

Web-appendix (supplementary file)

Appendix 1: The distribution of the respondents EQ-VAS values

EQ-VAS score	Number	Percentage (%)	Cum. Percentage (%)
10-	29	0.18	0.18
20-	72	0.44	0.62
30-	88	0.54	1.16
40-	365	2.24	3.4
50-	2,056	12.62	16.03
60-	1,979	12.15	28.18
70-	3,728	22.89	51.07
80-	4,026	24.72	75.78
90-	2,594	15.93	91.71
100-	1,350	8.29	100

Notes: EQ-VAS: European Quality of Life – Visual Analogue Scale, Cum. Percentage – Cumulative percentage

Appendix 2: Relationship between EQ-VAS and EQ5D across major sub-groups

Dependent variable	Mobility	Self-care	Usual care	Pain / discomfort	Anxiety / Depression	Observation
Overall	-10.5 (0.6)	-9.9 (0.9)	-12.4 (0.7)	-10.9 (0.6)	-8.9 (0.8)	16287
Gender						
Male	-12.0 (0.6)	-11.4 (1.1)	-14.6 (0.9)	-11.9 (0.6)	-12.1 (0.7)	7760
Female	-8.1 (0.4)	-7.9 (0.7)	-9.9 (0.6)	-7.7 (0.4)	-9.1 (0.5)	8527
Age groups						
Young (20-44 yrs)	-9.9 (0.5)	-11.0 (0.9)	-12.0 (0.8)	-8.8 (0.5)	-9.3 (0.6)	9603
Middle (45-60 yrs)	-9.0 (0.5)	-10.8 (0.9)	-11.3 (0.8)	-9.0 (0.5)	-10.7 (0.6)	5544
Elderly (>60 yrs)	-11.1 (1.0)	-11.7 (1.6)	-13.1 (1.3)	-11.0 (1.1)	-13.2 (1.4)	1140
Income						
Low income group (INR <10000 or US\$ 155)	-10.6 (0.4)	-12.1 (0.7)	-13.2 (0.6)	-10.2 (0.4)	-10.7 (0.5)	11537
Middle income group (INR 10000-20000 or US\$ 155-310)	-10.2 (0.8)	-8.9 (1.6)	-10.7 (1.3)	-9.2 (0.8)	-11.8 (1.1)	2667
High income group (INR >20000 or US\$>310)	-12 (1.0)	-14.4(2.5)	-15.6 (1.7)	-10.5 (0.9)	-8.2 (1.6)	1975
Level of education						
Up to primary school	-10.8 (0.6)	-12.8 (1.1)	-12.6 (0.8)	-9.9 (0.6)	-11.6 (0.8)	3604
Secondary school	-9.9 (0.4)	-11.1 (0.8)	-12.2 (0.7)	-9.3 (0.4)	-10.2 (0.5)	9924
Graduation and above	-8.9 (1.0)	-8.3 (2.1)	-11.4 (1.8)	-9.8 (0.9)	-8.3 (1.3)	2759
Marital status						
Single	-8.4 (1.9)	-9.4 (3.8)	-15.2 (3.3)	-9.0 (1.8)	-10.8 (2.0)	1177
Married	-10.3 (0.4)	-11.5 (0.6)	-12.3 (0.5)	-9.5 (0.4)	-10.3 (0.5)	14217
Widowed	-9.9 (1.2)	-11.1 (1.8)	-12.9 (1.4)	-10.1 (1.2)	-11.8 (1.5)	838
Divorce	-18.6 (5.8)	-14.1 (7.0)	-24.2 (6.0)	-15.1 (5.6)	-15.6 (5.1)	55
Tobacco use						
No	-10.1 (0.4)	-11.4 (0.6)	-12.4 (0.5)	-9.8 (0.4)	-10.5 (0.5)	12529
Yes	-13.4 (0.8)	-15.5 (1.5)	-16.5 (1.2)	-11.1 (0.7)	-12.6 (0.9)	3758
Alcohol use						
No	-10.6 (0.4)	-12.1 (0.6)	-13.1 (0.5)	-10.2 (0.4)	-11.0 (0.5)	13911
Yes	-10.6 (1.1)	-10.7 (2.0)	-11.4 (1.9)	-8.2 (1.0)	-10.6 (1.2)	2376
BMI						
Underweight	-10.6 (2.4)	-15.6 (5.1)	-15.4 (3.9)	-10.5 (2.9)	-7.8 (4.8)	756
Normal weight	-10.6 (0.9)	-11.6(1.5)	-13.6 (1.2)	-9.2 (0.9)	-9.7 (1.2)	5278
Overweight	-10.3 (1.1)	-12.1 (1.2)	-11.6 (1.3)	-7.7 (0.9))	-8.9 (1.2)	4190
Obesity	-7.4 (0.9)	-9.9 (1.7)	-11.4 (1.3)	-8.0 (0.9)	-8.6 (1.4)	2249
Diabetes						
Diabetes (diagnosed or self-reported)	-10.0 (0.6)	-11.6 (1.1)	-11.6 (0.9)	-9.7 (0.6)	-11.4 (0.8)	3676
Pre diabetes	-10.2 (0.6)	-13.5 (1.0)	-14.1 (0.8)	-9.4 (0.6)	-10.6 (0.7)	5449
No diabetes	-10.9 (0.7)	-11.0 (1.2)	-12.6 (1.1)	-9.9 (0.7)	-10.0 (0.8)	4610
Hypertension						

