

Data supplement

Table DS1 Basic characteristics of participants with dementia and depression in the Anhui cohort study, China						
Variable	Non-case dementia and depression group (<i>n</i> = 2216)	Dementia		Depression		<i>P</i>
		Case group (<i>n</i> = 223)	Subcase group (<i>n</i> = 307)	Case group (<i>n</i> = 128)	Subcase group (<i>n</i> = 104)	
Age, years: mean (s.d.)	71.5 (6.5)	73.2 (8.8)	73.5 (7.4)	71.6 (6.7)	71.6 (6.9)	<0.001
Gender, <i>n</i> (%)						
Men	1134 (51.2)	86 (38.6)	122 (39.7)	41 (32.0)	49 (47.1)	
Women	1082 (48.8)	137 (61.4)	185 (60.3)	87 (68.0)	55 (52.9)	<0.001
Body mass index, kg/m ² : <i>n</i> (%)						
≤25	1508 (68.1)	171 (76.7)	220 (71.7)	99 (77.3)	72 (69.2)	
26–29	627 (28.3)	47 (21.1)	77 (25.1)	25 (19.5)	31 (29.8)	
≥30	81 (3.7)	5 (2.2)	10 (3.3)	4 (3.1)	1 (1.0)	0.071
Smoking, ^a <i>n</i> (%)						
Never smoked	1054 (57.8)	139 (66.8)	174 (68.8)	87 (74.4)	52 (58.4)	
Ex-smoker	139 (7.6)	12 (5.8)	137 (5.1)	7 (6.0)	11 (12.4)	
Current smoker	629 (34.5)	57 (27.4)	66 (41.4)	23 (19.7)	26 (29.2)	<0.001
Alcohol drinking, <i>n</i> (%)						
No	1766 (79.7)	193 (86.5)	250 (81.4)	115 (89.8)	92 (88.5)	
Yes	450 (20.3)	30 (13.5)	57 (18.6)	13 (10.2)	12 (11.5)	0.002
Urban/rural location, <i>n</i> (%)						
Urban	1237 (55.8)	49 (22.0)	180 (58.6)	37 (28.9)	46 (44.2)	
Rural	979 (44.2)	174 (78.0)	127 (41.4)	91 (71.1)	58 (55.8)	<0.001
Educational level, <i>n</i> (%)						
College	256 (11.6)	6 (2.7)	20 (6.5)	9 (7.0)	3 (2.9)	
High secondary school	336 (15.2)	5 (2.2)	44 (14.3)	3 (2.3)	10 (9.6)	
Secondary school	328 (14.8)	16 (7.2)	37 (12.1)	10 (7.8)	12 (11.5)	
Primary school	281 (12.7)	17 (7.6)	43 (14.0)	10 (7.8)	19 (18.3)	
Illiterate	1015 (45.8)	179 (80.3)	163 (53.1)	96 (75.0)	60 (57.7)	<0.001
Main occupation, <i>n</i> (%)						
Officer/teacher	776 (35.0)	20 (9.0)	88 (28.7)	19 (14.8)	25 (24.0)	
Business/other (housewife)	178 (8.0)	14 (6.3)	38 (12.4)	7 (5.5)	5 (4.8)	
Manual labourer	305 (13.8)	17 (7.6)	49 (16.0)	10 (7.8)	19 (18.3)	
Peasant	956 (43.2)	172 (77.1)	132 (43.0)	92 (71.9)	55 (52.9)	<0.001
Current family income (estimated average), <i>n</i> (%)						
Very satisfactory (\$1589)	210 (9.5)	8 (3.6)	74 (24.1)	4 (3.1)	9 (8.7)	
Satisfactory (\$1055)	1210 (54.6)	61 (27.4)	105 (34.2)	27 (21.1)	39 (37.5)	
Average (\$689)	659 (29.7)	115 (51.6)	104 (33.9)	57 (44.5)	32 (30.8)	
Poor (\$291)	137 (6.2)	39 (17.6)	24 (7.8)	40 (31.3)	24 (23.1)	<0.001
Marital status, <i>n</i> (%)						
Married	1702 (76.8)	120 (53.8)	193 (62.9)	77 (60.2)	69 (66.3)	<0.001
Never married/divorced	78 (3.5)	17 (7.6)	13 (4.2)	6 (4.7)	7 (6.7)	
Widowed	435 (19.6)	86 (38.6)	101 (32.9)	45 (35.2)	28 (26.9)	
Frequency of visiting children or other relatives, <i>n</i> (%)						
Daily	1226 (55.3)	148 (66.4)	215 (70.0)	75 (58.6)	59 (56.7)	<0.001
At least weekly to less than monthly	658 (29.7)	36 (16.1)	52 (16.9)	23 (18.0)	25 (24.0)	
Monthly	260 (11.7)	28 (12.6)	31 (10.1)	20 (15.6)	17 (16.3)	
Never	72 (3.3)	11 (4.9)	9 (2.9)	10 (7.8)	3 (2.9)	
Hypertension (BP ≥ 140/90 mmHg or taking antihypertensive drugs), <i>n</i> (%)						
No	951 (42.9)	89 (39.9)	110 (35.8)	50 (39.1)	40 (38.5)	
Yes	1265 (57.1)	134 (60.1)	197 (64.2)	78 (60.9)	64 (61.5)	0.147
Diabetes, <i>n</i> (%)						
No	2096 (94.6)	215 (96.4)	287 (93.5)	117 (91.4)	94 (90.4)	
Yes	120 (5.4)	8 (3.6)	20 (6.5)	11 (8.6)	10 (9.6)	0.109
Heart disease (coronary or other types of heart disease), <i>n</i> (%)						
No	1884 (85.0)	200 (89.7)	258 (84.0)	109 (85.2)	89 (85.6)	
Yes	332 (15.0)	23 (10.3)	49 (16.0)	19 (14.8)	15 (14.4)	0.412
Stroke, <i>n</i> (%)						
No	2150 (97.0)	201 (90.1)	293 (95.4)	112 (87.5)	96 (92.3)	
Yes	66 (3.0)	22 (9.9)	14 (4.6)	16 (12.5)	8 (7.7)	<0.001

