

## Supplementary

**Table S1** Compare the scores of SCL-90 factors in ESRD patients undergoing maintenance hemodialysis patients with stroke and without stroke (N=190)

Variables	Number (%)	Stroke (N=42;22.1%)	No stroke (N=148;77.9%)	P value
Somatization	190 (100%)	2.14 (0.75)	1.98 (0.66)	0.184
Obsessive-compulsive	190 (100%)	1.50 (0.44)	1.60 (0.55)	0.240
Interpersonal sensitivity	190 (100%)	1.37 (0.34)	1.42 (0.55)	0.535
Depression	190 (100%)	1.84 (0.47)	1.92 (0.64)	0.492
Anxiety	190 (100%)	1.38 (0.39)	1.51 (0.46)	0.109
Hostility	190 (100%)	1.62 (0.82)	1.46 (0.55)	0.221
Phobic anxiety	190 (100%)	1.71 (0.68)	1.52 (0.76)	0.149
Paranoid ideation	190 (100%)	1.31 (0.38)	1.30 (0.49)	0.907
Psychoticism	190 (100%)	1.44 (0.24)	1.44 (0.32)	0.958
Average positive factors	190 (100%)	1.65 (0.34)	1.64 (0.40)	0.843

Data were shown as mean (SD). Continuous variables used independent sample *t* test.

**Table S2** Compare the scores of SCL-90 factors in ESRD patients undergoing maintenance hemodialysis patients with coronary artery disease and without coronary artery disease (N=190)

Variables	Number (%)	Coronary artery disease (N=67;35.3%)	No coronary artery disease (N=123;64.7%)	P value
Somatization	190 (100%)	2.21 (0.73)	1.90 (0.63)	0.003
Obsessive-compulsive	190 (100%)	1.61 (0.47)	1.56 (0.55)	0.494
Interpersonal sensitivity	190 (100%)	1.43 (0.43)	1.40 (0.55)	0.769
Depression	190 (100%)	1.94 (0.61)	1.88 (0.60)	0.476
Anxiety	190 (100%)	1.49 (0.41)	1.48 (0.47)	0.874
Hostility	190 (100%)	1.50 (0.56)	1.49 (0.66)	0.899
Phobic anxiety	190 (100%)	1.63 (0.74)	1.53 (0.75)	0.374
Paranoid ideation	190 (100%)	1.26 (0.37)	1.32 (0.52)	0.422
Psychoticism	190 (100%)	1.43 (0.23)	1.44 (0.34)	0.714
Average positive factors	190 (100%)	1.68 (0.37)	1.62 (0.40)	0.280

Data were shown as mean (SD). Continuous variables used independent sample *t* test.

**Table S3** Compare the scores of SCL-90 factors in ESRD patients undergoing maintenance hemodialysis patients with hypertension and without hypertension (N=190)

Variables	Number (%)	Hypertension (N=167;87.9%)	No hypertension (N=23;12.1%)	P value
Somatization	190 (100%)	2.02 (0.70)	1.96 (0.54)	0.718
Obsessive-compulsive	190 (100%)	1.58 (0.53)	1.55 (0.48)	0.759
Interpersonal sensitivity	190 (100%)	1.42 (0.52)	1.37 (0.38)	0.686
Depression	190 (100%)	1.90 (0.62)	1.91 (0.53)	0.933
Anxiety	190 (100%)	1.49 (0.46)	1.41 (0.37)	0.453
Hostility	190 (100%)	1.48 (0.61)	1.55 (0.74)	0.634
Phobic anxiety	190 (100%)	1.56 (0.74)	1.61 (0.83)	0.755
Paranoid ideation	190 (100%)	1.31 (0.48)	1.25 (0.41)	0.572
Psychoticism	190 (100%)	1.44 (0.32)	1.46 (0.17)	0.755
Average positive factors	190 (100%)	1.64 (0.39)	1.61 (0.35)	0.718

Data were shown as mean (SD). Continuous variables used independent sample *t* test.

