

Appendix Table 1. WMH sample characteristics by World Bank income categories^a

Country by income category	Survey ^b	Sample characteristics ^c	Field dates	Age range	Sample size		Sampling fraction (%) for Family Burden	Response rate (%) ^e
					Part 1	Part 1 50+ Family Burden		
I. Low and lower middle income countries								
Colombia	NSMH	All urban areas of the country (approximately 73% of the total national population)	2003	18-65	4426	239	30	87.7
India - Pondicherry	WMHI	Pondicherry region.	2003-5	18-97	2992	263	33	98.8
Iraq	IMHS	Nationally representative.	2006-7	18-96	4332	852	100	95.2
Nigeria	NSMHW	21 of the 36 states in the country, representing 57% of the national population. The surveys were conducted in Yoruba, Igbo, Hausa and Efik languages.	2002-3	18-100	6752	639	33	79.3
PRC ^f - Shenzhen	Shenzhen	Shenzhen metropolitan area. Included temporary residents as well as household residents.	2006-7	18-88	7132	557	100	80.0
Total					25634	2550		
II. Upper-middle income countries								
Brazil - São Paulo	São Paulo Megacity	Stratified multistage clustered area probability sample of household residents in the São Paulo metropolitan area.	2005-7	18-93	5037	1467	100	81.3
Bulgaria	NSHS	Nationally representative.	2003-7	18-98	5318	825	30	72.0
Lebanon	LEBANON	Nationally representative.	2002-3	18-94	2857	233	25	70.0
Mexico	M-NCS	Stratified multistage clustered area probability sample of household residents in all urban areas of the country (approximately 75% of the total national population).	2001-2	18-65	5782	287	30	76.6
Romania	RMHS	Nationally representative.	2005-6	18-96	2357	1265	100	70.9
Total					21351	4077		
III. High-income countries								
Belgium	ESEMeD	Nationally representative. The sample was selected from a national register of Belgium residents	2001-2	18-95	2419	268	25	50.6
France	ESEMeD	Nationally representative. The sample was selected from a national list of households with listed telephone numbers.	2001-2	18-97	2894	312	25	45.9
Germany	ESEMeD	Nationally representative.	2002-3	18-95	3555	398	25	57.8
Israel	NHS	Nationally representative.	2002-4	21-98	4859	1904	100	72.6
Italy	ESEMeD	Nationally representative. The sample was selected from municipality resident registries.	2001-2	18-100	4712	497	25	71.3
Netherlands	ESEMeD	Nationally representative. The sample was selected from municipal postal registries.	2002-3	18-95	2372	662	60	56.4
N. Ireland	NISHS	Nationally representative.	2004-7	18-97	4340	1110	50	68.4
Portugal	NMHS	Nationally representative.	2008-9	18-81	3849	224	15	57.3
Spain	ESEMeD	Nationally representative.	2001-2	18-98	5473	605	25	78.6
United States	NCS-R	Nationally representative.	2002-3	18-99	9282	1285	33	70.9
Total					43755	7565		
IV. Total					90740	13892		71.8

^a The World Bank. (2008). Data and Statistics. Accessed May 12, 2009 at: <http://go.worldbank.org/D7SN0B8YU0>

^b NSMH (The Colombian National Study of Mental Health); WMHI (World Mental Health India); IMHS (Iraq Mental Health Survey); NSMHW (The Nigerian Survey of Mental Health and Wellbeing); NSHS (Bulgaria National Survey of Health and Stress); LEBANON (Lebanese Evaluation of the Burden of Ailments and Needs of the Nation); M-NCS (The Mexico National Comorbidity Survey); RMHS (Romania Mental Health Survey); ESEMeD (The European Study of the Epidemiology of Mental Disorders); NHS (Israel National Health Survey); NISHS (Northern Ireland Study of Health and Stress); NMHS (Portugal National Mental Health Survey); NCS-R (The US National Comorbidity Survey Replication).

