

Health and socioeconomic disadvantage

Although the overall level of health and wellbeing of Australians is relatively high compared with other countries, there are significant disparities in the health outcomes of different populations within Australia. In particular, people who live in areas with poorer socioeconomic conditions tend to have worse health than people from other areas. Previous analysis has shown that disadvantaged Australians have higher levels of disease risk factors and lower use of preventative health services than those who experience socioeconomic advantage.¹

This article will use the Socio-Economic Index of Disadvantage for Areas (SEIFA) to examine the association between socioeconomic disadvantage and health. It should be noted that SEIFA scores are based on summary measures that represent an average of people and households in an area and should not be presumed to apply to all individuals within that area.

Data from the ABS 2007–08 National Health Survey (NHS) shows that there is a relationship between an increased level of disadvantage and poorer health outcomes for people living in those areas.

There are various material and psychosocial reasons why people living in disadvantaged areas experience poorer health. For example, low income can negatively impact housing standards or reduce access to medical services; low educational attainment can affect the ability to obtain information on health services and health risk prevention; and the lack of a sense of financial security or control over one's life may create chronic stress which can negatively impact on physical as well as mental wellbeing. However, the direction of causality is not necessarily one way. For example, people with chronic conditions may have a reduced ability to earn income, family members may reduce or cease employment to provide care, while people or families whose income is reduced may move to disadvantaged areas to access low-cost housing.²

Self-assessed health

Self-assessed health is considered a good proxy indicator of the overall health of a population. Research has shown that self-assessed health is a strong predictor of mortality and morbidity and provides an insight into how people perceive their own health.³ For more information on self-assessed health see [Self-assessed health in Australia: A snapshot, 2004–05](#) (ABS cat. no. 4828.0.55.001).

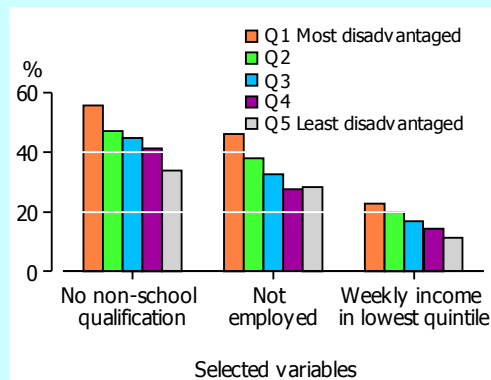
Data source and definitions

This article mainly uses data from the ABS 2007–08 National Health Survey. The analysis is restricted to all people aged 15 years and over unless otherwise stated.

The ABS has developed four indexes to rank the level of social and economic wellbeing of a region. The analysis in this article uses the *Socio-Economic Indexes for Areas (SEIFA) of Disadvantage* based upon the 2006 Census of Population and Housing. The SEIFA index of relative disadvantage combines a number of variables (such as income, education and unemployment) of people, families and dwellings within an area, and ranks these areas on a scale of relative disadvantage. In this article the scale is divided into quintiles – with the first quintile representing the areas of greatest relative disadvantage and the fifth quintile representing the areas of least relative disadvantage.

This article primarily focuses on the health outcomes of people living in the most disadvantaged areas (Quintile 1). People living in these areas were more likely to have no non-school qualification (56%), be not working (46%) or have a weekly personal income in the lowest quintile (23%) than those living in the least disadvantaged areas (34%, 28% and 11% respectively). The distribution of age groups were relatively similar across the quintiles of disadvantage.

Proportion(a) with selected variables by relative disadvantage of area – 2007-08



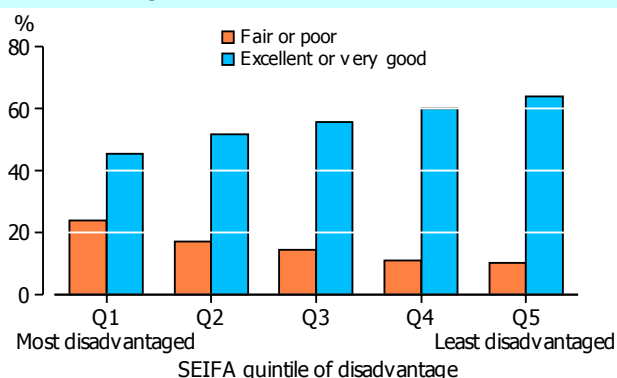
(a) Of total population, aged 15 years and over, living in each quintile.

Source: ABS 2007-08 National Health Survey

For more information on SEIFA see [Information Paper: An Introduction to Socio-Economic Indexes for Areas \(SEIFA\), 2006](#), (ABS cat. no. 2039.0).

