

Age 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, 34.0% were aged 30 to 44 years and 12.4% were age 75 years and older, as described in Table 1.

Table 1: Proportion of participants by age group, 30 years and over

	NWAHS Cohort 2015	
	n	% (95% CI)
30 to 44 years	531	34.0 (31.7 - 36.4)
45 to 54 years	355	22.7 (20.7 - 24.9)
55 to 64 years	286	18.3 (16.5 - 20.3)
65 to 74 years	194	12.5 (10.9 - 14.2)
75 years and over	194	12.4 (10.9 - 14.2)
Total	1562	100.0

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

Using the SF-36V2¹, 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 Survey². The following report outlines the results of the SF36V2 questionnaire by three age groups 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. Sex adjusted scores (to account for differences in these factors between groups) were also presented to test for significant differences between age groups.

It can be seen from Table 2 and Figure 1 that those aged 30 to 44 years scored statistically significantly higher than those aged 45 to 64 years on the Physical Functioning, Role Physical, and Bodily Pain domains, but lower on the Mental Health domain of the SF-36V2.

Those aged 30 to 44 years and 45 to 64 years also scored statistically significantly higher than those aged 65 years and over on the Physical Functioning, Role Physical, Bodily Pain, and General Health domain, but lower on the Mental Health dimension. Those aged 30 to 44 years also scored statistically significantly higher than those aged 65 years and over on the Social Functioning domain of the SF-36V2.

Table 2: Sex adjusted Quality of Life profile of participants by age group, 30 years and over

	PF	RP	BP	GH	VT	SF	RE	MH
	Physical Functioning	Role Physical	Bodily Pain	General Health	Vitality	Social Functioning	Role Emotional	Mental Health
30 to 44 years	<i>n</i> = 418							
Mean	51.78 ^{ab}	49.99 ^{ab}	46.80 ^{ab}	47.70 ^b	46.59	47.74 ^b	47.37	44.66 ^{ab}
95% CI	(50.8 - 52.8)	(49.0 - 51.0)	(46.1 - 47.5)	(46.8 - 48.7)	(45.7 - 47.5)	(46.7 - 48.8)	(46.3 - 48.3)	(43.7 - 45.6)
45 to 64 years	<i>n</i> = 490							
Mean	48.21 ^b	48.61 ^b	44.75 ^b	46.79 ^b	47.51	47.31	47.80	47.39 ^b
95% CI	(47.2 - 49.2)	(47.7 - 49.5)	(44.1 - 45.4)	(45.9 - 47.6)	(46.7 - 48.4)	(46.3 - 48.3)	(46.8 - 48.8)	(46.4 - 48.4)
65 years plus	<i>n</i> = 292							
Mean	37.66	42.24	41.78	44.40	46.93	46.05	47.66	49.94
95% CI	(36.5 - 38.8)	(41.1 - 43.4)	(40.9 - 42.6)	(43.3 - 45.5)	(45.8 - 48.0)	(44.8 - 47.3)	(46.5 - 48.8)	(48.7 - 51.2)

^a Statistically significantly different to the 45 to 64 year age group (t-test, $p < 0.05$),

^b Statistically significantly different to the 65 years plus age group (t-test, $p < 0.05$)

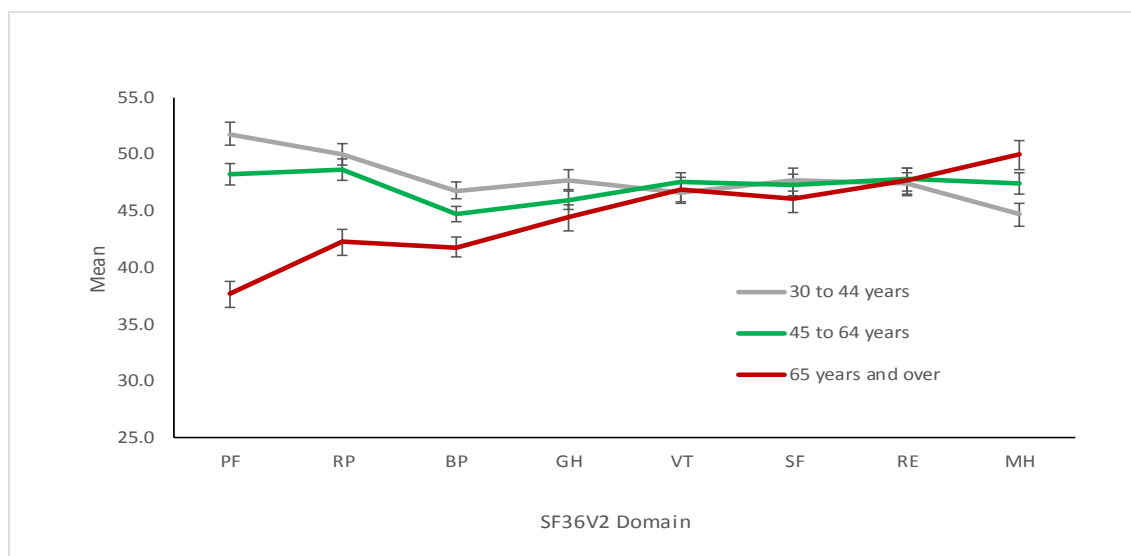


Figure 1: Graph of sex adjusted Quality of Life profile of participants by age, 30 years and over

References

- Ware J, Kosinski M, Dewey J. How to Score Version 2 of the SF- 36 Health Survey. Lincoln, RI: Quality Metric Incorporated 2000.
- 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.

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