^c Most WMH surveys are based on stratified multistage clustered area probability household samples in which samples of areas equivalent to counties or municipalities in the US were selected in the first stage followed by one or more subsequent stages of geographic sampling (e.g., towns within counties, blocks within towns, households within blocks) to arrive at a sample of households, in each of which a listing of household members was created and one or two people were selected from this listing to be interviewed. No substitution was allowed when the originally sampled household resident could not be interviewed. These household samples were selected from Census area data in all countries other than France (where telephone directories were used to select households) and the Netherlands (where postal registries were used to select households). Several WMH surveys (Belgium, Germany, Italy) used municipal resident registries to select respondents without listing households. 14 of the 20 surveys are based on nationally representative (NR) household samples.

^d Brazil, Iraq, Israel, Northern Ireland, People's Republic of China (PRC) - Shenzhen, and Romania did not have an age restricted Part 2 sample. All other countries, with the exception of Nigeria, (which was age restricted to ≤ 39) were age restricted to ≤ 44 .

^e The response rate is calculated as the ratio of the number of households in which an interview was completed to the number of households originally sampled, excluding from the denominator households known not to be eligible either because of being vacant at the time of initial contact or because the residents were unable to speak the designated languages of the survey. The weighted average response rate is 71.8%.

^f For the purposes of cross-national comparisons we limit the sample to those 18+.

Appendix Table 2. Prevalence Estimates of family member conditions by country income level

	High Income		Upper-middle Income		Low/Lower-Middle Income	
	%	(SE)	%	(SE)	%	(SE)
I. Parent						
A. Mental						
Memory Problems	5.0	(0.5)	2.3	(0.4)	4.3	(1.0)
Mental Retardation	0.2	(0.2)	0.3	(0.2)	0.6	(0.3)
Alcohol/Drugs	0.4	(0.1)	0.9	(0.3)	0.8	(0.3)
Depression	2.2	(0.4)	0.8	(0.2)	1.1	(0.6)
Anxiety	2.4	(0.4)	0.7	(0.2)	0.3	(0.2)
Schizophrenia	0.2	(0.1)	0.1	(0.1)	0.0	(0.0)
Manic Depression	0.2	(0.1)	0.0	(0.0)	0.0	(0.0)
Other Mental	0.3	(0.1)	0.1	(0.0)	0.0	(0.0)
B. Physical						
Cancer	3.7	(0.4)	1.4	(0.2)	3.5	(1.1)
Heart Problems	7.2	(0.5)	5.8	(0.5)	7.2	(1.4)
Other Physical Disorder	2.1	(0.3)	1.1	(0.3)	1.7	(0.6)
Other Physical Illness	3.6	(0.5)	2.0	(0.3)	5.8	(1.0)
II. Spouse						
A. Mental						
Memory Problems	0.8	(0.2)	0.6	(0.1)	0.1	(0.1)
Mental Retardation	0.0	(0.0)	0.1	(0.0)	0.1	(0.0)
Alcohol/Drugs	0.2	(0.1)	0.5	(0.1)	0.1	(0.1)
Depression	1.6	(0.3)	0.9	(0.2)	0.6	(0.2)
Anxiety	1.1	(0.2)	0.8	(0.2)	0.4	(0.2)
Schizophrenia	0.1	(0.0)	0.2	(0.1)	0.1	(0.0)
Manic Depression	0.3	(0.1)	0.1	(0.0)	0.0	(0.0)
Other Mental	0.2	(0.1)	0.2	(0.1)	0.3	(0.1)
B. Physical						
Cancer	2.0	(0.3)	0.6	(0.2)	0.9	(0.3)
Heart Problems	3.3	(0.3)	3.6	(0.4)	1.0	(0.2)
Other Physical Disorder	0.7	(0.1)	0.8	(0.2)	0.8	(0.3)
Other Physical Illness	3.1	(0.3)	2.7	(0.4)	3.2	(0.6)
III. Child						
A. Mental						
Memory Problems	0.1	(0.1)	0.5	(0.2)	0.1	(0.1)
Mental Retardation	0.8	(0.2)	1.5	(0.4)	2.2	(0.6)
Alcohol/Drugs	2.9	(0.4)	2.5	(0.4)	0.1	(0.1)
Depression	4.2	(0.5)	1.4	(0.4)	0.5	(0.4)
Anxiety	3.4	(0.4)	1.9	(0.4)	0.2	(0.1)
Schizophrenia	0.6	(0.2)	0.2	(0.1)	0.5	(0.3)
Manic Depression	1.3	(0.2)	0.4	(0.2)	0.0	(0.0)
Other Mental	0.5	(0.2)	0.6	(0.2)	0.6	(0.3)
B. Physical						
Cancer	1.5	(0.3)	0.5	(0.2)	0.0	(0.0)
Heart Problems	1.0	(0.2)	1.3	(0.3)	0.5	(0.3)
Other Physical Disorder	1.3	(0.2)	1.1	(0.2)	1.0	(0.3)
Other Physical Illness	3.5	(0.6)	0.9	(0.2)	3.3	(0.7)