In the past three ABS National Health Surveys (2001, 2004–05 and 2007–08) the majority of Australians (around 84%) rated their health as excellent, very good or good. However, there was a clear relationship between poorer self-assessed health and the relative disadvantage of the area in which people lived.

Proportion(a) who assessed their health as fair or poor, or, excellent or very good, by relative disadvantage of area – 2007-08



(a) Of total population, aged 15 years and over, living in each quintile.

Source: ABS 2007-08 National Health Survey

In 2007–08, almost a quarter (24%) of people living in the most disadvantaged areas rated their health as fair or poor compared with one-tenth of those living in the least disadvantaged areas. On the other end of the scale people living in the most disadvantaged areas were less likely to rate their health as excellent or very good (45%) compared with those living in the least disadvantaged areas (64%).

Selected long-term conditions

While the ABS 2007–08 NHS collected information on most long-term conditions, it had a particular focus on chronic diseases such as arthritis, cancer, diabetes, heart and circulatory conditions, and mental health.⁴ In 2007–08, there were clear gradients for most of these chronic diseases across the quintiles of disadvantage.

In 2007–08, people living in the most disadvantaged areas were more likely to have arthritis (23%) than those living in the least disadvantaged areas (15%). The proportion of people with arthritis levelled at around one-fifth in quintiles two and three and fell to around 15% in quintiles four and five.

The prevalence of other chronic diseases, such as ischaemic heart disease and diabetes, displayed a similar pattern across the levels of disadvantage. In 2007–08, people living in the most disadvantaged areas were around two and a half times as likely as those living in the least disadvantaged areas to have ischaemic heart disease (5.9% compared with 2.3%). The proportion of people with ischaemic heart disease tended to decline as the level of disadvantage also decreased. In 2007–08, this pattern was also reflected in the proportion of people who reported having diabetes.

The risk of cancer can be influenced by an individual's lifestyle and the conditions in

Indigenous Australians and self-assessed health

In 2004–05 Indigenous Australians, aged 15 years and over, made up 1.5% of the Australian population and over three-fifths (62%) lived in areas in the bottom two quintiles of socioeconomic disadvantage.

In the 2004–05 National Aboriginal and Torres Strait Islander Health Survey, Indigenous Australians living in the most disadvantaged areas were 1.4 times more likely to report their health as fair or poor compared with non-Indigenous Australians living in the most disadvantaged areas. Alternatively, of those living in the most disadvantaged areas Indigenous Australians were around half (0.6) as likely to assess their health as excellent compared with non-Indigenous Australians.

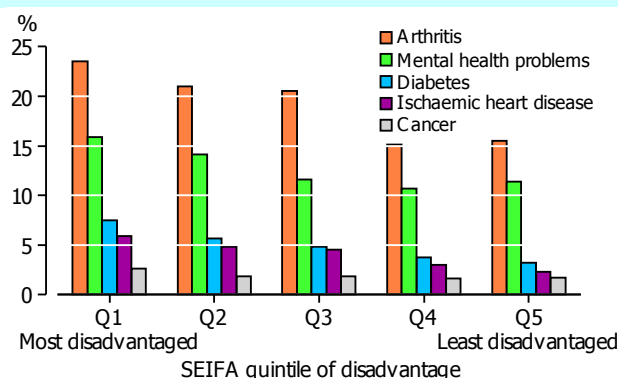
For more information on Indigenous Australians and their health see [The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, 2008](#) (ABS cat. no. 4704.0).

which they live. For example, people in the most disadvantaged areas were more likely to be current smokers than those in the least disadvantaged areas (see the section below on 'Health risk factors'). Furthermore, people who live in areas of greater disadvantage may be less likely to be reached by preventative and promotion measures relating to cancer.⁵ In 2007–08, there was a greater proportion of people who had cancer in the most disadvantaged areas (2.6%) compared with the least disadvantaged areas (1.7%).⁶

...mental health

The direction of causality between mental health and socioeconomic disadvantage is unclear, but mental and behavioural problems can impair an individual's wellbeing. For example, poor mental health may affect an individual's ability to perform everyday activities such as working or maintaining a

Proportion(a) who had a selected long-term condition by relative disadvantage of area – 2007-08



(a) Of total population, aged 15 years and over, living in each quintile.

Source: ABS 2007-08 National Health Survey

social network. The NHS identified conditions such as emotional disorders, dependence on drugs or alcohol, feeling anxious or nervous and depression as examples of long-term mental and behavioural problems.

