Supplementary material

Table A1: Definition of variables

Variable	Definition
Male	Equal to 1 if the respondent is male, 0 otherwise
Age	Respondent's age
Married	Equal to 1 if the respondent is married, 0 otherwise
Widowed	Equal to 1 if the respondent is widowed, 0 otherwise
Primary Education	Equal to 1 if the respondent finished primary education, 0 otherwise
Real Household Income	Annual household income at 2018 prices
Logarithm of real household income	Logarithm of annual household income at 2018 prices
Real Household wealth	Non-housing household wealth at 2018 prices
Logarithm of real household wealth	Non-housing household wealth at 2018 prices
Working	Equal to 1 if the respondent does non-agriculture work, 0 otherwise
Number of Sons	The number of respondents' sons
Number of Daughters	The number of respondents' daughters
CaredbyDaughter	Equal to 1 if the respondent's daughter is the main carer but not son, 0 otherwise
CaredbySon	Equal to 1 if the respondent's son is the main carer but not daughter, 0 otherwise
CaredbyBoth	Equal to 1 if the respondents are cared by both daughter and son, 0 otherwise
CaredbyOther	Equal to 1 if the respondent is mainly cared for by others rather than children, 0 otherwise
OnlyDaughterCare	Equal to 1 if the respondent's primary carer is daughter only, 0 otherwise
OnlySonCare	Equal to 1 if the respondent's primary carer is son only, 0 otherwise
SRH_Poor	Equal to 1 if the respondent reports very poor or poor health, 0 otherwise
SRH_CA	Self-reported health: 1 poor; 2 fair; 3 good; 4 excellent
Chronic	Category of chronic disease: 1 No chronic disease; 2 Onset before; and 3 Onset new

Table A2: Ordinal logistic regression models for self-reported health and care provided by son and daughter

	(1) Model 1	(2) Model 2
Male	1.014	1.104
	(0.925 - 1.110)	(0.877 - 1.388)
Age	1.004	1.016**
	(0.998 - 1.009)	(1.005 - 1.027)
Marital status (ref. single or divorced)		
Married	0.908	0.937
	(0.737 - 1.119)	(0.631 - 1.392)
Widowed	1.091	0.902
	(0.865 - 1.376)	(0.597 - 1.364)
Primary Education	0.764***	0.900
	(0.694 - 0.841)	(0.705 - 1.147)
Household Income	1.021*	1.032
	(1.004 - 1.037)	(0.997 - 1.068)
Working	1.704***	1.148
	(1.453 - 1.999)	(0.689 - 1.914)
Number of Sons	0.967	0.916
	(0.926 - 1.011)	(0.834 - 1.007)
Number of Daughters	0.963*	0.931
	(0.927 - 1.000)	(0.860 - 1.008)
Care structure (ref: CaredbyOther)		
CaredbyDaughter	0.772***	
	(0.665 - 0.898)	
CaredbySon	1.043	
	(0.942 - 1.156)	
CaredbyBoth	0.931	
	(0.805 - 1.077)	
Care structure (ref: OnlyDaughterCare)		
OnlySonCare		1.466**
		(1.144 - 1.879)
Urban	1.137**	1.229
	(1.036 - 1.249)	(0.991 - 1.525)
Observations	9,142	1,687
LR chi2	225.49	104.06
***Prob* > chi2**	0.0000	0.0000
AIC	18459.22	3598.712
***F*-test (*p*-value)**	0.0003	

Note: We use an ordinal logistic model, and the odds ratios (0Rs) are reported. The 95% confidence intervals are reported in the parentheses. Year and province dummies are included in all models, but their coefficients are not reported for brevity. The *P*-value of *F*-test for the equality of coefficients on the 'CarebyDaughter' and 'CarebySon' is reported at the end of the table.
*$p < .05$, **$p < .01$, ***$p < .001$.