IV. Sibling**A. Mental**

Memory Problems	2.0	(0.2)	1.6	(0.2)	0.5	(0.2)
Mental Retardation	1.4	(0.2)	0.9	(0.2)	0.7	(0.2)
Alcohol/Drugs	3.9	(0.3)	3.7	(0.4)	1.0	(0.3)
Depression	4.5	(0.2)	1.7	(0.2)	0.7	(0.3)
Anxiety	3.5	(0.3)	1.1	(0.1)	0.7	(0.4)
Schizophrenia	0.6	(0.1)	0.4	(0.1)	0.2	(0.1)
Manic Depression	1.0	(0.1)	0.0	(0.0)	0.1	(0.0)
Other Mental	0.6	(0.1)	0.2	(0.1)	0.6	(0.3)

B. Physical

Cancer	5.9	(0.4)	2.2	(0.3)	1.0	(0.4)
Heart Problems	9.6	(0.5)	5.8	(0.5)	2.4	(0.5)
Other Physical Disorder	2.3	(0.3)	1.6	(0.3)	1.7	(0.4)
Other Physical Illness	6.0	(0.4)	2.5	(0.4)	5.8	(1.0)

V. Both Parents Living**A. Mental**

Memory Problems	8.9	(1.6)	3.8	(1.3)	2.2	(0.6)
Mental Retardation	0.1	(0.1)	1.2	(0.9)	0.0	(0.0)
Alcohol/Drugs	1.2	(0.4)	1.4	(0.5)	1.0	(1.0)
Depression	4.5	(1.1)	2.0	(0.6)	0.0	(0.0)
Anxiety	5.9	(1.2)	1.8	(0.5)	0.0	(0.0)
Schizophrenia	0.4	(0.3)	0.3	(0.3)	0.0	(0.0)
Manic Depression	0.4	(0.3)	0.0	(0.0)	0.0	(0.0)
Other Mental	0.2	(0.1)	0.3	(0.3)	0.0	(0.0)

B. Physical

Cancer	6.6	(0.9)	1.2	(0.6)	5.1	(3.6)
Heart Problems	15.9	(1.3)	13.5	(1.9)	14.4	(2.6)
Other Physical Disorder	2.4	(0.5)	4.2	(1.5)	1.0	(0.7)
Other Physical Illness	6.7	(1.2)	3.8	(0.9)	7.9	(0.8)

VI. One Parent Living**A. Mental**

Memory Problems	4.0	(0.5)	1.9	(0.4)	4.8	(1.0)
Mental Retardation	0.2	(0.2)	0.1	(0.1)	0.8	(0.4)
Alcohol/Drugs	0.3	(0.1)	0.8	(0.3)	0.8	(0.1)
Depression	1.6	(0.4)	0.5	(0.2)	1.4	(0.3)
Anxiety	1.6	(0.4)	0.5	(0.2)	0.3	(0.1)
Schizophrenia	0.1	(0.1)	0.0	(0.0)	0.0	(0.0)
Manic Depression	0.2	(0.1)	0.1	(0.0)	0.1	(0.1)
Other Mental	0.3	(0.2)	0.0	(0.0)	0.1	(0.1)

