



Chronic Conditions

Current Mental Health

Condition

Stage 3

Epidemiological Series Report # 2011 - 05

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Introduction

The following overview presents information about current mental health conditions among the participants of the North West Adelaide Health Study, and the demographic, chronic conditions and risk factors associated with having a current mental health condition. Stage 1 of the study was conducted between 2000 and 2003, with Stage 2 conducted from 2004 to 2006 and Stage 3 conducted from 2008 to 2010.

Measurement and definition of a current mental health condition

The proportion of participants with a current mental health condition was based on data obtained from the telephone interview. Participants were asked if they had been told by a doctor in the last twelve months that they had any of the following conditions: anxiety, depression, a stress related problem or any other mental health problem.

Proportion of those with a current mental health condition – Stage 1, Stage 2 & Stage 3

The proportion of participants with a current mental health condition for Stages 1, 2 and 3 is shown in Table 1. Overall, in Stage 1, **13.6%** (95% CI 12.3-14.9), in Stage 2, **16.1%** (95% CI 14.6-17.8) and in Stage 3, **15.8%** (95% CI 13.5-18.4) of study participants were told by doctor that they have diabetes.

Table 1: Proportion of those with a current mental health condition

	Stage 1		Stage 2		Stage 3	
	n	%	n	%	n	%
No mental health condition	3484	86.4	2927	83.9	2013	84.2
A current mental health condition	547	13.6	563	16.1	378	15.8
Total	4031	100.0	3490	100.0	2391	100.0

* Note: The weighting of data can result in rounding discrepancies or totals not adding.

Explanation of statistical terms used in this report

Incident rate is a measure of risk of developing a condition or risk factor within a specified period of time, often one year but in this report per 1000 person years. This allows for different amounts of observation times among participants between the baseline and Stage 3 results (ranging from 2000-2003 to 2008-2010). The incident rates were calculated without adjusting for age in this report. *For example, in a population of 1000 people, if 28 people develop a disease over two years, this would be expressed as 14 incident cases over 1000 person years (28 cases per 1000 divided by 2 years).*

Hazard ratio (HR) is the ratio of the hazard rates corresponding to a chronic condition or risk factor developing in the different groups over time – in this case, the time since the baseline examination (between 2000 and 2003). This allows for different amounts of observation times among participants between the baseline and Stage 3 results (ranging from 2000-2003 to 2008-2010). *For example, looking at cardiovascular disease, a hazard ratio of 2 for overweight or obese people implies that twice as many people with this risk factor have developed cardiovascular disease in this time compared to the reference group (those who are underweight or who have a healthy weight with a hazard ratio of 1).*

Adjusting for age is a technique used to better allow populations to be compared when the age profiles of the populations are quite different.

Tables 2 and 3 present the incidence rate per 1000 person years among those participants who did not report having a current mental health condition at baseline Stage 1 (384 incident cases).

Demographic profile of those with a current mental health condition

The risk of developing a current mental health condition among study participants without a current mental health condition at baseline was statistically significantly higher among females, or those who were adults living alone or unemployed, those undertaking home duties or retired, and significantly lower among those aged 60 years and over (Table 2).

Table 2: Hazard ratios for demographic variables associated with a current mental health condition

