



Health Outcomes

Medications

Stage 2

Epidemiological Series Report # 2007-26

April 2007

Introduction

The following is an overview of the number of medications taken by participants in the North West Adelaide Health Study. The average number of medications is examined, and the demographic, and factors associated with taking medications are presented. Stage 1 (baseline examination) of the study was undertaken between 2000 and 2003, with Stage 2 (second examination) conducted from 2004 to 2006.

Measurement of medication use

Information relating medication use was collected in Stage 2. All participants attending a clinic assessment were asked to bring in **all** medications that they were currently taking, both prescription and non-prescription or over the counter medication. Each medication, the dosage, the reason that the participant was taking the medication for and how often it was being taken was recorded.

Number of medications taken – Stage 2 (self report)

The number of medications taken by participants is shown in Table 1 and Figure 1. Overall, in Stage 2, the median number of medications taken was one and the range from 0 to 21.

Table 1: Number of medications taken

	Stage 2	
	n	%
No medications	996	31.5
One medication	600	19.0
Two medications	463	14.6
Three medications	302	9.5
Four to six medications	503	15.9
Seven to ten medications	231	7.3
Eleven or more medications	66	2.1
Total	3161	100.0

Note: (Stage 2) 45 participants did not provide information and were excluded

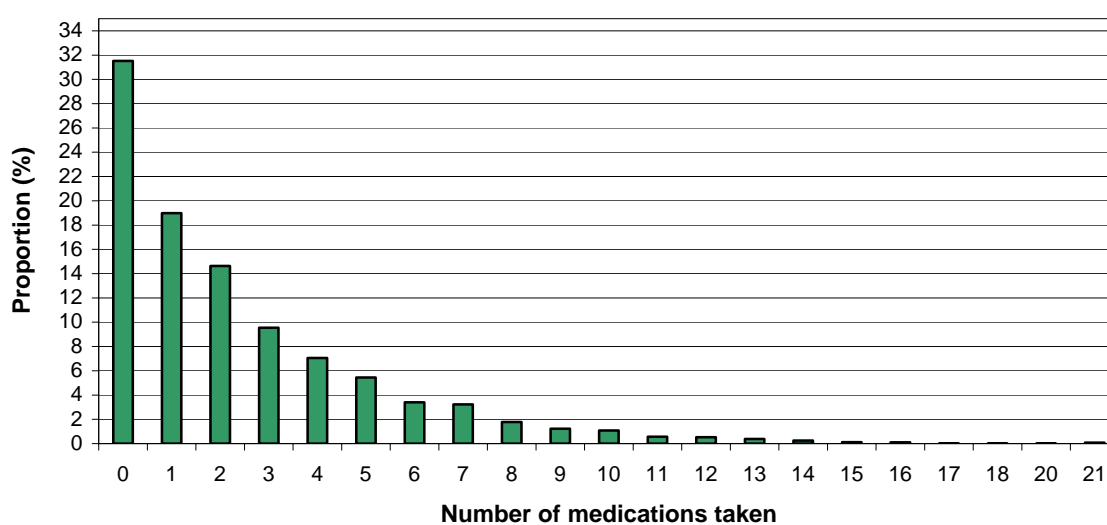


Figure 1: Number of medications taken

Overall, 31.5% of participants did not take any medications and 15.9% took four to six medications.

Demographic profile of respondents taking at least one medication

The prevalence of taking at least one medication was statistically significantly higher among females, those aged 45 years and over, adults living with a partner and no children, adults living alone or adults related or unrelated living together, those separated or divorced or widowed or those working part time, retired or undertaking home duties, unemployed or students. Respondents with higher than secondary, earning more than \$20,000 or never married were significantly less likely to be taking at least one medication (Table 2).

Table 2: Univariate Odds Ratios for demographic variables associated with taking at least one medication