Table A3: Ordinal logistic regression models for self-reported health and care provided by son and daughter: differentiating by region

	Model 1		Model 2	
	(1)	(2)	(3)	(4)
	Urban	Rural	Urban	Rural
Male	1.084	0.990	0.939	1.158
	(0.924 - 1.272)	(0.885 - 1.107)	(0.617 - 1.431)	(0.876 - 1.530)
Age	1.009*	1.001	1.012	1.017*
	(1.001 - 1.018)	(0.995 - 1.007)	(0.991 - 1.032)	(1.003 - 1.031)
Marital status (ref. single or divorced)				
Married	1.048	0.870	1.133	0.866
	(0.703 - 1.562)	(0.680 - 1.112)	(0.552 - 2.325)	(0.535 - 1.400)
Widowed	1.312	1.033	1.190	0.806
	(0.846 - 2.035)	(0.784 - 1.360)	(0.561 - 2.523)	(0.488 - 1.333)
Primary Education	0.768**	0.774***	1.050	0.858
	(0.653 - 0.904)	(0.686 - 0.874)	(0.708 - 1.555)	(0.623 - 1.183)
Household Income	1.012	1.024*	1.026	1.036
	(0.986 - 1.039)	(1.003 - 1.046)	(0.971 - 1.085)	(0.990 - 1.085)
Working	1.894***	1.617***	1.175	1.113
	(1.462 - 2.454)	(1.315 - 1.988)	(0.526 - 2.626)	(0.559 - 2.217)
Number of Sons	1.002	0.952	1.129	0.857**
	(0.927 - 1.083)	(0.902 - 1.005)	(0.943 - 1.351)	(0.764 - 0.962)
Number of Daughters	0.969	0.956	1.028	0.883*
	(0.906 - 1.037)	(0.913 - 1.002)	(0.891 - 1.185)	(0.800 - 0.974)
Care structure (ref: CaredbyOther)				
CaredbyDaughter	0.914	0.696***		
	(0.716 - 1.166)	(0.574 - 0.845)		
CaredbySon	1.149	1.004		
	(0.951 - 1.389)	(0.887 - 1.135)		
CaredbyBoth	0.801	1.006		
	(0.625 - 1.025)	(0.838 - 1.207)		
Care structure (ref: OnlyDaughterCare)				
OnlySonCare			1.085	1.594**
			(0.717 - 1.644)	(1.155 - 2.201)
Observations	2,893	6,249	559	1,128
LR chi2	116.66	158.18	54.13	83.54
***Prob* > chi2**	0.0000	0.0000	0.0433	0.0000
AIC	5900.187	12576.43	1263.322	2371.701
***F*-test (*p*-value)**	0.0937	0.0005		

Note: We use an ordinal logistic model, and the odds ratios (0Rs) are reported. The 95% confidence intervals are reported in the parentheses. Year and province dummies are included in all models, but their coefficients are not reported for brevity. The *P*-values of *F*-tests for the equality of coefficients on the 'CarebyDaughter' and 'CarebySon' are reported at the end of the table.

*$p < .05$, **$p < .01$, ***$p < .001$.

Table A4: Ordinal logistic regression models for self-reported health and care provided by son and daughter: differentiating by gender

	Model 1		Model 2	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Age	1.003	1.004	1.025	1.014*
	(0.995 - 1.012)	(0.997 - 1.010)	(1.000 - 1.051)	(1.001 - 1.027)
Marital status (ref. single or divorced)				
Married	1.109	0.842	1.655	0.723
	(0.761 - 1.615)	(0.654 - 1.084)	(0.748 - 3.660)	(0.453 - 1.153)
Widowed	1.369	1.000	1.569	0.726
	(0.885 - 2.117)	(0.757 - 1.321)	(0.679 - 3.627)	(0.445 - 1.183)
Primary Education	0.732***	0.791***	0.813	0.993
	(0.634 - 0.845)	(0.694 - 0.902)	(0.523 - 1.263)	(0.734 - 1.342)
Household Income	1.040**	1.008	1.047	1.024
	(1.012 - 1.070)	(0.988 - 1.029)	(0.971 - 1.129)	(0.984 - 1.066)
Working	2.018***	1.499***	2.089	0.927
	(1.594 - 2.553)	(1.203 - 1.869)	(0.838 - 5.208)	(0.491 - 1.751)
Number of Sons	1.014	0.940*	0.969	0.888*
	(0.942 - 1.091)	(0.890 - 0.993)	(0.800 - 1.174)	(0.794 - 0.992)
Number of Daughters	0.963	0.963	0.800**	0.984
	(0.904 - 1.025)	(0.918 - 1.010)	(0.682 - 0.939)	(0.896 - 1.081)
Care structure (ref: CaredbyOther)				
CaredbyDaughter	0.801	0.753**		
	(0.607 - 1.056)	(0.629 - 0.903)		
CaredbySon	1.018	1.066		
	(0.851 - 1.218)	(0.939 - 1.210)		
CaredbyBoth	0.835	0.976		
	(0.640 - 1.089)	(0.818 - 1.165)		
Care structure (ref: OnlyDaughterCare)				
OnlySonCare			2.046*	1.394*
			(1.173 - 3.567)	(1.050 - 1.851)
Urban	1.127	1.137*	0.995	1.302*
	(0.966 - 1.315)	(1.009 - 1.281)	(0.632 - 1.567)	(1.014 - 1.673)
Observations	3,335	5,807	419	1,268
LR chi2	138.20	138.26	65.86	81.44
***Prob* > chi2**	0.0000	0.0000	0.0017	0.0001
AIC	6709.542	11780.810	940.3634	2687.311
***F*-test (*p*-value)**	0.1206	0.0004		