As with other selected long-term conditions, the proportion of people who reported having mental problems increased as levels of socioeconomic disadvantage increased. In 2007–08, 16% of people living in the most disadvantaged areas had a mental or behavioural problem compared with 11% of people living in the least disadvantaged areas. Proportions of people who reported having a mental or behavioural problem levelled at around one in ten across quintiles three, four and five.

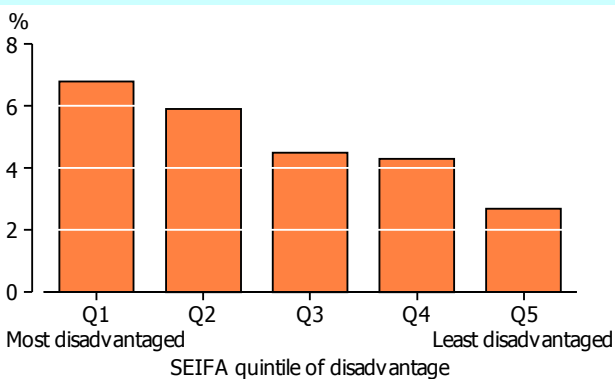
Disability

In 2007–08, there were higher proportions of people living with a disability in the most disadvantaged areas compared with people living in the least disadvantaged areas.⁷ As with other long-term conditions the direction of causality of this relationship is not straightforward.

The proportion of people with a profound or severe disability decreased with declining levels of disadvantage. More than twice the proportion of people living in the most disadvantaged areas (6.8%) had a profound or severe disability compared with those living in the least disadvantaged areas (2.7%).

A similar pattern was also reflected in the proportion of people who had an employment restriction due to a disability living in the most disadvantaged areas (18%) compared with those living in the least disadvantaged areas (7.7%), and in the proportion of people who had an education restriction due to a disability (4.2% compared with 2.1%).

Proportion(a) with a profound or severe disability by relative disadvantage of area – 2007-08



(a) Of total population, aged 15 years and over, living in each quintile.

Source: ABS 2007-08 National Health Survey

Health risk definitions

Current smokers are those who reported at the time of interview that they smoked cigarettes, cigars or pipes.

Obesity is defined according to Body Mass Index (BMI), using the formula weight in kilograms divided by height in metres squared. Adults are classed as obese if their BMI score is 30 or greater.

Risky or high risk drinking refers to relative risk levels as defined by the National Health and Medical Research Council (NHMRC) in 2001. The main guideline to minimise risk in the long-term limits consumption to no more than an average of four standard drinks a day for a man and two standard drinks a day for a woman. In this article, **risky or high risk drinking** refers to drinking above these guidelines based on a seven-day average. Although these guidelines were revised in mid-2009, the analysis in this article is based on the 2001 guidelines as it is not possible to create meaningful measures relating to the 2009 guidelines from the 2007–08 NHS.

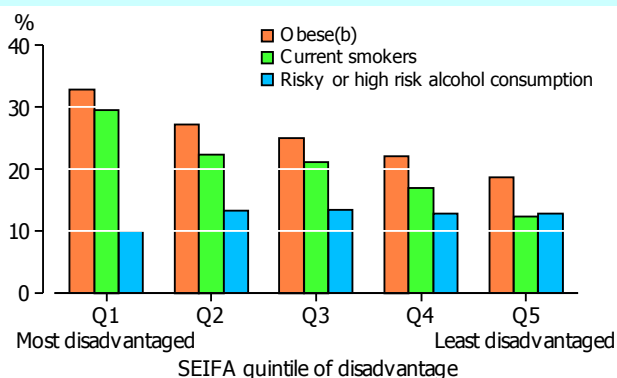
Health risk factors

Health risk factors can influence the health status of an individual and can signify an increased risk of developing a particular disease or condition. Lifestyle behaviours such as tobacco smoking, risky alcohol consumption and obesity are three of the more prominent health risks in Australian society. Smoking has been associated with cancers and lung disease; obesity has been associated with mature onset diabetes and heart disease; and risky drinking has been linked to liver disease and acute short term effects, for example, dangerous driving and violence. In 2007–08, the prevalence of these health risk factors varied according to the socioeconomic disadvantage of an area.

In 2007–08, people aged 15 years and over, and living in the most disadvantaged areas, were more likely to be current smokers (30%) compared with those living in the least disadvantaged areas (12%). This difference partly reflects the number of people who had never smoked; under half (45%) of those living in the most disadvantaged areas had never smoked compared with almost three-fifths (58%) of people living in the least disadvantaged areas. The proportion of people who were ex-smokers was relatively stable (at around 30%) across the five levels of disadvantage.

