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This is a Peer Reviewed Published version of the following article, accepted for publication in Quality of Life Research.

2011-06-22

# Population health status in China : EQ-5D results, by age, sex and socio-economic status, from the National Health Services Survey 2008

Sun, Sun; Chen, Jiaying; Johannesson, Magnus; Kind, Paul; Xu, Ling; Zhang, Yaoguang; Burström, Kristina

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Qual Life Res. 2011 Apr;20(3):309-20.

Springer

<http://doi.org/10.1007/s11136-010-9762-x>

<http://hdl.handle.net/10616/40646>

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### Title

Population health status in China: EQ-5D results, by age, sex and socio-economic status, from the National Health Services Survey 2008

### Journal

Quality of Life Research 2010, doi 10.1007/s11136-010-9762-x.

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**Table 5** Percentage of respondents reporting moderate or severe problems in each EQ-5D dimension [ $\chi^2$  tests were performed between unemployed and employed respondents. All results were statistically significant ( $P<0.05$ )], VAS score (mean), by employment status, age group and sex, China 2008

EQ-5D Dimension	Employment status					
	15-44 years		45-64 years		65+	
	Unemployed	Employed	Unemployed	Employed	Unemployed	Employed
<i>Men (n)</i>	1,831	22,595	2,289	17,787	2,186	3,037
<i>Women (n)</i>	3,911	23,965	3,724	15,448	3,686	2,323
	%	%	%	%	%	%
<b>Mobility</b>						
Men	4.2	1.1	10.4	3.7	25.7	13.9
Women	2.2	1.2	9.4	4.9	25.6	17.0
<b>Self-care</b>						
Men	3.0	0.6	6.9	2.0	18.3	9.4
Women	1.6	0.7	6.3	2.7	19.0	11.9
<b>Usual activities</b>						
Men	4.6	1.0	10.3	3.3	26.1	13.3
Women	2.5	1.2	8.6	4.6	25.6	16.5
<b>Pain/discomfort</b>						
Men	5.3	2.5	15.3	8.7	29.5	20.8
Women	4.6	3.7	17.3	13.0	32.5	25.4
<b>Anxiety/depression</b>						
Men	6.2	2.7	12.2	5.8	20.8	13.4
Women	4.6	3.5	11.8	8.4	20.9	16.3
<b>VAS score (mean)</b>						
Men	83.4	85.9	74.0	79.5	66.4	71.3
Women	83.2	84.5	74.1	77.2	66.2	69.0

**Table 6** Percentage of respondents reporting moderate and severe problems in each EQ-5D dimension [ $\chi^2$  tests were performed between respondents who answered ‘yes’ and ‘no’. All results were statistically significant ( $P<0.05$ )], VAS score (mean), by clinical characteristics, age group and sex, China 2008

EQ-5D Dimension	Clinical characteristics																	
	Discomfort during the past 2 weeks						Diagnosed with chronic disease during the past 6 months						Hospitalised during the past 12 months					
	15-44 years		45-64 years		65+		15-44 years		45-64 years		65+		15-44 years		45-64 years		65+	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Men (n)	2,368	24,831	5,026	17,293	3,287	5,231	1,649	25,609	5,354	17,010	3,837	4,703	762	26,496	1,293	21,072	955	7,585
Women (n)	3,485	27,141	6,540	16,479	3,845	4,936	2,361	28,339	6,729	16,314	4,345	4,451	2,312	28,388	1,387	21,656	916	7,881
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>Mobility</b>																		
Men	7.8	0.7	13.3	2.1	27.1	10.7	9.3	0.8	13.0	2.0	26.1	9.6	11.9	1.0	18.5	3.8	34.4	14.8
Women	6.1	0.6	13.5	2.3	29.1	12.7	7.9	0.7	13.3	2.2	27.8	12.2	4.1	1.0	16.6	4.7	34.4	18.2
<b>Self-care</b>																		
Men	4.9	0.3	8.1	1.2	17.9	7.2	5.5	0.4	8.3	1.0	17.6	6.2	8.1	0.5	12.8	2.1	23.9	9.7
Women	3.8	0.4	8.0	1.2	20.0	8.8	5.1	0.4	8.1	1.1	18.6	8.9	2.6	0.6	11.7	2.6	23.6	12.6
<b>Usual activities</b>																		
Men	8.1	0.5	12.7	1.7	25.7	10.1	9.8	0.6	12.4	1.6	24.8	9.0	11.6	0.9	19.0	3.3	31.7	14.1
Women	7.0	0.5	12.7	1.9	27.7	12.1	9.2	0.6	12.5	1.9	25.9	12.1	4.4	1.0	17.5	4.2	32.6	17.3
<b>Pain/discomfort</b>																		
Men	19.9	0.9	29.2	3.8	37.9	11.1	22.1	1.3	25.9	4.3	34.1	11.0	16.5	2.1	28.4	8.4	36.4	19.5
Women	22.0	1.2	33.4	5.2	42.3	14.9	25.7	1.8	30.6	6.0	39.1	15.1	7.9	3.3	29.8	12.1	42.1	25.2
<b>Anxiety/depression</b>																		
Men	11.8	1.8	16.4	3.6	22.2	7.6	14.9	1.9	15.7	3.6	20.6	7.2	14.3	2.4	19.7	5.7	23.1	12.0
Women	13.6	2.2	19.0	4.3	24.4	9.6	18.0	2.2	18.5	4.4	22.8	9.5	6.4	3.2	22.0	7.6	25.9	15.0
<b>VAS score (mean)</b>																		
Men	77.6	86.9	70.6	80.9	65.2	73.2	74.2	86.9	70.4	81.2	65.4	74.0	77.0	86.4	68.7	79.2	62.6	71.1
Women	75.6	86.0	69.4	79.3	64.2	71.4	72.2	85.8	69.0	79.6	64.5	71.9	82.5	85.0	67.9	77.0	62.5	68.9