**Table S4** Compare the scores of SCL-90 factors in ESRD patients undergoing maintenance hemodialysis patients with heart failure and without heart failure (N=190)

Variables	Number (%)	Heart failure (N=42;22.1%)	No heart failure (N=148;77.9%)	P value
Somatization	190 (100%)	2.25 (0.70)	1.95 (0.67)	0.011
Obsessive-compulsive	190 (100%)	1.60 (0.54)	1.57 (0.52)	0.725
Interpersonal sensitivity	190 (100%)	1.50 (0.67)	1.39 (0.45)	0.183
Depression	190 (100%)	1.98 (0.66)	1.88 (0.59)	0.376
Anxiety	190 (100%)	1.58 (0.43)	1.45 (0.45)	0.099
Hostility	190 (100%)	1.49 (0.60)	1.49 (0.63)	0.962
Phobic anxiety	190 (100%)	1.51 (0.76)	1.58 (0.74)	0.653
Paranoid ideation	190 (100%)	1.24 (0.40)	1.31 (0.49)	0.380
Psychoticism	190 (100%)	1.42 (0.31)	1.44 (0.31)	0.651
Average positive factors	190 (100%)	1.70 (0.44)	1.62 (0.37)	0.281

Data were shown as mean (SD). Continuous variables used independent sample *t* test.

**Table S5** Pearson's correlations of the Chinese KDQOL-SF scores with the Chinese version SCL-90 score in the study population (N=190)-detailed version

Scale/subscale		Average positive factors	Somatization	Obsessive compulsive	Interpersonal sensitivity	Depression	Anxiety	Hostility	Phobic anxiety	Paranoid ideation	Psychoticism
Overall health rating	Coefficient	-0.343**	-0.318**	-0.122	-0.230**	-0.294**	-0.225**	-0.194**	-0.248**	-0.209**	-0.323**
	P value	<0.001	<0.001	0.093	0.001	<0.001	0.002	0.007	0.001	0.004	<0.001
Symptom/problem	Coefficient	-0.337**	-0.354**	-0.071	-0.235**	-0.255**	-0.356**	-0.275**	-0.237**	-0.096	-0.124
	P value	<0.001	<0.001	0.332	0.001	<0.001	<0.001	<0.001	0.001	0.185	0.088
Effects of kidney disease on daily life	Coefficient	-0.198**	-0.181*	-0.02	-0.215**	-0.145*	-0.248**	-0.169*	-0.146*	-0.063	-0.085
	P value	0.006	0.012	0.783	0.003	0.045	0.001	0.02	0.045	0.392	0.242
Burden of kidney disease	Coefficient	-0.233**	-0.295**	-0.085	-0.237**	-0.139	-0.226**	-0.226**	-0.112	-0.119	-0.137
	P value	0.001	<0.001	0.242	0.001	0.056	0.002	0.002	0.125	0.101	0.059
Cognitive function	Coefficient	0.363**	0.242**	0.339**	0.233**	0.327**	0.314**	0.294**	0.136	0.226**	0.182*
	P value	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.061	0.002	0.012
Quality of social interaction	Coefficient	0.292**	0.181*	0.160*	0.232**	0.292**	0.282**	0.308**	0.075	0.220**	0.212**
	P value	<0.001	0.012	0.027	0.001	<0.001	<0.001	<0.001	0.306	0.002	0.003
Sleep	Coefficient	-0.017	0.013	-0.12	0.108	0.046	-0.015	-0.008	0.123	-0.006	0.042
	P value	0.812	0.856	0.1	0.14	0.53	0.839	0.916	0.09	0.938	0.565
Social support	Coefficient	0.237**	0.051	0.208**	0.250**	0.211**	0.294**	0.222**	0.002	0.176*	0.253**
	P value	0.001	0.488	0.004	0.001	0.004	<0.001	0.002	0.973	0.015	<0.001
Work status	Coefficient	-0.126	-0.172*	0.006	-0.199**	-0.08	-0.187**	-0.106	-0.037	-0.065	-0.078
	P value	0.083	0.017	0.93	0.006	0.271	0.01	0.145	0.613	0.377	0.287
Physical functioning	Coefficient	-0.339**	-0.360**	-0.188**	-0.234**	-0.265**	-0.175*	-0.149*	-0.300**	-0.177*	-0.159*
	P value	<0.001	<0.001	0.009	0.001	<0.001	0.016	0.04	<0.001	0.015	0.029
Role limitations-physical health	Coefficient	-0.114	-0.196**	0.039	-0.154*	-0.059	-0.185*	-0.168*	-0.013	-0.05	-0.122
	P value	0.117	0.007	0.595	0.033	0.423	0.01	0.02	0.862	0.494	0.093
Pain	Coefficient	0.362**	0.416**	0.265**	0.186*	0.242**	0.199**	0.195**	0.177*	0.237**	0.226**
	P value	<0.001	<0.001	<0.001	0.01	0.001	0.006	0.007	0.015	0.001	0.002
General health	Coefficient	-0.332**	-0.360**	-0.101	-0.265**	-0.244**	-0.245**	-0.265**	-0.197**	-0.197**	-0.251**
	P value	<0.001	<0.001	0.166	<0.001	0.001	0.001	<0.001	0.007	0.006	<0.001
Mental health	Coefficient	-0.537**	-0.217**	-0.401**	-0.367**	-0.590**	-0.412**	-0.328**	-0.354**	-0.420**	-0.405**
	P value	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Role limitations-emotional	Coefficient	-0.094	-0.222**	0.068	-0.091	-0.044	-0.192**	-0.139	-0.01	-0.042	-0.103
	P value	0.195	0.002	0.348	0.212	0.544	0.008	0.057	0.887	0.561	0.156
Social functioning	Coefficient	0.202**	0.063	0.175*	0.253**	0.178*	0.137	0.111	0.014	0.233**	0.206**
	P value	0.005	0.387	0.016	<0.001	0.014	0.059	0.126	0.85	0.001	0.004
Vitality	Coefficient	-0.478**	-0.146*	-0.458**	-0.283**	-0.533**	-0.242**	-0.308**	-0.309**	-0.444**	-0.353**
	P value	<0.001	0.044	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001