Being obese poses major health risks by increasing the risk of chronic illnesses such as diabetes, cardiovascular disease and some cancers.⁸ In 2007–08, one-third of people living in the most disadvantaged areas (aged 18 years and over and who had their BMI score measured) were categorised as obese compared with under one-fifth (19%) who lived in the least disadvantaged areas. There was a clear gradient in the proportion of people who were classed as obese as the levels of disadvantage increased.

Proportion(a) with health risk factors by relative disadvantage of area – 2007-08



(a) Of total population, aged 15 years and over, living in each quintile.
 (b) Proportion of people who are obese of total population who had their BMI score measured, aged 18 years and over, living in each quintile.

Source: ABS 2007-08 National Health Survey

In contrast, the trend was reversed for the proportion of people who consumed alcohol at a level considered risky to their health – being slightly less common in the most disadvantaged areas (10%) compared with the least disadvantaged areas (13%).

Distribution of health services

People living in areas of greatest socioeconomic disadvantage may have difficulty accessing health services due to economic restraints and reduced mobility. However, there is also evidence to suggest that there is an uneven distribution of health services between areas of greatest and lowest relative disadvantage. The per capita rate of medical practitioners, specialists and dental practitioners all increased with declining levels of relative disadvantage.⁹

In 2006, around one in ten (11%) generalist medical practitioners worked in the most disadvantaged areas compared with almost one in four (24%) working in the least disadvantaged areas. There were less than half the rate of specialists working in the most disadvantaged areas (less than 30 per 100,000 people) compared with the least disadvantaged areas (over 60 per 100,000 people). A similar pattern was evident for the number of dental practitioners per 100,000 people, with almost half as many working in the most disadvantaged areas compared with the least disadvantaged areas.

Primary health care

In 2007-08, people living in the most disadvantaged areas were more likely than others to frequently consult their general practitioner (GP). Of those living in the most disadvantaged areas 15% consulted their GP at least once a month compared with 6.6% of those living in the least disadvantaged areas.

This is consistent with the evidence that people from more disadvantaged areas experience poorer health than others.

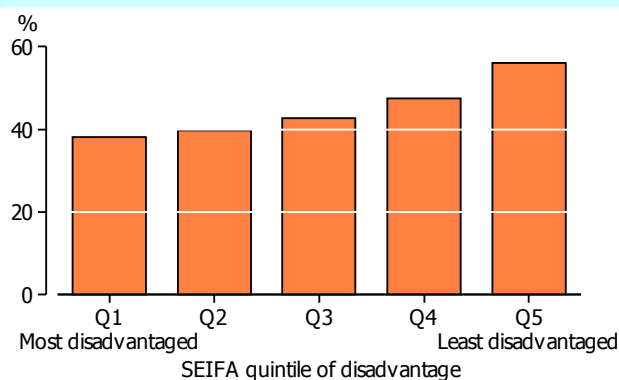
In contrast, in 2004-05 (the most recent NHS in which information on dental consultations was collected), people living in the most disadvantaged areas were less likely to have consulted a dentist in the 12 months prior to interview than those living in the least disadvantaged areas (38% compared with 56%). The proportion of people who had consulted a dentist tended to increase as the level of disadvantage decreased. This pattern was similar for visiting a dentist in the periods: three months, three to six months and six to 12 months, prior to interview. Dental visiting behaviour is closely associated with oral health; people who visit a dentist regularly have less invasive treatments than people who have a problem-orientated pattern of attendance.¹⁰ As dental services are not covered by public health arrangements, less frequent dentist visits are consistent with those living in the most disadvantaged areas being less likely to have the economic resources needed for dentist visits.

In 2007-08, this pattern was also reflected in the proportions of people who consulted other health professionals not covered under Medicare. In the 12 months prior to interview, 13% of people living in the most disadvantaged areas had consulted an acupuncturist, chiropractor, nutritionist or naturopath compared with 19% of those living in the least disadvantaged areas.