BP, blood pressure.

a. Percentages do not fit with total *n* due to missingness.

Table DS2 Numbers, mortality rate and hazard ratios in participants with low v. high socioeconomic status (SES) defined by educational level, occupational class and income in the Anhui cohort study, China^a

Dementia and depression status group	Deaths/participants, <i>n</i>	Mortality rate, %	Hazard ratio ^b (95% CI)
<i>SES defined by educational level</i>			
Non-cases of dementia and depression			
High SES	180/1345	13.4	1.00
Low SES	261/1282	20.4	1.27 (0.40–1.87)
Dementia			
High SES	19/44	43.2	2.69 (1.64–4.39)
Low SES	66/179	36.9	2.37 (1.65–3.41)
Depression			
High SES	9/32	28.1	1.61 (0.81–3.22)
Low SES	30/96	31.3	1.78 (1.11–2.84)
<i>SES defined by occupational class</i>			
Non-cases of dementia and depression			
High SES	116/911	12.7	1.00
Low SES	325/1716	18.9	1.28 (0.94–1.73)
Dementia			
High SES	9/21	42.9	2.40 (1.18–4.90)
Low SES	76/202	37.6	2.42 (1.65–3.56)
Depression			
High SES	5/20	25.0	1.28 (0.51–3.24)
Low SES	34/108	31.5	1.92 (1.20–3.07)
<i>SES defined by income</i>			
Non-cases of dementia and depression			
High SES	247/1647	15.0	1.00
Low SES	194/980	19.8	1.26 (0.93–1.72)
Dementia			
High SES	26/69	37.7	2.71 (1.34–5.50)
Low SES	59/154	38.3	2.46 (0.48–3.08)
Depression			
High SES	10/31	32.3	1.21 (0.48–3.08)
Low SES	29/97	29.9	1.88 (1.17–3.01)

a. High and low SES were defined in the following ways (a) educational level, as \geq educational levels of primary school v. illiteracy, (b) occupational class, as officer/teacher and business v. peasant, manual labourer and others, (c) in family income, as satisfactory and very satisfactory v. poor and average.
b. Adjusted for age (continuous variable), gender, rural v. urban location, educational level, occupation and family income, marital status, frequencies of children/relatives visiting, body mass index group, smoking, alcohol, hypertension (defined as having blood pressure measured \geq 140/90 mmHg or taking antihypertensive drugs), diabetes, heart disease and stroke.

