

# Transcript of interview with Professor Wendy Hoy

**Voice-over:** Welcome to the National Health and Medical Research Council podcast. Our podcasts aim to keep you in touch with major health and medical research issues, and the people who shape them.

**Interviewer:** Professor Wendy Hoy is the director of the University of Queensland Centre for Chronic Disease and has conducted precedent-setting research into the role of chronic disease in certain populations.

Wendy, thank you for joining us today in this conversation. I thought we might start by you just giving us a bit of a setting.

**Prof. Hoy:** My work focuses on chronic disease generally - its pathophysiology, its risk factors, its epidemiological patterns and the health services that we need to implement to get control over it. The populations that I have worked with and studied include native Americans in the south-west of the US, as well as in Australia, where the prime focus is on Australian Indigenous people and in my particular instance, mostly Aboriginal people. Others are doing most of the work on Indigenous people in the Torres Strait.

**Interviewer:** Let's examine those risk factors. What are they?

**Prof. Hoy:** It's difficult to summarise them, and I don't want to oversimplify it or suggest that we know all the answers. But they arise in large part out of an environment of disadvantage, which we know the Aboriginal people experience. They probably begin preconception with epigenetic factors potentially modifying the way that the genes are going to dictate our later health. They are entrenched in the intrauterine environment, with adverse factors that are altering the baby's optimal development, and this includes the obvious things like frank maternal undernutrition, just not getting enough of the right things to eat. But it extends beyond that. There is really good evidence that general maternal ill health, infections, for example, maternal stress, and certainly smoking and alcohol use and probably ganja use, and so on, all profoundly affect babies' development.

Then, in postnatal life, where does it begin? It begins with infant malnutrition, which begins when they're weaned, and poor weaning practices, persistent recurrent infections of all sorts during infancy and childhood. Then the preferential central deposition of fat around the tummy that many of these groups experience, which begins post puberty and probably was, in fact, a characteristic that enhanced survival and ability to have your own children and therefore for when all the Darwinian objectives. Over the longer term, though, it appears that many of these chronic disease risk factors are flagged by and marked by a preferential central fat deposition.

And then we can't fail to mention the fact that throughout all of life in these remote environments, at least, poor nutrition is really very marked. It's poor nutrition in the sense of not getting enough of the right things very often, but as well getting too much of saturated fats and refined sugars and so forth, and all the factors that we've introduced with our quick-fix sort of westernised diets. And this is often just not a question of choice with Aboriginal people; it's usually a question of what's available and what they can afford, with the elevated prices in

remote places and the great deficiency of fresh fruit and veg and so forth in their local stores, and the lack of exercise as part of their daily life anymore.

And then there's a final category of risk factors that's hard to talk about because we don't yet have the vocabulary, but I think it's very clear that personal and societal stress is an excruciatingly powerful risk factor for all these disorders. We don't quite know yet how to measure it, how to capture that, in epidemiological tools, questionnaires, information gathering, how to have people speak about it and capture it, and we're in a fairly early stage of working out what biological markers - say, for example, in the saliva or the blood - might mark that stress, but watch this space for the next 10 years. We will prove that that is really profound.

**Interviewer:** What do you think are the biggest health issues in some of these remote areas?

**Prof. Hoy:** Well, the death statistics tell us they are conditions leading to deaths of misadventure, what we call external causes - the deaths of interpersonal violence, motor vehicle accidents, intoxications and so forth. That's one major category. The other major category is this epidemic that's developed in the last 25 years of chronic disease. Those two together are the causes of the vast majority of the excessive deaths in Aboriginal people at this point.

**Interviewer:** Now these are complex problems that you're describing here, and I'd be interested to understand from the work that you've done what possible solutions are being proposed to try and address these issues?