Diagnosed or Self-reported hypertension	-11.2 (0.6)	-14.7 (1.0)	-14.1 (0.8)	-10.8 (0.6)	-10.8 (0.7)	5074
Pre hypertension	-10.9 (0.7)	-12.4 (1.2)	-14.1 (1.0)	-9.7 (0.7)	-11.2 (0.9)	4717
No hypertension	-9.3 (0.6)	-9.6 (1.0)	-10.4 (0.9)	-8.4 (0.6)	-10.0 (0.7)	5695
Heart disease						
No	-10.5 (0.3)	-11.9 (0.6)	-13.0 (0.5)	-9.9 (0.3)	-10.7 (0.4)	15842
Yes	-9.0 (1.6)	-9.0 (2.5)	-9.5 (1.9)	-7.4 (1.7)	-11.8 (2.0)	445
Stroke						
No	-10.7 (0.3)	-11.9 (0.6)	-13.1 (0.5)	-10.0 (0.3)	-10.8 (0.4)	16203
Yes	-13.7 (3.6)	-18.4 (4.4)	-19.2 (4.1)	-12.2 (3.5)	-16.3 (4.1)	84
Kidney disease						
No	-10.7 (0.3)	-11.9 (0.6)	-13.1 (0.5)	-9.9 (0.3)	-10.8 (0.4)	16175
Yes	-11.6 (3.7)	-21.2 (4.8)	-14.3 (4.2)	-16.4 (3.2)	-16.3 (3.7)	112

NOTES: Tobacco use, Heart disease, Kidney disease were based on self-reports, newly diagnosed diabetes - defined as no self-reported diabetes and fasting blood glucose (FBG) of ≥ 126 mg/dl, or HbA1c $\geq 6.5\%$), pre-diabetes – no self-reported diabetes and FBG ≥ 100 -125 mg/dl or HbA1c ≥ 5.7 -6.4%), normoglycemia – no self-reported diabetes and FBG < 100 mg/dl and HbA1c $< 5.7\%$, Newly diagnosed hypertension – defined as no self-reported hypertension and BP $\geq 140/90$ mmHg, prehypertension - no self-reported hypertension and BP: 120-139 / 80-89 mmHg and normotensive - no history of hypertension and BP $< 120/80$ mmHg. INR: Indian rupees, mmHg – millimeter of mercury, mg/dl - Milligram/deciliter; yrs – years; US\$ - United States Dollar

Appendix 3 - The comparison of HRQOL as measured by EQ5D-VAS among different countries

Countries, year of study	N	EQ-VAS	Percentages with any difficulties in EQ5D domain					
			Mobility	Self-care	Usual activities	Pain / Discomfort	Anxiety / Depression	Any dimension
India, Delhi (age \geq 20), 2011	5,365	78.9	14.1	1.6	4.4	8.0	9.5	27.8
India, Chennai, (age \geq 20), 2011	6,903	70.8	17.3	7.8	7.7	9.0	8.9	29.7
Pakistan (Karachi), (age \geq 20), 2011	4,016	73.2	10.4	1.9	5.6	8.7	9.3	17.9
China (age \geq 18), 2008	2,991	77.0	4.9	2.0	3.3	18.0	6.1	22.4
UK (age \geq 18), 1998	3395	82.5	18.4	4.2	16.3	33.0	20.9	43.1
USA (age \geq 18) , 1998	427	82.2	14.0	3.0	14.0	40.0	24.0	na
Japan (age \geq 20) , 1998	620	77.8	7.2	1.8	5.2	20.0	8.5	25.0
Spain (age \geq 15) , 1998	12,245	71.1	11.2	2.0	6.9	26.3	12.5	33.0
Canada (age \geq 18), 1997	1518	78.7	22.2	4.0	19.1	43.6	28.6	53.0
Sweden (age \geq 18), 1998	3069	83.5	10.0	2.0	8.0	42.0	30.0	na
Finland (age \geq 18), 1992	2411	79.4	20.0	5.0	18.0	39.0	14.0	na
Germany (age \geq 18), 1998	337	82.2	18.0	3.0	13.0	37.0	18.0	na
Belgium (age \geq 18), 2001	1274	81.0	13.0	3.0	15.0	42.0	21.0	na
New Zealand (age \geq 18), 1999	1328	81.3	17.0	4.0	18.0	37.0	20.0	na
Zimbabwe (age \geq 18), 2000	2350	76.1	20.0	7.0	18.0	41.0	40.0	na
Armenia (age \geq 18), 2002	2222	66.6	26.0	13.0	28.0	64.0	52.0	na

NOTES: EQ5D-VAS: European Quality of Life 5 Dimension – Visual Analogue Scale; na – not available