Table DS3 Comparisons in characteristics between participants followed up and lost to follow-up in the Anhui cohort, China

Variable	Follow-up in the cohort		P
	Yes (n = 2978)	No (n = 358)	
Age, years: mean (s.d.)	71.8 (6.9)	72.1 (7.0)	0.545
Gender, n (%)			
Men	1432 (48.1)	139 (38.8)	0.001
Women	1546 (51.9)	219 (61.2)	
Body mass index, kg/m ² : n (%)			
≤25	2070 (69.5)	256 (71.6)	0.726
26–29	807 (27.1)	90 (25.1)	
≥30	101 (3.4)	12 (3.4)	
Smoking, ^a n (%)			
Never smoked	1506 (60.5)	184 (66.4)	0.007
Ex-smoker	182 (7.3)	7 (2.5)	
Current smoker	801 (32.2)	86 (31.0)	
Alcohol drinking, n (%)			
No	2416 (81.1)	297 (83.0)	0.401
Yes	562 (18.9)	61 (17.0)	
Urban/rural location, n (%)			
Urban	1549 (52.0)	187 (52.2)	0.937
Rural	1429 (48.0)	171 (47.8)	
Educational level, n (%)			
College	294 (9.9)	27 (7.5)	0.224
High secondary school	398 (13.4)	55 (15.4)	
Secondary school	403 (13.5)	55 (15.4)	
Primary school	370 (12.4)	35 (9.8)	
Illiterate	1513 (50.8)	186 (52.0)	
Main occupation, n (%)			
Officer/teacher	929 (31.2)	123 (34.4)	0.138
Business/other (housewife)	242 (8.1)	31 (8.7)	
Manual labourer	400 (13.4)	33 (9.2)	
Peasant	1407 (47.2)	171 (47.8)	
Current family income (estimated average), n (%)			
Very satisfactory (\$1589)	305 (10.2)	32 (8.9)	0.691
Satisfactory (\$1055)	1142 (48.4)	180 (50.3)	
Average (\$689)	967 (32.5)	119 (33.2)	
Poor (\$291)	264 (8.9)	27 (7.5)	
Marital status, n (%)			
Married	2162 (72.6)	235 (65.6)	0.001
Never married/divorced	121 (4.1)	8 (2.2)	
Widowed	695 (23.3)	115 (32.1)	
Frequency of visiting children or other relatives, n (%)			
Daily	1723 (57.9)	197 (55.0)	0.086
At least weekly to less than monthly	794 (26.7)	115 (32.1)	
Monthly	356 (12.0)	39 (10.9)	
Never	105 (3.5)	7 (2.0)	
Hypertension (BP ≥ 140/90 mmHg or taking antihypertensive drugs), n (%)			
No	1240 (41.6)	156 (43.6)	0.483
Yes	1738 (58.4)	202 (56.4)	
Diabetes, n (%)			
No	2809 (94.3)	336 (93.9)	0.717
Yes	169 (5.7)	22 (6.1)	
Heart disease (coronary or other types of heart disease), n (%)			
No	2540 (85.3)	304 (84.9)	0.850
Yes	438 (14.7)	54 (15.1)	
Stroke, n (%)			
No	2852 (95.8)	343 (95.8)	0.971
Yes	126 (4.2)	15 (4.2)	
Depression–dementia status group			
Non-case	2216 (74.4)	264 (73.7)	0.055
Depression subcase	104 (3.5)	18 (5.0)	
Depression case	128 (4.3)	6 (1.7)	
Dementia subcase	307 (10.3)	36 (10.1)	
Dementia case	223 (7.5)	34 (9.5)	

BP, blood pressure.

a. Percentages do not fit with total n due to missingness.