deaths which were reported as not self-inflicted.

Thus, excluding those deaths reported as self-inflicted, the pattern of Aboriginal deaths in custody is not markedly different, in terms of both age and cause of death, from the pattern documented for the general Aboriginal community.

5 Hospitalisation

While not necessarily accurately reflecting the extent or pattern of treatable illness in the community, hospital statistics, generally reflecting more serious types of morbidity, confirm the relatively poor health status of Aborigines, both in terms of the rate of hospitalisation and the length of stay in hospital.

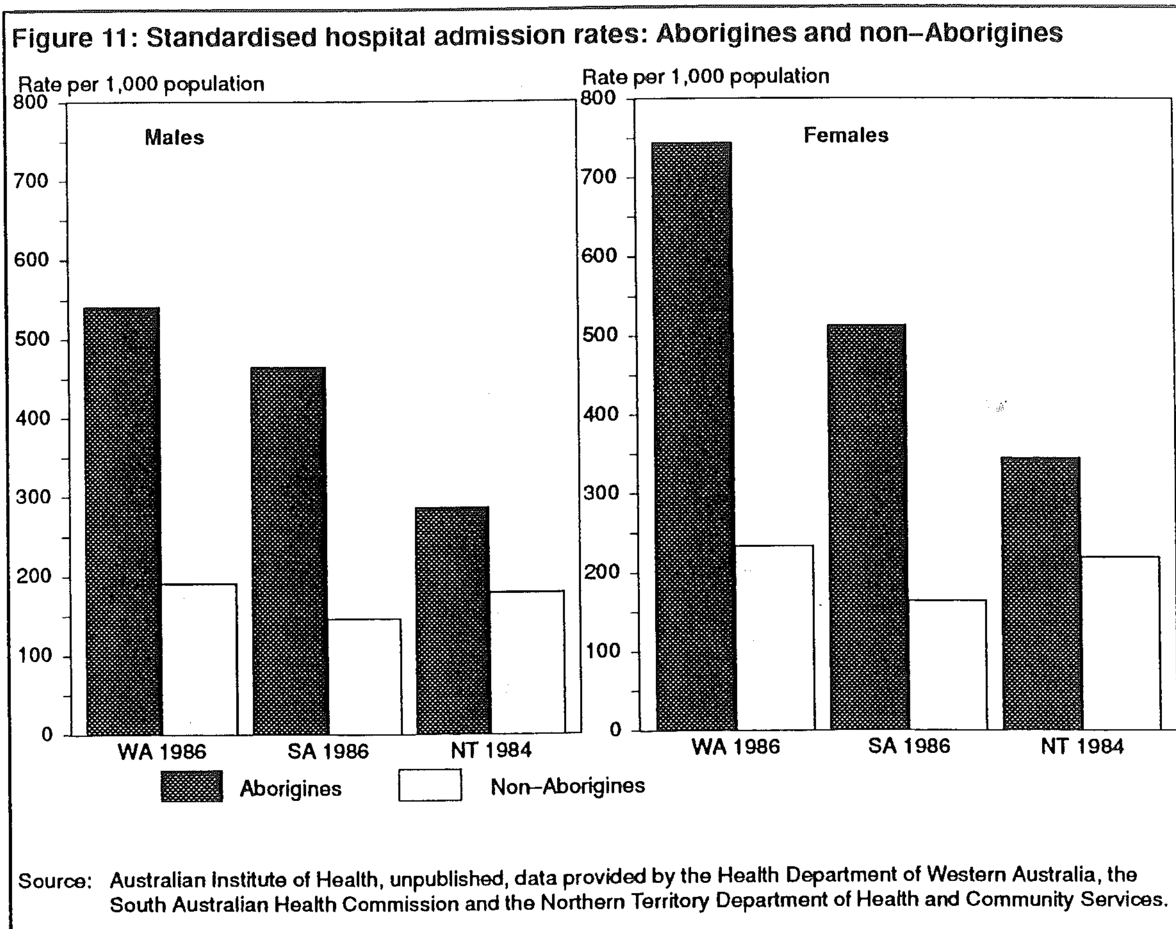
Overall, Aborigines are admitted to hospital two-and-a-half to three times more frequently than non-Aborigines, and, once admitted, tend to stay slightly longer. They are admitted more frequently for virtually every cause, and for every age-group, than are non-Aborigines.

Admission[5] rates

Admission data for Aborigines and non-Aborigines living in Western Australia, South Australia and the Northern Territory, directly standardised using the World Standard Population as the reference population, reveal that the overall Aboriginal male admission rate was 2.5 times that of non-Aboriginal males, and the overall rate for Aboriginal females was 2.8 times the non-Aboriginal rate.

For Western Australia and South Australia, Aboriginal admissions were around 3 times more frequent than non-Aboriginal admissions (see Figure 11). For the Northern Territory, the Aboriginal: non-Aboriginal rate ratio was 1.6 for both males and females.

Figure 11: Standardised hospital admission rates: Aborigines and non-Aborigines



Source: Australian Institute of Health, unpublished, data provided by the Health Department of Western Australia, the South Australian Health Commission and the Northern Territory Department of Health and Community Services.