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**Table 7** Multiple regression analyses on VAS score, on sex, age group, educational level, income group and employment status, China 2008

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	$\beta$ -estimate	p-value	$\beta$ -estimate	p-value	$\beta$ -estimate	p-value	$\beta$ -estimate	p-value	$\beta$ -estimate	p-value	$\beta$ -estimate	p-value
<b>Intercept</b>	90.544	<0.001	86.576	<0.001	88.333	<0.001	85.826	<0.001	90.281	<0.001	85.295	<0.001
<b>Sex<sup>a</sup></b>	-1.678	<0.001	-1.175	<0.001	-1.703	<0.001	-1.357	<0.001	-1.474	<0.001	-1.045	<0.001
<b>Age group<sup>b</sup></b>												
20-24	-1.161	<0.001	-1.099	<0.001	-1.335	<0.001	-1.240	<0.001	-0.717	0.005	-0.968	<0.001
25-29	-2.403	<0.001	-2.221	<0.001	-2.711	<0.001	-2.538	<0.001	-1.946	<0.001	-2.296	<0.001
30-34	-4.288	<0.001	-3.867	<0.001	-4.440	<0.001	-4.191	<0.001	-3.824	<0.001	-3.899	<0.001
35-39	-5.714	<0.001	-5.118	<0.001	-5.887	<0.001	-5.555	<0.001	-5.272	<0.001	-5.265	<0.001
40-44	-7.237	<0.001	-6.569	<0.001	-7.489	<0.001	-7.109	<0.001	-6.773	<0.001	-6.784	<0.001
45-49	-9.398	<0.001	-8.691	<0.001	-9.756	<0.001	-9.278	<0.001	-8.891	<0.001	-8.867	<0.001
50-54	-11.420	<0.001	-10.293	<0.001	-11.714	<0.001	-10.984	<0.001	-10.937	<0.001	-10.294	<0.001
55-59	-13.419	<0.001	-11.968	<0.001	-13.608	<0.001	-12.709	<0.001	-12.956	<0.001	-11.803	<0.001
60-64	-15.743	<0.001	-14.211	<0.001	-15.830	<0.001	-14.863	<0.001	-15.187	<0.001	-13.604	<0.001
65-69	-18.347	<0.001	-16.614	<0.001	-18.442	<0.001	-17.290	<0.001	-17.622	<0.001	-15.654	<0.001
70-74	-20.429	<0.001	-18.384	<0.001	-20.619	<0.001	-19.218	<0.001	-19.419	<0.001	-17.134	<0.001
75-79	-22.046	<0.001	-19.778	<0.001	-22.263	<0.001	-20.687	<0.001	-20.927	<0.001	-18.391	<0.001
80-84	-23.827	<0.001	-21.410	<0.001	-24.064	<0.001	-22.380	<0.001	-22.486	<0.001	-19.885	<0.001
85+	-24.543	<0.001	-21.895	<0.001	-24.623	<0.001	-22.810	<0.001	-22.911	<0.001	-20.209	<0.001
<b>Socio-economic status</b>												
<b>Level of education<sup>c</sup></b>												
Primary school	-	-	2.097	<0.001	-	-	1.735	<0.001	-	-	1.857	<0.001
Junior middle school	-	-	3.810	<0.001	-	-	2.905	<0.001	-	-	3.268	<0.001
Senior middle school	-	-	3.908	<0.001	-	-	2.411	<0.001	-	-	2.935	<0.001
College and above	-	-	4.277	<0.001	-	-	2.127	<0.001	-	-	2.397	<0.001
Level of education missing	-	-	3.299	0.010	-	-	2.655	0.038	-	-	4.058	0.002
<b>Income<sup>d</sup></b>												
Second group	-	-	-	-	1.978	<0.001	1.788	<0.001	-	-	1.819	<0.001
Third group	-	-	-	-	2.598	<0.001	2.320	<0.001	-	-	2.397	<0.001
Fourth group	-	-	-	-	3.928	<0.001	3.493	<0.001	-	-	3.702	<0.001
Fifth group (high)	-	-	-	-	4.298	<0.001	3.732	<0.001	-	-	4.014	<0.001
<b>Employment status<sup>e</sup></b>												
Retired	-	-	-	-	-	-	-	-	0.403	0.003	-2.516	<0.001
Student	-	-	-	-	-	-	-	-	0.544	0.037	0.113	0.665
Unemployed	-	-	-	-	-	-	-	-	-2.837	<0.001	-3.029	<0.001
Employment status missing	-	-	-	-	-	-	-	-	-6.209	<0.001	-5.394	<0.001
<b>R-Square</b>												
<b>Adj R-Square</b>		0.200		0.208		0.212		0.216		0.205		0.221
		0.199		0.207		0.212		0.216		0.205		0.221
<b>Observation number</b>		120,703		120,703		120,703		120,703		120,703		120,703