B. Physical

Cancer	3.0	(0.4)	1.5	(0.3)	3.1	(1.0)
Heart Problems	5.1	(0.6)	4.0	(0.5)	5.3	(1.1)
Other Physical Disorder	2.1	(0.4)	0.4	(0.2)	1.9	(0.6)
Other Physical Illness	2.9	(0.5)	1.5	(0.3)	5.3	(0.9)

VII. Spouse Among Married**A. Mental**

Memory Problems	1.1	(0.2)	0.8	(0.2)	0.2	(0.1)
Mental Retardation	0.0	(0.0)	0.1	(0.1)	0.1	(0.0)
Alcohol/Drugs	0.3	(0.1)	0.7	(0.2)	0.2	(0.1)

Depression	2.2	(0.4)	1.2	(0.2)	0.7	(0.3)
Anxiety	1.5	(0.2)	1.1	(0.3)	0.5	(0.2)
Schizophrenia	0.1	(0.0)	0.2	(0.1)	0.1	(0.0)
Manic Depression	0.4	(0.1)	0.1	(0.1)	0.0	(0.0)
Other Mental	0.3	(0.1)	0.2	(0.1)	0.3	(0.2)
B. Physical						
Cancer	2.6	(0.3)	0.8	(0.2)	1.2	(0.4)
Heart Problems	4.4	(0.4)	5.0	(0.6)	1.3	(0.3)
Other Physical Disorder	0.9	(0.2)	1.0	(0.2)	0.9	(0.4)
Other Physical Illness	4.2	(0.4)	3.7	(0.5)	4.0	(0.7)

Appendix Table 3. Cross-national differences in prevalence estimates of family member conditions by country income group¹

	Odds-ratios compared to high income countries				χ^2_2	(p-value)
	Upper-Middle Income		Low/Lower-Middle Income			
	OR	(95% CI)	OR	(95% CI)		
I. Parent illness among those with two living parents						
Any Mental Illness	0.4	(0.2-0.6)	0.2	(0.1-0.4)	36.7	(<.001)
Any Physical Illness	0.6	(0.4-0.9)	1.0	(0.7-1.4)	6.8	(.034)
Any Illness	0.5	(0.3-0.6)	0.7	(0.5-1.0)	22.9	(<.001)
II. Parent illness among those with one living parent						
Any Mental Illness	0.6	(0.4-0.8)	0.8	(0.5-1.2)	8.1	(.017)
Any Physical Illness	0.6	(0.4-0.7)	0.8	(0.6-1.2)	20.0	(<.001)
Any Illness	0.5	(0.4-0.7)	0.8	(0.6-1.1)	32.7	(<.001)
III. Spouse illness among the married						
Any Mental Illness	0.8	(0.5-1.1)	0.4	(0.2-0.6)	19.1	(<.001)
Any Physical Illness	0.9	(0.7-1.1)	0.7	(0.5-1.0)	4.9	(.086)
Any Illness	0.8	(0.7-1.0)	0.6	(0.4-0.8)	9.9	(.007)
IV. Sibling illness among those with one or more siblings						
Any Mental Illness	0.6	(0.5-0.7)	0.3	(0.2-0.4)	73.2	(<.001)
Any Physical Illness	0.5	(0.4-0.6)	0.4	(0.3-0.6)	89.1	(<.001)
Any Illness	0.5	(0.5-0.6)	0.4	(0.3-0.5)	123.7	(<.001)
V. Child illness among those with one or more children						
Any Mental Illness	0.7	(0.5-0.9)	0.3	(0.2-0.5)	20.0	(<.001)
Any Physical Illness	0.6	(0.4-0.8)	0.6	(0.4-1.0)	10.5	(.005)
Any Illness	0.6	(0.5-0.8)	0.4	(0.3-0.6)	23.9	(<.001)

¹Based on logistic regression models to predict dichotomous measures of relative disorders in the subsample of respondents who have such relatives (e.g., parent illness among respondents with one or more living parents). The predictors of primary interest are dummy variables for upper-middle and low/lower-middle income countries compared to the omitted category of high income countries. All models control for respondent age and age-squared. The sibling models additional control for number of siblings and the children models for number of children. Pondicherry and Israel were excluded from the parent models, as those surveys did not include questions about whether the respondent's parents were still living or dead.