Variable	n	%	OR	(95% CI)	p value
Sex					
Male	896/1712	57.8	1.00		
Female	1268/1778	78.8	2.70	(2.31-3.16)	< 0.001
Age group					
20 to 24 years	120/216	55.4	1.00		
25 to 34 years	349/672	51.9	0.87	(0.64-1.18)	0.36
35 to 44 years	358/643	55.7	1.01	(0.74-1.38)	0.95
45 to 54 years	380/561	67.6	1.68	(1.22-2.31)	0.002
55 to 64 years	364/434	84.0	4.23	(2.92-6.13)	< 0.001
65 to 74 years	301/322	93.6	11.78	(6.99-19.83)	< 0.001
75 years and over	293/313	93.6	11.78	(6.96-19.94)	< 0.001
Highest education level obtained*					
Secondary	1034/1399	73.9	1.00		
Trade/apprenticeship/cert/diploma	741/1154	64.2	0.63	(0.54-0.75)	< 0.001
Bachelor degree or higher	341/544	62.7	0.59	(0.48-0.73)	< 0.001
Gross annual household income*					
Up to \$20,000	508/599	84.8	1.00		
\$20,001- 40,000	530/712	74.4	0.52	(0.39-0.69)	< 0.001
\$40,001- 60,000	374/679	55.1	0.22	(0.17-0.29)	< 0.001
More than \$60,000	638/1028	62.0	0.29	(0.23-0.38)	< 0.001
Family structure*					
Family & children, 2 biol/adop parents	663/1174	56.5	1.00		
Adult living with partner, no children	688/840	81.9	3.48	(2.82-4.30)	< 0.001
Adult living alone	345/424	81.2	3.33	(2.54-4.36)	< 0.001
Adults – reltd/unreltd, living together	234/336	69.6	1.76	(1.36-2.28)	< 0.001
Step/sole/shared parenting & other	197/331	59.4	1.13	(0.88-1.45)	0.34
Marital status*					
Married or living with partner	1447/2104	68.8	1.00		
Separated/divorced	214/270	79.3	1.74	(1.28-2.37)	< 0.001
Widowed	190/210	90.5	4.32	(2.70-6.92)	< 0.001
Never married	298/553	53.9	0.53	(0.44-0.64)	< 0.001
Work status*					
Full time employed	7671/1418	54.0	1.00		
Part time/casual employed	349/524	66.6	1.70	(1.38-2.09)	< 0.001
Unemployed	61/74	82.7	4.06	(2.20-7.48)	< 0.001
Home duties/retired	869/969	89.7	7.37	(5.85-9.29)	< 0.001
Student/other	102/148	68.4	1.84	(1.28-2.65)	0.001

*Not stated category not reported

Those taking at least one medication were more likely to be:

- female;
- aged 45 years and over;
- adults living alone, with a partner and no children, or adults related or unrelated living together;
- those separated or divorced or widowed; or
- those working part time, unemployed, student retired or undertaking home duties.

Number of medications taken and selected chronic conditions and risk factors

The number of medications taken by respondents with specified chronic conditions was also examined. The median number of medications taken by respondents with each condition or risk factor and the minimum and maximum number of medications are reported in Table 3.

Table 3: Median number of medications taken

	N	Min	Max	Median
COPD	149	0	16	4
Asthma	520	0	21	2
Diabetes	223	0	21	5
Cardiovascular disease	204	0	21	6
Mental health	477	0	21	3
Arthritis	648	0	21	4
Osteoporosis	113	0	21	6
High blood pressure	812	0	18	3
High cholesterol	1282	0	21	1
Obesity	929	0	21	2

Quality of Life profile of participants taking at least one medication

Figure 1 shows the mean scores of the SF-36 subscales for those who took at least one medication and those who did not take any medications. People taking at least one medication scored statistically significantly lower in all domains of the SF-36.

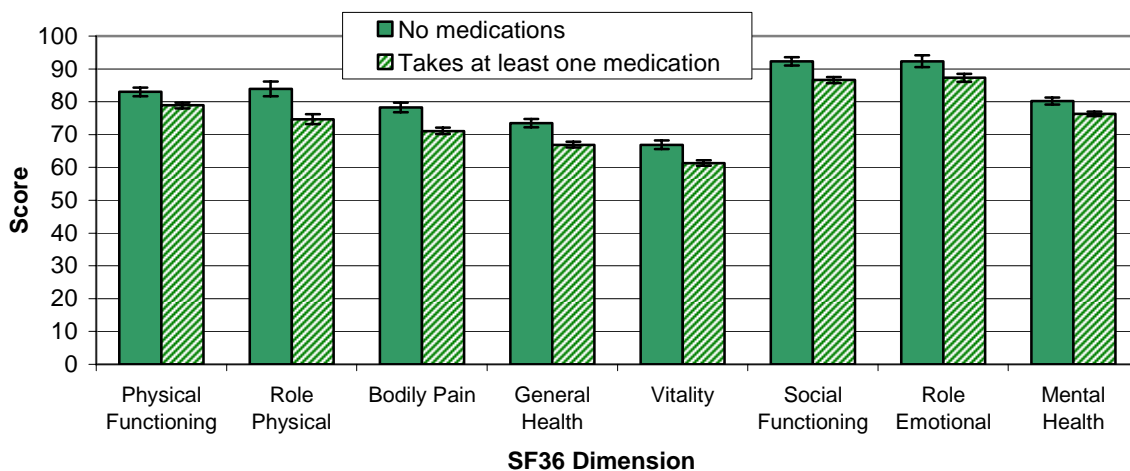


Figure 2: SF-36 mean scores for participants taking at least one medication compared to taking no medications

This document is one of a series of reports concerning Stage 2 of the North West Adelaide Health Study. Please see website for other reports in the series - <http://www.health.sa.gov.au/pros/>

CONTACT DETAILS:

Population Research & Outcome Studies Unit – South Australian Department of Health
 PO Box 287 Rundle Mall Level 8 CitiCentre, 11 Hindmarsh Square, Adelaide SA 5000
 Telephone (08) 8226 7042 Facsimile (08) 8226 6244 Email: pros@health.sa.gov.au

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Participants with CVD and osteoporosis took the highest median number of medications

Participants taking at least one medication scored statistically significantly lower on all dimensions of the SF36