



Review of diabetes among Indigenous peoples

Australian Indigenous HealthInfoNet

Introduction

Early studies of Indigenous people before the adoption of Western lifestyles showed no evidence of diabetes, but the condition, particularly type 2 diabetes is now recognised as a very important health problem for Indigenous peoples across Australia. It has become very common – over three times more likely to occur than in the non-Indigenous Australian population – and the consequences can be bad, as will be shown below [1-3].

(For general information about diabetes, see Background information.)

The effect that diabetes has on Indigenous people can be measured in three main ways:

- The number of people who have diabetes
- The number of people who go to hospital because of diabetes
- The number of people who die because of diabetes

How common is diabetes among Indigenous people?

A recent major national survey, called the 2004-05 National Aboriginal and Torres Strait Islander Health Survey [4], found:

- Diabetes/high sugar levels were reported by around 1 in 16 Indigenous people
- Diabetes/high sugar levels were more common among Indigenous people living in remote areas (that is, communities/small towns) (around 1 in 11) than among those living in non-remote areas (that is, big towns/cities) (around 1 in 20)

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More detailed information about diabetes in Indigenous people can be found at:

http://www.healthinfonet.ecu.edu.au/diabetes_review

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- Diabetes/high sugar levels were more than 3 times more common among Indigenous people than among non-Indigenous people
- The difference of diabetes/high sugar levels between Indigenous and non-Indigenous females greater than the difference between Indigenous and non-Indigenous males
- Indigenous people were more likely to get diabetes at younger ages than non-Indigenous people [4]

Table 1. *Diabetes - percentages of people reporting diabetes/high sugar levels as a 'long-term health condition', by Indigenous status, and Indigenous:non-Indigenous ratios, Australia, 2004-2005 [4]*

Age group (years)	Indigenous people	Non-Indigenous people	Ratio
15-24	1.0	0.5	2.0
25-34	4.3	0.6	7.2
35-44	10.0	2.0	5.0
45-54	20.7	4.0	5.2
55+	32.1	11.6	2.8

How common are diabetes in pregnancy (gestational diabetes) and type 1 diabetes among Indigenous people?

Diabetes in pregnancy

There have not been many studies of diabetes in pregnancy, but one study from the Northern Territory found:

- Around 1 in 16 Indigenous women developed gestational diabetes
- Around 1 in 25 non-Indigenous women developed gestational diabetes

After taking account of the fact that Indigenous women tend to have babies at younger ages than non-Indigenous women, the level of gestational diabetes for Indigenous women was more than twice that of non-Indigenous women [5].

Type 1 diabetes

A study in New South Wales found that Indigenous and non-Indigenous children had similar levels of type 1 diabetes [6, 7].

How many Indigenous people go to hospital because of diabetes?

When a person goes to hospital, the main reason for doing so is written down (recorded) -- for example, it may be because of a heart attack. Often diabetes is not recorded as the main reason because it is linked to other illnesses, such as heart disease, kidney troubles, stroke, and feet problems. So the number of people who go to hospital because of their diabetes is not really known. For example, diabetes was recorded as the reason an Indigenous person had to go to hospital in only 1 in 100 admissions in 2003-04, but we know it is linked with quite a lot of illnesses that require admission [8].

Despite this, the rate of Indigenous people going to hospital for diabetes was higher than the rate for non-Indigenous people - 8 times higher for Indigenous males than non-Indigenous males, and 10 times higher for Indigenous females than for non-Indigenous females [8].

How many Indigenous people die because of diabetes?

Diabetes is the cause of many Indigenous deaths. For Indigenous people living in Qld, WA, SA and the NT in 1999-2003, diabetes caused around 1 in 12 deaths. Deaths caused by diabetes were 7.5 times more common for Indigenous males than for non-Indigenous males and deaths caused by diabetes were 10.5 times more common for Indigenous females than for non-Indigenous females. For people aged 35-54 years, Indigenous males died at a rate 21 times that of non-Indigenous males, and Indigenous females died at a rate 37 times that of non-Indigenous females. These alarming statistics show the seriousness of diabetes for Indigenous people [8].

What causes so many Indigenous people to get diabetes?

There are many reasons why Indigenous people have higher rates of type 2 and gestational diabetes than non-Indigenous people:

- Obesity is 1.5 times more common among Indigenous people than among non-Indigenous people [9-17]
- More than 2 out of 5 Indigenous people surveyed reported taking no exercise, compared with 3 out of 10 non-Indigenous people [4]
- Many Indigenous people eat too much fatty and sugary foods

- Many Indigenous people live in poor housing and environments [4, 18-24]

What are the main problems faced by Indigenous people who live with diabetes?