5. Hospitalisation data are usually reported in terms of 'separations', comprising discharges, transfers and deaths. However, in this paper the more generally understood term 'admission' is used.

Age-specific admission rates

The highest admission rates for non-Aborigines occurred for older people, but for Aborigines the highest rates were for infants and young children (0–4 year age group).

Aboriginal admission rates were higher than those of non- Aborigines for all age groups. For both males and females, the highest rate ratio was documented for the 0–4 year age group, with the next highest rate ratios being found among young and middle aged adults (age group 35–44 years for males, and 45–54 years for females).

Causes of hospitalisation

From the combined data for Western Australia (1986), South Australia (1986) and the Northern Territory (1984), the leading causes of hospitalisation for Aboriginal males were conditions classified within the ICD group "external causes of injury and poisoning", the second highest rate being for diseases of the respiratory system.

For Aboriginal females, the leading cause of hospitalisation was the ICD supplementary classification, which includes a number of conditions associated with reproductive function. The next leading causes were the ICD groups "complications of pregnancy, childbirth, and the puerperium" and "external causes of injury and poisoning".

6 Sickness and disease

In terms of general morbidity, malnutrition is still a problem for a considerable number of Aborigines. Particularly in remote parts of the country, mild to moderate undernutrition in infants and young children is still quite common. Malnourished infants and children are more vulnerable to a wide range of infections, the risk being increased by unhygienic living conditions and high levels of environmental contamination. Many Aboriginal children enter the vicious synergistic cycle of infection-malnutrition, and carry the legacy of impaired growth into early adulthood.

From the early adult years, many Aborigines start to gain weight excessively, eventually becoming overweight or obese. High levels of obesity contribute to the high levels of diabetes mellitus, and increase the risks of developing hypertension and coronary heart disease.

Diabetes mellitus, almost exclusively type 2 (non-insulin dependent), is between two and five times more prevalent among Aborigines than among other Australians. Hypertension, virtually non-existent among Aborigines in the past, has become a significant problem for some Aborigines. As noted above, ischemic disease is now the major cause of Aboriginal mortality.

The communicable diseases, though less important now in terms of mortality, remain important causes of morbidity among Aborigines. Of major importance are respiratory tract and middle ear infections.

For many Aboriginal infants and children, diarrheal disease still poses a major threat, and in many parts of remote Australia trachoma remains common. Other communicable diseases more common among Aborigines than among non-Aborigines are skin infections and infestations, the sexually transmitted diseases and hepatitis B, which is being increasingly recognised. A number of other diseases, such as meningitis and osteomyelitis, also affect Aborigines disproportionately.

Although its precise impact is not known, AIDS has become a significant threat for Aboriginal groups in some parts of the country.

There are a relatively low number of new cases of tuberculosis and leprosy each year, but these diseases still cause problems for some Aborigines.

The prevalence of psychotic mental disorders among Aborigines is similar to that of the general population, but a number of other psychiatric disorders appear to be more common.

In many instances, Aboriginal use of alcohol is excessive, contributing substantially to both morbidity and mortality. Among Aboriginal children and adolescents, petrol inhalation has reached crisis proportions in some parts of Australia.

As reflected in both mortality and hospitalisation rates, the impact of injuries among Aborigines is much greater than among other Australians.

7 Conclusions

By virtually every health status measure, the health of Aborigines is much worse than that of other Australians.

With Aboriginal mortality roughly two to four times that of the total Australian population, Aborigines can expect to live many years less than other Australians. Throughout the country, the major cause of Aboriginal deaths is disease of the circulatory system, including heart disease. As noted above, the high death rates, particularly of young adult Aboriginal males, are reflected in the deaths occurring in custody.

The mortality of Aboriginal infants, despite substantial improvements since the early 1970s, remains about three times higher than that of non-Aboriginal Australians. Aboriginal maternal mortality is still three to five times that of other Australians.

Overall, the hospitalisation of Aborigines is two to three times higher than that of non-Aborigines, and up to five times higher for children less than five years of age.

For virtually every disease category, Aborigines experience higher levels of sickness. These higher levels of sickness are seen in malnutrition, many communicable diseases, non-communicable diseases, such as diabetes mellitus, alcohol and substance abuse, and in injuries.

The extent of the health disadvantages experienced by Aborigines led to the establishment, in December 1987, of a Ministerial Forum on Aboriginal health, comprising Commonwealth, State and Territory Ministers for Health and Aboriginal Affairs, and of a Working Party to develop a national strategy. The Forum is due to meet in June 1990 to decide on the implementation of the Working Party's recommended National Aboriginal Health Strategy (National Aboriginal Health Strategy Working Party 1989).

The elimination of Aboriginal health disadvantages requires a committed national health strategy, complemented by broad-ranging strategies aimed at redressing Aboriginal social and economic disadvantages, including the discrimination experienced by many Aborigines. Without such strategies, the standard of Aboriginal health will remain at levels that 'would not be tolerated if it existed in the population as a whole' (House of Representatives Standing Committee on Aboriginal Affairs 1979).

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