\*\*P<0.01, \*P<0.05.

**Table S6** Description of categorical variables of ESRD patients undergoing maintenance hemodialysis

Variable	Definition
Sex	Sex (Male/Female); reference: male.
Marital status	Marital status (Married/Widowed or bachelor); reference: widowed or bachelor.
Educational level	Educational level (Under high school/High school or above); reference: under high school.
Duration of hemodialysis	Duration of hemodialysis (<2 years/≥2 years); reference: <2 years
Coronary artery disease	Coronary artery disease (Yes/No); reference: no coronary artery disease.
Hypertension	Hypertension (Yes/No); reference: no hypertension.
Heart failure	Heart failure (Yes/No); reference: no heart failure.
Type 2 diabetes mellitus	Type 2 diabetes mellitus (Yes/No); reference: no type 2 diabetes mellitus
Stroke	History of stroke (Yes/No); reference: no stroke.

**Table S7** The scores of the Chinese version SCL-90 in the study population (N=190)

Factor	MHD patients (N=190)	
	Mean	SD
Somatization	2.01	0.68
Depression	1.90	0.61
Anxiety	1.48	0.45
Obsessive compulsive	1.58	0.53
Hostility	1.49	0.62
Phobic anxiety	1.56	0.75
Paranoid ideation	1.30	0.47
Interpersonal sensitivity	1.41	0.51
Psychoticism	1.44	0.30
Average positive factors	1.64	0.39

**Table S8** The Chinese KDQOL-SF scores in the study population (N=190)

Scale/subscale	Mean	SD
Overall health	37.89	19.37
Symptom/problem	76.51	15.85
Effects of kidney disease on daily life	60.87	18.56
Burden of kidney disease	48.26	23.92
Cognitive function	32.81	10.31
Quality of social interaction	29.16	11.48
Sleep	68.72	13.63
Social support	26.67	31.56
Work status	12.63	30.40
PCS		
Physical functioning	72.05	25.82
Role limitations-physical health	13.95	31.65
Pain	28.55	19.70
General health	38.24	23.58
MCS		
Mental health	66.36	12.32
Role limitations-emotional	14.91	32.62
Social functioning	44.74	13.19
Vitality	64.21	12.43

PCS, physical component summary; MCS, mental component summary.