Variable	n	New Cases (N) [†]	Incidence rate (1000 person yrs) [†]	HR (95%CI)**	p value**
Sex					
Male	1495	158	16.3	1	
Female	1419	226	24.4	1.50 (1.18-1.91)	0.001
Age group					
Up to 49 years	1672	236	21.6	1	
50 to 59 years	452	68	22.0	1.05 (0.79-1.39)	0.737
60 years and over	790	60	16.1	0.76 (0.58-1.00)	0.047
Highest education level obtained*					
Secondary	1252	177	22.0	1	
Trade/apprenticeship/cert/diploma	1205	146	18.4	0.82 (0.63-1.06)	0.125
Bachelor degree or higher	339	48	21.4	0.90 (0.62-1.32)	0.600
Gross annual household income*					
Up to \$20,000	644	82	20.4	1	
\$20,001- 40,000	713	110	23.3	0.99 (0.68-1.45)	0.968
\$40,001- 60,000	658	76	17.5	0.71 (0.45-1.11)	0.135
More than \$60,000	744	93	18.9	0.72 (0.46-1.13)	0.156
Family structure*					
Family & children, two biological/ adoptive parents	968	128	20.3	1	
Adult living with partner, no children	771	101	19.4	1.06 (0.75-1.48)	0.745
Adult living alone	368	60	25.2	1.45 (1.03-2.06)	0.034
Adults – related/unrelated, living together	264	30	18.0	0.95 (0.58-1.58)	0.852
Step/sole/shared parenting & other	249	35	22.1	1.16 (0.74-1.82)	0.519
Marital status*					
Married or living with partner	1939	265	20.7	1	
Separated/divorced	212	34	24.2	1.14 (0.84-1.55)	0.407
Widowed	192	16	13.7	0.74 (0.46-1.19)	0.216
Never married	557	68	19.2	0.79 (0.51-1.20)	0.263
Work status*					
Full time employed	1169	140	17.8	1	
Part time/casual employed	480	71	22.5	1.24 (0.88-1.76)	0.216
Unemployed	91	23	40.8	2.34 (1.28-4.30)	0.006
Home duties/retired	953	125	20.6	1.47 (1.03-2.10)	0.032
Student/other	191	22	18.9	1.05 (0.59-1.87)	0.877

* Don't know/ refused/ not stated category not reported

** All variables adjusted for age (except for age group) to calculate hazard ratio

† Not adjusted for age

Chronic condition and risk factor profile of those with a current mental health condition

The risk of developing a current mental health condition among study participants without a current mental health condition at baseline was statistically significantly higher among those who were current smokers or those who had a low alcohol risk, and significantly lower among those who had high total blood cholesterol, than those without these risk factors (Table 3).

Table 3: Hazard ratios for risk factors associated with a current mental health condition

Variable	n	New Cases (N) [†]	Incidence rate (1000 person yrs) [†]	HR (95%CI)**	p value**
Cardiovascular disease					
No	2659	360	21.9	1	
Yes	182	20	18.5	0.95 (0.60-1.48)	0.806
Diabetes					
No	2653	355	21.7	1	
Yes	190	24	21.2	1.04 (0.67-1.60)	0.875
Smoking*					
Non-smoker	1384	155	17.1	1	
Ex-smoker	900	110	18.9	1.12 (0.86-1.47)	0.409
Current smoker	619	116	29.0	1.62 (1.20-2.19)	0.002
Alcohol risk					
Non-drinker/ No risk	1571	169	16.7	1	
Low Risk	1145	185	24.4	1.41 (1.11-1.81)	0.006
Intermediate to High Risk	180	29	24.6	1.38 (0.83-2.32)	0.219
Physical activity					
Sedentary	763	109	21.9	1	
Undertakes some exercise	1905	244	19.6	0.90 (0.69-1.18)	0.450
BMI[^]					
Underweight/Normal (under 25)	1023	125	18.6	1	
Overweight (25 to 29.9)	1105	137	19.1	1.11 (0.82-1.51)	0.494
Obese (30 and over)	782	121	24.0	1.35 (0.99-1.86)	0.059
High waist circumference (≥95cm men, ≥80cm women)[^]					
Normal	1256	152	18.4	1	
High	1658	132	21.7	1.28 (0.97-1.68)	0.080
High blood pressure (≥140/90mmHg)[^]					
No	2013	278	22.4	1	
Yes	829	101	20.0	0.95 (0.71-1.27)	0.737
High total cholesterol (≥5.5mmol/L)[^]					
No	1774	258	24.0	1	
Yes	1031	113	17.4	0.72 (0.56-0.93)	0.010

* Don't know/ refused/ not stated category not reported

** All variables adjusted for age (except for age group) to calculate hazard ratio

† Not adjusted for age

[^] Biomedical measurement

This document is one of a series of reports concerning Stage 3 of the North West Adelaide Health Study. Please see the website for other reports in the series - www.health.adelaide.edu.au/pros/data/nwahs/.

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