Health insurance

Private health insurance is one way of planning for health expenses. Private health insurance supplements the Medicare system and depending on the type of insurance purchased, provides cover against all or part of hospital theatre, accommodation costs in hospitals and costs associated with a range of services not

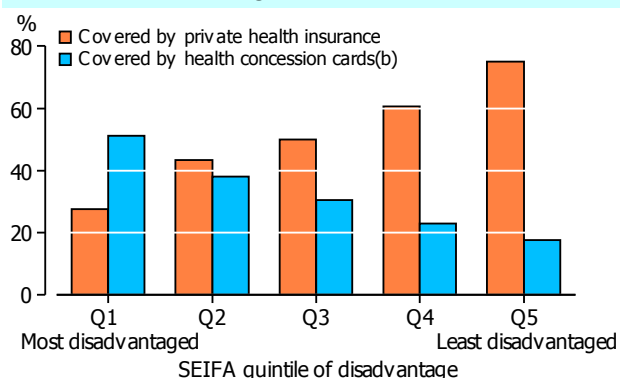
Proportion(a) who visited a dentist in the 12 months prior to interview – 2004-05



(a) Of total population, aged 15 years and over, living in each quintile.

Source: ABS 2004-05 National Health Survey

Proportion(a) covered with private health insurance and health concession cards(b) by relative disadvantage of area – 2007-08



(a) Of total population, aged 15 years and over, living in each quintile.

(b) Includes government health concession cards and veteran concession cards.

Source: ABS 2007-08 National Health Survey

covered under Medicare (including private dental services, optical, home nursing and ambulance). For more information see [Private Health Insurance: A snapshot, 2004-05](#) (ABS cat. no. 4815.0.55.001).

People living in the most disadvantaged areas reported much lower rates of private health insurance than those living in the least disadvantaged areas (28% compared with 75%). As the relative disadvantage of areas decreased there was a clear increase in the proportion of people who had private health insurance, rising from 43% to 50% to 61% across the three middle quintiles. This pattern is not surprising given the government policy to encourage people who can afford private health insurance to take it out. For example, the Medicare levy surcharge is applied to people who do not have private hospital cover and earn above a specified income (\$73,000 for individuals and \$146,00 for families), encouraging those with a higher income to take out private hospital cover.

While people living in areas of greater disadvantage were less likely to purchase private health insurance, they were more likely to be covered by other schemes such as government health concession cards or veteran concession cards, reflecting the greater proportion of people receiving pensions and other income support in more disadvantaged areas. Around half (51%) of people living in the most disadvantaged areas were covered by one of these cards compared with under one-fifth (18%) of people living in the least disadvantaged areas.

Looking ahead

The Council of Australian Governments' current *National Healthcare Agreement* (NHA) sets objectives to address the disparities in health outcomes of different populations, including between Indigenous and non-Indigenous Australians. The NHA stipulates that all governments agree that the healthcare system will strive to eliminate difference in the health outcomes of groups currently experiencing poorer health relative to the wider community. The NHA endeavours to improve health outcomes for all Australians and sustain a health system that promotes social inclusion and reduces disadvantage.¹¹

Endnotes

- 1 Australian Bureau of Statistics, 1999, 'Health and socioeconomic disadvantage of area' in [Australian Social Trends 1999](#), cat. no. 4102.0, ABS, Canberra, <www.abs.gov.au>.
- 2 Australian Institute of Health and Welfare, 2009, [Australia's Welfare 2009](#), cat. no. AUS 117, AIHW, Canberra, p. 153, <www.aihw.gov.au>.
- 3 Australian Bureau Statistics 2004-05, [Self-assessed health in Australia: A snapshot, 2004-05](#), cat. no. 4828.0.55.001, ABS, Canberra, <www.abs.gov.au>.
- 4 Long-term conditions are conditions that had lasted or are expected to last for six months or more.
- 5 World Health Organisation, 2002, [National Cancer Control Programmes: Policies and Managerial Guidelines](#), 2nd Edition, WHO, Geneva, part I, pp. 5-7, <www.who.int>.
- 6 The NHS excludes people in hospitals, nursing and convalescent homes and hospices; the exclusion of these groups is expected to have a greater effect on the data for cancer than for most other long-term conditions.
- 7 In this analysis a disability refers to a long-term condition that has or is expected to last six months or more and limits or restricts core activities.
- 8 World Health Organisation, 2006, [Obesity and Overweight](#), Fact sheet no. 311, WHO, <www.who.int>.
- 9 This excludes medical practitioners, dental practitioners and specialists working in hospitals; Information in the paragraph comes from: Australian Bureau Statistics, 2006, [Selected Health Occupations: Australia, 2006](#), cat. no. 4819.0, ABS, Canberra, <www.abs.gov.au>.
- 10 Australian Institute of Health and Welfare, 2004-06, [Geographic variation in oral health and use of dental services in the Australian population 2004-06](#), research report no. 41, AIHW, Canberra, p. 2, <www.aihw.gov.au>.
- 11 Council of Australian Governments, 2007, [National Healthcare Agreement](#), COAG, Canberra, pp. 3-5, <www.coag.gov.au>.