Note: We use an ordinal logistic model, and the odds ratios (0Rs) are reported. The 95% confidence intervals are reported in the parentheses. Year and province dummies are included in all models, but their coefficients are not reported for brevity. The *P*-values of *F*-tests for the equality of coefficients on the 'CarebyDaughter' and 'CarebySon' are reported at the end of the table.

*$p < .05$, **$p < .01$, ***$p < .001$.

Table A5: Ordinal logistic regression models for self-reported health and care provided by son and daughter: differentiating by wealth

	Model 1		Model 2	
	(1)	(2)	(3)	(4)
	Wealthy	Less wealthy	Wealthy	Less wealthy
Male	1.086	1.016	0.927	1.179
	(0.887 - 1.329)	(0.916 - 1.126)	(0.586 - 1.466)	(0.898 - 1.549)
Age	0.993	1.006*	1.004	1.021**
	(0.983 - 1.004)	(1.001 - 1.012)	(0.981 - 1.027)	(1.007 - 1.035)
Marital status (ref. single or divorced)				
Married	1.291	0.834	1.101	0.961
	(0.752 - 2.216)	(0.665 - 1.046)	(0.407 - 2.975)	(0.618 - 1.495)
Widowed	1.542	0.989	1.292	0.848
	(0.855 - 2.781)	(0.767 - 1.275)	(0.450 - 3.707)	(0.535 - 1.344)
Primary Education	0.765*	0.740***	1.280	0.778
	(0.618 - 0.946)	(0.664 - 0.826)	(0.761 - 2.152)	(0.585 - 1.033)
Household Income	1.034*	1.011	1.068	1.013
	(1.001 - 1.069)	(0.992 - 1.030)	(0.999 - 1.142)	(0.971 - 1.057)
Working	1.962***	1.592***	2.974*	0.844
	(1.424 - 2.702)	(1.322 - 1.918)	(1.017 - 8.697)	(0.454 - 1.568)
Number of Sons	1.068	0.947*	1.046	0.858**
	(0.969 - 1.178)	(0.902 - 0.995)	(0.865 - 1.265)	(0.766 - 0.962)
Number of Daughters	1.051	0.947*	1.022	0.898*
	(0.967 - 1.143)	(0.908 - 0.989)	(0.870 - 1.200)	(0.817 - 0.986)
Care structure (ref: CaredbyOther)				
CaredbyDaughter	0.824	0.761**		
	(0.594 - 1.144)	(0.642 - 0.903)		
CaredbySon	1.061	1.025		
	(0.841 - 1.338)	(0.913 - 1.151)		
CaredbyBoth	0.970	0.903		
	(0.709 - 1.329)	(0.764 - 1.068)		
Care structure (ref: OnlyDaughterCare)				
OnlySonCare			1.538	1.445*
			(0.894 - 2.646)	(1.083 - 1.929)
Urban	1.053	1.127*	1.325	1.159
	(0.861 - 1.289)	(1.012 - 1.255)	(0.855 - 2.052)	(0.898 - 1.495)
Observations	1,812	7,330	414	1,273
LR chi2	83.76	171.13	88.02	85.10
***Prob* > chi2**	0.0001	0.0000	0.0000	0.0000
AIC	3909.53	14547.66	933.8019	2673.755
***F*-test (*p*-value)**	0.1478	0.0016		

Note: We use an ordinal logistic model, and the odds ratios (0Rs) are reported. The 95% confidence intervals are reported in the parentheses. Year and province dummies are included in all models, but their coefficients are not reported for brevity. The *P*-values of *F*-tests for the equality of coefficients on the 'CarebyDaughter' and 'CarebySon' are reported at the end of the table.

*$p < .05$, **$p < .01$, ***$p < .001$.

