



A snapshot of risk factors for cardiovascular disease and diabetes in Whyalla's Aboriginal Community

– *Preliminary results* –

Les Taylor - PHC RED Development Placement

Gary Misan, Sonia Champion, Judy Taylor



University of
South Australia



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Context

Australia's Aboriginal people are at higher risk of developing chronic disease than their non-Aboriginal counterparts –

- < The prevalence of diabetes and cardiovascular disease is 3 – 4 x higher than non-Aboriginal population for any age
- < CVD mortality 7 – 12 x higher than non-aboriginal population in 25-54 yr age group
- < Risk of death from diabetes is 10 – 13 x higher than non-aboriginal population
- < High prevalence of undiagnosed diabetes with much earlier age onset than for non-Aboriginal population
- < Also evidence indicating higher prevalence of metabolic syndrome in Aboriginal people

It is important to identify people who are high risk of developing these conditions while we can still do something about preventing them

metabolic syndrome

Characterised by

- = **central obesity**
- = **elevated triglycerides**
- = **low HDL cholesterol**
- = **impaired glucose/insulin control**
- = **elevated blood pressure**
- *cut-offs for Aboriginal population not defined but likely to be lower than for non-Aboriginal*

< Caused by

- = **sedentary lifestyle**
- = **diets high in saturated fat, refined carbohydrate, salt**

< Increases risk ¹ for

- = **Type 2 diabetes (3 x)**
- = **CVD (3 x)**
- *leading causes of premature disability and death in western countries*



¹ [Isomaa B, et al \(2001\). Diabetes Care. 2001 Apr;24\(4\):683-9](#)



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risk of CV & diabetes

- < There is no reliable prevalence data for diabetes or CV risk for Aboriginal people in Australia that is based on large studies
- < Existing estimates are based on small studies
- < Prevalence for SA is generally estimated from broader population data and/or from samples based on WA and NT where data is better but not necessarily comparable
- < There is no data for Whyalla's Aboriginal community
- < Thus there is no 'evidence' on which to plan targeted health promotion activities.

- < Whyalla's current Aboriginal population is estimated at 650 people¹
- < estimates range from 500 – 750
- < More females than males
- < ~ 80% are aged under 35 yrs²
- < ~ 60% less than 25 yrs

1. Whyalla Social Profile, 2006
2. ABS Census, 2001

INDIGENOUS POPULATION - WHYALLA				
	Males	Females	Persons	Percentage
0-4	35	51	86	13.7
5-9	50	53	103	16.4
10-14	36	45	81	12.9
15-19	35	41	76	12.1
20-24	29	16	45	7.2
25-29	25	28	53	8.4
30-34	19	29	48	7.6
35-39	17	15	32	5.1
40-44	14	21	35	5.6
45-49	10	14	24	3.8
50-54	7	10	17	2.7
55-59	5	5	10	1.6
60-64	3	5	8	1.3
65 years and over	3	8	11	1.7
Total	288	341	629	100

ABS Census 2001



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purpose of study

- To determine, for Aboriginal people in Whyalla –
- < to what extent do they exhibit characteristics of metabolic syndrome
 - < what is their risk of developing heart disease and diabetes
 - < what might be done to mitigate this risk

method

- < ethics approval from UniSA HREC, AHC-SA
- < community consultation
- < purposive sample of non-diabetic adults; ≥ 30 people
 - = Aboriginal, over 18
 - = live in Whyalla ($> 9/12$ out of 12)
 - = informed consent
 - = not diabetic, not pregnant
- < assessments for –
 - = Anthropometry –
 - < height, weight, waist-hip circumference
- < seated blood pressure
- < non-fasting blood glucose and cholesterol
- < short survey of diet and exercise habits



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preliminary results

- < 3 screening sessions to date
 - = 1 Nunyara Wellbeing Centre
 - = 2 Buttingarra (CDEP)
- < Team from SGRHS –
 - = including dietetics students
 - = in association with Aboriginal Health workers from Nunyara
- < lunch provided for participants
- < 19 people screened; 18 eligible (1 pregnant)
- < aiming for at least 30 people



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next steps

- < to complete screening
 - = ? At TAFE, other
 - = aiming for at least 30 people
- < analyse data
- < take information back to community
- < discuss implications
- < decide what might be done
- < decide how community might be involved
- < discuss with Nunyara CEO / Board
 - = ? seek funding
 - = implement health promotion program or other
 - = monitor process and outcomes
- < publish



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summary

- < Aboriginal people at higher risk of illness and death from CV disease and diabetes
- < have a higher risk of metabolic syndrome
- < little data for risk for SA; no data for Whyalla
- < study to assess prevalence of metabolic syndrome
- < 18 eligible people screened to date; aiming for 30 or more
- < Preliminary results only at this stage
- < Full risk assessment still to come
- < Being done as a PHC RED Research development placement

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Thank you

Les Taylor

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Tel:(08) 8647 6002

leslie.taylor@unisa.edu.au



<http://sgrhs.unisa.edu.au>