<sup>a</sup>Coded: men=0; women=1

<sup>b</sup>Base line category: age group 15-19 years

<sup>c</sup>Base line category: below primary school

<sup>d</sup>Base line category: first group (low)

<sup>e</sup>Base line category: employed

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**Table 8** Multiple regression analyses on VAS score, on sex, age group and clinical characteristics, China 2008

	Model 1		Model 2		Model 3	
	$\beta$ -estimate	p-value	$\beta$ -estimate	p-value	$\beta$ -estimate	p-value
<b>Intercept</b>	90.851	<0.001	90.541	<0.001	90.618	<0.001
<b>Sex<sup>a</sup></b>	-1.297	<0.001	-1.333	<0.001	-1.525	<0.001
<b>Age group<sup>b</sup></b>						
20-24	-1.196	<0.001	-1.094	<0.001	-0.644	0.003
25-29	-2.334	<0.001	-2.264	<0.001	-2.004	<0.001
30-34	-3.998	<0.001	-3.870	<0.001	-4.028	<0.001
35-39	-5.152	<0.001	-5.046	<0.001	-5.554	<0.001
40-44	-6.394	<0.001	-6.173	<0.001	-7.139	<0.001
45-49	-8.192	<0.001	-7.731	<0.001	-9.234	<0.001
50-54	-9.773	<0.001	-9.155	<0.001	-11.198	<0.001
55-59	-11.410	<0.001	-10.617	<0.001	-13.142	<0.001
60-64	-13.286	<0.001	-12.157	<0.001	-15.327	<0.001
65-69	-15.582	<0.001	-14.301	<0.001	-17.842	<0.001
70-74	-17.208	<0.001	-15.759	<0.001	-19.846	<0.001
75-79	-18.539	<0.001	-17.122	<0.001	-21.313	<0.001
80-84	-20.226	<0.001	-18.711	<0.001	-23.159	<0.001
85+	-20.985	<0.001	-19.959	<0.001	-23.938	<0.001
<b>Clinical characteristics</b>						
Discomfort during the past 2 weeks <sup>c</sup>	-8.916	<0.001	-	-	-	-
Discomfort during the past 2 weeks missing	-0.178	0.820	-	-	-	-
Diagnosed with chronic disease during the past 6 months <sup>d</sup>	-	-	-9.979	<0.001	-	-
Hospitalised during the past 12 months <sup>e</sup>	-	-	-	-	-6.899	<0.001
<b>R-Square</b>		0.259		0.269		0.214
<b>Adjusted R-Square</b>		0.259		0.269		0.214
<b>Observation number</b>		120,703		120,701		120,703

<sup>a</sup>Coded: men=0; women=1

<sup>b</sup>Base line category: age group 15-19 years

<sup>c</sup>Base line category: respondents without discomfort during the past 2 weeks

<sup>d</sup>Base line category: respondents without chronic disease during the past 6 months

<sup>e</sup>Base line category: respondents without hospitalised during the past 12 months