For Indigenous people living in the Northern Territory:

- The main cause of death among people with diabetes is kidney disease (sometimes called end-stage renal disease) (for non-Indigenous people with diabetes, the main cause of death is heart disease) [13, 25-29].
- Infection is the second most common cause of death for people with diabetes. More than 1-in-5 deaths of Indigenous people with diabetes in Australia in 1995 were caused by infection). [20, 27, 30].
- Diabetes is a major cause of blindness. In the Northern Territory in 1994, almost 3-out-of-10 Indigenous people with diabetes had some form of eye damage [18, 5].
- Almost one-in-five admissions to hospital of Indigenous people with diabetes are a result of cardiovascular (heart and blood system) complications [5].
- More than nine-out-of-10 people with diabetes going to hospital for feet problems were Indigenous [31, 32].

How can diabetes be looked after?

There is no way of curing diabetes, so it is important to keep it under control.

You can improve your diabetes by:

- losing weight
- eating healthier, more natural foods
- eating a few smaller meals per day rather than one or two large ones
- doing more exercise, including looking for ways to put more activity into your day (for example, walking to the shops instead of driving)
- taking medicines that can lessen the amount of sugar in your blood (if prescribed by doctor)
- stopping smoking
- drinking less alcohol
- having good hygiene (to reduce infections) [33]

You should also visit your health clinic often, so that:

- your eyes can be checked
- your feet can be checked
- your kidneys can be checked
- your blood pressure can be checked [33]

For many Indigenous people, controlling their diabetes can be hard since access to health services is far away, or they speak a different language, or do not understand the nurses/doctors (different culture). This can increase the harmful effects of diabetes on Indigenous people [34, 35].

What is being done about diabetes in Indigenous communities?

Governments have made plans and put forward ideas of how to lessen the harmful effects of diabetes among Indigenous people. Some of these include:

- The National Diabetes Strategy and Implementation Plan [36]
- National Diabetes Strategy 2000–2004 [37]
- Western Australian Diabetes Strategy 1999
- Healthy lifestyles – A strategic framework for the primary prevention of diabetes and cardiovascular disease in Western Australia 2002–2007
- NSW chronic disease prevention strategy 2003–2007

In view of its seriousness for Indigenous people, it appears that much more could be done to reduce and deal with diabetes.

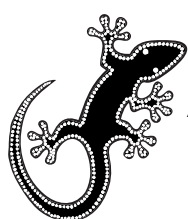
Summary

There is no doubt that diabetes is a big health problem for many Indigenous people, especially type 2 diabetes, which is four times more likely to affect Indigenous than non-Indigenous people. Many Indigenous people die from its effects.

Diabetes is caused by the way people live their lives, so there is a lot that people can do to stop themselves from getting it, and a lot that can be done to lessen its impact if they do get it. But, as with most other areas of Indigenous health, there is not enough being done to lessen the harmful effects of this sickness among Indigenous people [33].

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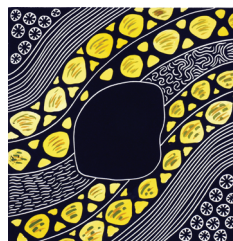
The Australian Indigenous HealthInfoNet is an innovative Internet resource that contributes to 'closing the gap' in health between Indigenous and other Australians by informing practice and policy in Indigenous health.

Two concepts underpin the HealthInfoNet's work. The first is evidence-informed decision-making, whereby practitioners and policy-makers have access to the best available research and other information. This concept is linked with that of translational research (TR), which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge through ongoing interaction with key stakeholders.

The HealthInfoNet's work in TR at a population-health level, in which it is at the forefront internationally, addresses the knowledge needs of a wide range of potential users, including policy-makers, health service providers, program managers, clinicians, Indigenous health workers, and other health professionals. The HealthInfoNet also provides easy-to-read and summarised material for students and the general community.

The HealthInfoNet encourages and supports information-sharing among practitioners, policy-makers and others working to improve Indigenous health – its free on line yarning places enable people across the country to share information, knowledge and experience. The HealthInfoNet is funded mainly by the Australian Department of Health and Ageing. Its award-winning web resource (www.healthinfo.net.ecu.edu.au) is free and available to everyone.

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