Table A6: Multinominal logistic regression models for the incidence of chronic disease and care provided by daughters and sons

	All		Wealthy		Less wealthy	
	(1)	(2)	(3)	(4)	(5)	(6)
	Onset before	New onset	Onset before	New onset	Onset before	New onset
Male	0.867*	0.919	0.849	0.808	0.870	0.948
	(0.760 - 0.989)	(0.818 - 1.032)	(0.636 - 1.133)	(0.620 - 1.054)	(0.749 - 1.010)	(0.833 - 1.080)
Age	1.011**	1.006	1.013	1.007	1.012**	1.007
	(1.004 - 1.019)	(1.000 - 1.013)	(0.999 - 1.028)	(0.994 - 1.020)	(1.003 - 1.021)	(0.999 - 1.014)
Marital status (ref. single or divorced)						
Married	0.978	1.307*	0.857	2.875**	1.003	1.139
	(0.728 - 1.312)	(1.005 - 1.700)	(0.433 - 1.696)	(1.402 - 5.896)	(0.721 - 1.396)	(0.855 - 1.518)
Widowed	0.899	1.081	0.814	2.348*	0.947	0.952
	(0.649 - 1.245)	(0.808 - 1.446)	(0.392 - 1.691)	(1.092 - 5.050)	(0.655 - 1.369)	(0.691 - 1.312)
Primary Education	1.384***	1.371***	1.275	1.384*	1.438***	1.378***
	(1.201 - 1.595)	(1.211 - 1.551)	(0.933 - 1.742)	(1.045 - 1.834)	(1.224 - 1.688)	(1.199 - 1.582)
Household Income	1.007	1.012	1.011	1.029	1.002	1.002
	(0.985 - 1.030)	(0.991 - 1.033)	(0.968 - 1.056)	(0.986 - 1.075)	(0.976 - 1.029)	(0.978 - 1.027)
Working	0.684**	0.677***	0.680	0.564**	0.679*	0.720**
	(0.528 - 0.886)	(0.556 - 0.824)	(0.407 - 1.136)	(0.374 - 0.850)	(0.502 - 0.920)	(0.574 - 0.903)
Number of Sons	1.013	0.995	0.931	0.989	1.028	0.988
	(0.954 - 1.076)	(0.942 - 1.050)	(0.818 - 1.059)	(0.876 - 1.115)	(0.959 - 1.102)	(0.930 - 1.051)
Number of Daughters	1.010	1.000	0.936	1.004	1.032	0.998
	(0.958 - 1.066)	(0.953 - 1.048)	(0.835 - 1.050)	(0.902 - 1.118)	(0.971 - 1.096)	(0.946 - 1.053)
Care structure (ref: CaredbyOther)						
CaredbyDaughter	1.132	1.315**	0.800	1.062	1.250	1.390**
	(0.911 - 1.406)	(1.093 - 1.583)	(0.505 - 1.267)	(0.706 - 1.596)	(0.975 - 1.604)	(1.127 - 1.714)
CaredbySon	1.070	1.133	0.943	1.057	1.106	1.172*
	(0.922 - 1.241)	(0.992 - 1.294)	(0.674 - 1.317)	(0.774 - 1.443)	(0.935 - 1.310)	(1.010 - 1.360)
CaredbyBoth	1.120	1.303**	0.863	1.285	1.245	1.299*
	(0.904 - 1.388)	(1.086 - 1.563)	(0.546 - 1.364)	(0.857 - 1.926)	(0.974 - 1.592)	(1.057 - 1.597)
Urban	1.025	1.053	0.871	1.217	1.065	1.002
	(0.894 - 1.175)	(0.934 - 1.187)	(0.652 - 1.166)	(0.932 - 1.590)	(0.910 - 1.245)	(0.875 - 1.148)
Constant	0.952	0.431**	1.489	0.170**	0.824	0.516*
	(0.502 - 1.807)	(0.242 - 0.768)	(0.379 - 5.852)	(0.0453 - 0.639)	(0.395 - 1.718)	(0.268 - 0.991)
Observations	9,733	9,733	2,024	2,024	7,709	7,709
LR chi2	2829.36		593.42		2319.77	
***Prob* > chi2**	0.0000		0.0000		0.0000	
AIC	18496.7		3950.094		14624.91	

Note: We use a multinominal logistic model, and the relative risk ratios (RRR) are reported. The 95% confidence intervals are reported in the parentheses. Year and province dummies are included in all models, but their coefficients are not reported for brevity.
*$p < .05$, **$p < .01$, ***$p < .001$.