

Asthma and Quality of Life (SF36V2)

May 2016

The North West Adelaide Health (NWAH) Study is a representative longitudinal cohort study of n = 4056 randomly selected adults, aged 18 years and over at the time of recruitment, from the north-west region of Adelaide. During a recent 15 year follow up survey, undertaken between August 2015 and January 2016; 1562 of 2881 contactable respondents completed a questionnaire, with a response rate of 54.1%. The respondents are now aged 30 years and over.

Of the cohort who answered the questionnaire, 14.3% of participants reported having been diagnosed with asthma and had experienced symptoms (wheeze, shortness of breath or chest tightness) of asthma or taken treatment for asthma in the last 12 months (Australian Centre for Asthma Monitoring (ACAM) definition)¹, as described in Table 1.

Table 1: Proportion of participants with current asthma, 30 years and over

	NWAHS Cohort 2015	
		% (95% CI)
Current Asthma	224	14.3 (12.7 - 16.1)
No Asthma / Don't know / Not stated	1339	85.7 (83.8 - 87.3)
Total	1562	100.0

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

Using the SF-36V2², a valid and reliable instrument and generic indicator of health status for use in population surveys, Health-Related Quality of Life was measured. Version 2 of the SF36 was designed as an improvement over Version 1, particularly in terms of less ambiguous instructions and questions, and some changes in response sets. The SF-36V2 is comprised of 36 questions that are summarised to eight domains: Physical Functioning, Role Physical, Bodily Pain, General Health, Vitality, Social Functioning, Role Emotional, and Mental Health.

In total 1200 participants answered sufficient questions to be analysed for Quality of Life domains as measured by the SF36V2. The scoring used here (Australian Normed T-Scores) is based on Australian weights derived from the 2004 Autumn South Australian Health Omnibus Survey³. The following report outlines the results of the SF36V2 questionnaire by whether the participant reported current asthma (ACAM Definition)⁴, and is part of a series of reports detailing Quality of Life as measured by the SF36V2 for different demographic and socioeconomic variables, as well as for chronic conditions and risk factors. Age and sex adjusted scores (to account for differences in these factors between groups) were also presented to test for significant differences between those with and without current asthma.

It can be seen from Table 2 and Figure 1 that those who had been told by a doctor they had asthma, scored statistically significantly lower than those without asthma for the Physical

Functioning, Role Physical, Bodily Pain, General Health, Vitality and Social Functioning domains of the SF-36V2.

Table 2: Age and sex adjusted Quality of Life profile of participants by current asthma, 30 years and over

	PF Physical Functioning	RP Role Physical	BP Bodily Pain	GH General Health	VT Vitality	SF Social Functioning	RE Role Emotional	MH Mental Health
No Asthma	<i>n</i> = 1064							
Mean	47.93*	48.69*	44.80*	47.87*	47.98*	47.72*	47.73	46.74
95% CI	(47.4 - 48.5)	(48.13 - 49.3)	(44.3 - 45.3)	(47.3 - 48.4)	(47.43 - 48.8)	(47.1 - 48.3)	(47.1 - 48.4)	(46.2 - 47.3)
Asthma	<i>n</i> = 1627							
Mean	43.58*	45.78*	42.09*	44.20*	45.68*	44.65*	46.40	46.89
95% CI	(42.3 - 44.9)	(44.48 - 47.1)	(41.0 - 43.2)	(42.9 - 45.4)	(44.4 - 46.9)	(43.2 - 46.1)	(44.9 - 47.9)	(45.5 - 48.2)

* Statistically significantly different to those without the condition (t-test, $p < 0.05$)

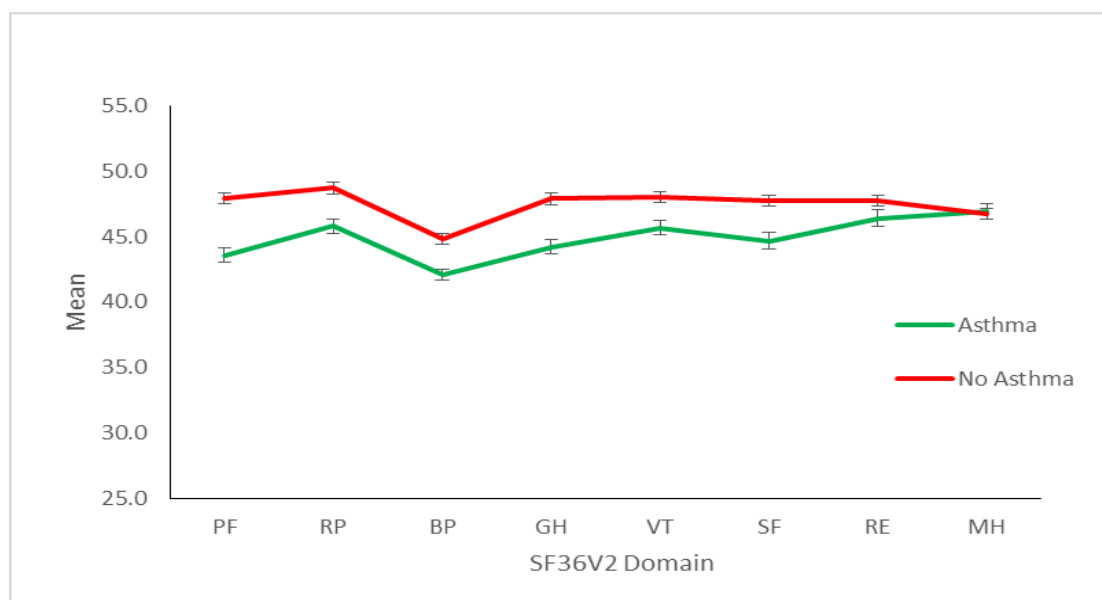


Figure 1: Graph of age and sex adjusted Quality of Life profile of participants by current asthma, 30 years and over

References

- 1 AIHW: Baker DF, Marks GB, Poulos LM and Williamson M 2004. Review of proposed National Health Priority Area asthma indicators and data sources. AIHW cat. no. ACM 2. Canberra: Australian Institute of Health and Welfare.
- 2 Ware J, Kosinski M, Dewey J. How to Score Version 2 of the SF- 36 Health Survey. Lincoln, RI: Quality Metric Incorporated 2000.
- 3 Hawthorne G, Osborne RH, Taylor A, Sansoni J. The SF36 Version 2: critical analyses of population weights, scoring algorithms and population norms. *Quality of Life Research*. 2007 May;16(4):661-73. Epub 2007 Feb 1.
- 4 AIHW: Baker DF, Marks GB, Poulos LM and Williamson M 2004. Review of proposed National Health Priority Area asthma indicators and data sources. AIHW cat. no. ACM 2. Canberra: Australian Institute of Health and Welfare.

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