**Prof. Hoy:** Well, it depends what populations you're talking about. In the Pacific islanders, who are by and large much healthier people with a much longer lifespan than mainland Aboriginal people, most of the risk factors are the postnatal ones related to excesses of diet, rather than deficiencies, and disturbances in the exercise patterns. And those are matters for public health programs and education. In the environment where profound socio-economic disadvantage and poverty are feeding into it at the front end as well, the solutions are intersectoral ones, and health is only a very minor part of it. They are better education, better employment opportunities, better access to good food, better infrastructure in communities for recreation, better housing and plumbing and so forth so that people aren't constantly battling off infections and so forth. And this is where Australia needs to focus in improving the lot of remote Aboriginal people, and they will find that a large part of the health profile improves along with it, independent of any fundamental changes we make to health services.

But, a very good lesson for health services to know, that anything that you're going to do for an ongoing chronic problem has to be sustained over the long term and you have to find strategies to keep the health services interested in doing it and you have to find the money to support it. Chronic disease activities like mental health are not very dramatic. They're not that attractive. And they're always the ones that get the short end of the stick when resources are tight - people are pulled away from those teams and money is taken away to support the acute care activities which are much more florid --

**Interviewer:** Obvious.

**Prof. Hoy:** -- and obvious; that's right.

At least we need a statutory body in Australia that takes fundamental and overarching responsibility for defining the way that systematic Aboriginal health care delivery occurs and making sure it's adequately resourced and making sure that all the processes and outcomes are

documented so we can modify our strategies to get success. At the very least that's what we need to have. It needs to be a nationwide one, because these people don't know the state boundaries as we know them. Whether it's a dedicated Aboriginal health service, that may be a technicality in terms of definition now. And, of course, given that in actual fact most people who categorise themselves as Aboriginal in Australia in fact are not living remotely anymore, they're living urban and peri-urban, perhaps Aboriginal health services don't appropriately apply to them. So we've got to just improve and systematise the health care delivery in the primary health care access of general practice for everybody to reach them.

**Interviewer:** Is it better to have a dedicated health service for a particular population, or is it better to mainstream?

**Prof. Hoy:** I really don't have the final answer on that. I think it has to be up for major discussion. And this, of course, is the opportunity for it now with the new government and new views and a resolve to put extra money into the Aboriginal issue until some things sort of improve. That dialogue needs to occur. Obviously a dedicated health service for Aboriginal people is not necessarily going to reach the urban and peri-urban people who are employing either Aboriginal medical services within town or mainstream mechanisms.

And then for the reimbursement mechanisms, these are not glamorous activities, this screening and so forth, nor are they very complex, and they should be done in the remote Aboriginal setting by Aboriginal health workers - not by nurses and certainly not by doctors. In actual fact, in the Tiwi setting, we were doing much of those functions by people who didn't even have a high school degree, and they had no medical training. But as long as they're literate and numerate and can learn the techniques of taking a blood pressure and so forth, they can do those tasks very nicely indeed.

But you have to gear the reimbursement mechanisms for those screening tests and for the treatment that flows on to that for the service provider who gave the service. And Medicare reimbursement at this point in time is all focused on doctor services. I would say let's just simplify it and let's reimburse facilities for health worker rendered services as an honest fact with the other site mechanisms there to make sure the quality observations is good and so forth. Then everything related to chronic disease care becomes self-supporting.

**Interviewer:** Are you optimistic for the future?

**Prof. Hoy:** Oh, indeed, oh, indeed. Well, of course, there's no point thinking pessimistically. But we can't have a repeat of the last two decades of Aboriginal health services in remote areas, and I do believe that this government, with the precedent set by the Northern Territory intervention, whatever one thinks about it and its legitimacy and so forth, the precedent has been set for saying there are some terrible problems here and we're going to have to throw a lot of money at it as well as use the correct strategies to spend that money. But the mental leap of this is going to require a huge investment has been made. Now it's our opportunity here to modify that strategy or whatever and make sure it covers these whole of life issues and all the intersectoral issues that embraces a robust and coherent and strategic health services system as well.

**Interviewer:** I think your hopes are echoed by almost everybody else in this country.

**Prof. Hoy:** It's quite wonderful to be in this era, isn't it?

**Interviewer:** It really is.

**Voice-over:** This podcast was brought to you by the National Health and Medical Research Council, working to build a healthy Australia. You'll find more information about this and other health and medical research issues on our website, at [www.nhmrc.gov.au](http://www.nhmrc.gov.au).