

Diabetes 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, 10.1% had been told by a doctor they had diabetes, as described in Table 1.

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

	NWAHS Cohort 2015	
	n	% (95% CI)
Diabetes	158	10.1 (8.7 - 11.7)
No Diabetes / Not stated	1404	89.9 (88.3 - 91.3)
Total	1562	100.0

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

Using the SF-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 whether the participant reported they had been told by a doctor they had diabetes 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 diabetes.

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

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

Table 2: Age and sex adjusted Quality of Life profile of participants by diabetes, 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
No Diabetes	<i>n</i> = 1064							
Mean	47.87*	48.85*	44.81*	48.05*	48.3*	47.73	47.89*	47.03
95% CI	(47.4 - 48.4)	(48.3 - 49.4)	(44.4 - 45.2)	(47.5 - 48.6)	(47.8 - 48.8)	(47.2 - 48.3)	(47.3 - 48.5)	(46.5 - 47.6)
Diabetes	<i>n</i> = 1627							
Mean	45.07*	46.05*	42.69*	43.61*	45.17*	46.37	46.06*	45.98
95% CI	(43.5 - 46.6)	(44.5 - 47.6)	(41.4 - 43.9)	(42.1 - 45.2)	(43.6 - 46.7)	(44.7 - 48.1)	(44.3 - 47.8)	(44.4 - 47.6)

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

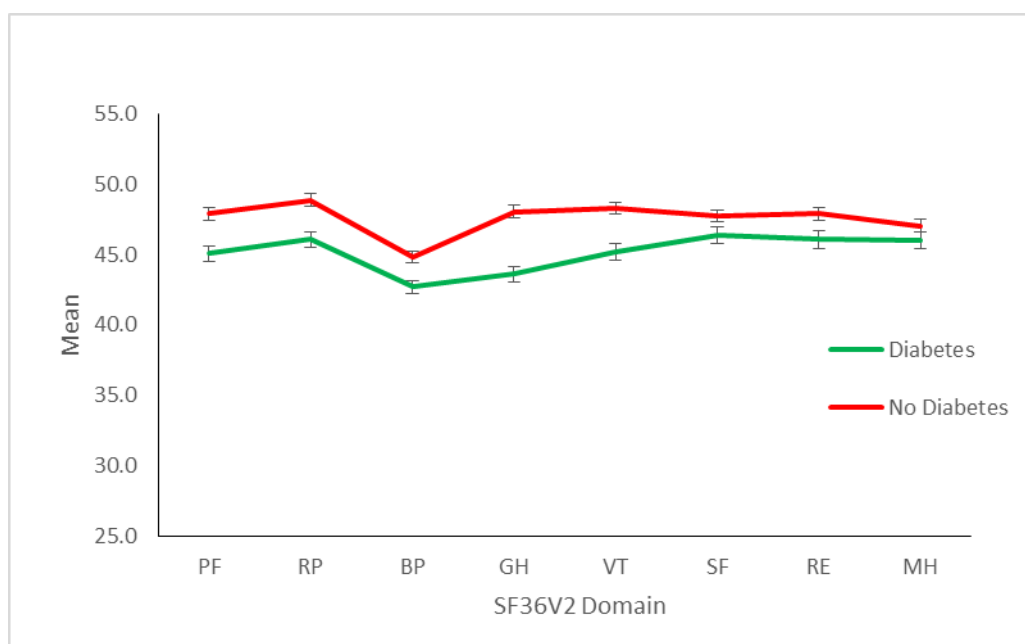


Figure 1: Graph of age and sex adjusted Quality of Life profile of participants by diabetes, 30 years and over

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.

Contact us:

Population Research and Outcome Studies
 Discipline of Medicine, Faculty of Health Sciences
 University of Adelaide
 GPO Box 498, Adelaide SA 5001

Ph +618 8313 1217
 Fax +618 8313 1228
 E-mail PROS@adelaide.edu.au
 PROS website <http://health.adelaide.edu.au/pros/>