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Supplement to: Shi Z, Xia K, Li J, Lu J, Lu H, Li Y, Zhang J, Chen Q, Liu J, Ding R. Analysis of characteristics and illness comprehension bias among Chinese patients with psycho-cardiovascular disease: a multi-centre cross-sectional survey. J Glob Health. 2025;15:04017.

Table S1. Basic information and medical history of patients with PCD*

Items	Overall (n = 834)
Gender	
<i>Male</i>	429 (51.40)
<i>Female</i>	405 (48.60)
Height in cm	
\bar{x} (SD)	167.00 (8.81)
MD (IQR)	167.00 (144.00–195.00)
<i>Missing</i>	4 (0.50)
Weight in kg	
\bar{x} (SD)	70.70 (12.80)
MD (IQR)	70.00 (45.00–119.00)
<i>Missing</i>	8 (1.00)
BMI in kg/m ²	
<24	307 (36.80)
24–28	397 (47.60)
≥28	121 (14.50)
<i>Missing</i>	9 (1.10)
Marital status	
<i>Married</i>	714 (85.60)
<i>Single</i>	115 (13.80)
<i>Missing</i>	5 (0.60)
Medical insurance	
<i>Yes</i>	688 (82.50)
<i>No</i>	116 (13.90)
<i>Missing</i>	30 (3.60)
Age in years	
30–40	47 (5.60)
41–60	425 (51.00)
≥61	359 (43.00)
<i>Missing</i>	3 (0.40)
Occupation	
<i>Labourer</i>	188 (22.50)
<i>National Business unit personnel</i>	264 (31.70)
<i>Unemployed</i>	379 (45.40)
<i>Missing</i>	3 (0.40)

Education level	
<i>Primary school or below</i>	81 (9.70)
<i>Secondary school</i>	417 (50.00)
<i>University</i>	314 (37.60)
<i>Master's degree or above</i>	15 (1.80)
<i>Missing</i>	7 (0.80)
Monthly household income in CNY	
<i><4000</i>	189 (22.70)
<i>4000–7999</i>	435 (52.20)
<i>8000–12 000</i>	160 (19.20)
<i>>12 000</i>	45 (5.40)
<i>Missing</i>	5 (0.60)
Region	
<i>North</i>	479 (57.40)
<i>South</i>	355 (42.60)
Three-question symptom†	
\bar{x} (SD)	2.16(0.84)
MD (IQR)	2.00 (0.00–3.00)
Cardiovascular-related medical history‡	
\bar{x} (SD)	3.04 (1.29)
MD (IQR)	3.00 (1.00–8.00)
Duration of illness in years	
<i><1</i>	74 (8.90)
<i>1–3</i>	432 (51.80)
<i>4–10</i>	243 (29.10)
<i>>10</i>	85 (10.20)
Psychological consultation	
<i>Yes</i>	126 (15.10)
<i>No</i>	708 (84.90)
Psychological Therapy	
<i>Yes</i>	43 (5.20)
<i>No</i>	791 (94.80)
Impact of psychological factors on CVD	
<i>Noticeable</i>	211 (25.30)
<i>Certain</i>	463 (55.50)
<i>Minor</i>	142 (17.00)
<i>No impact</i>	10 (1.20)
<i>Missing</i>	8 (1.00)
Current efficacy evaluation	
<i>Very satisfied</i>	150 (18.00)
<i>Satisfied</i>	338 (40.50)
<i>General</i>	312 (37.40)
<i>Not satisfied</i>	30 (3.60)
<i>Very dissatisfied</i>	4 (0.50)
Comprehension degree of PCD	

<i>Very familiar</i>	56 (6.70)
<i>Familiar with, but never in touch with</i>	385 (46.20)
<i>Not familiar with, but interested</i>	351 (42.10)
<i>Not familiar with and not interested</i>	39 (4.70)
<i>Missing</i>	3 (0.40)
GAD-7 scores	
\bar{x} (SD)	8.29 (2.15)
MD (IQR)	8.00 (5.00–16.00)
Degree of anxiety	
<i>Mild</i>	609 (73.00)
<i>Moderate</i>	218 (26.10)
<i>Severe</i>	7 (0.80)
PHQ-9 scores	
\bar{x} (SD)	9.81 (2.65)
MD (IQR)	10.00 (5.00–20.00)
Degree of depression	
<i>Mild</i>	401 (48.10)
<i>Moderate</i>	394 (47.20)
<i>Moderate to severe</i>	38 (4.60)
<i>Severe</i>	1 (0.10)

BMI – body mass index, CVD – cardiovascular disease, GAD-7 – seven-item General Anxiety Disorder scale, IQR – interquartile range, MD – median, PCD – psycho-cardiovascular disease, PHQ-9 – nine-item Patient Health Questionnaire, SD – standard deviation, \bar{x} – mean

*Presented as n(%) unless specified otherwise.

†The ‘three-question symptom’ is a method used by Chinese cardiologists to initially screen for possible CVD and mental health problems during or before diagnosis. The ‘three questions’ are as follows: 1) Is there poor sleep that has significantly affected the mental state during the day or requires medication? 2) Is there a feeling of restlessness and loss of interest in previously interesting things? 3) Is there any obvious physical discomfort, but multiple examinations have not found any reason to explain organic cardiovascular disease? If two out of three questions are answered with ‘yes,’ the likelihood of mental disorders is about 80% [20].

‡The cardiovascular-related medical history includes a history of drug treatment for CHD, heart valve replacement, stent/bypass surgery, heart failure, arrhythmia, peripheral artery

disease, cerebrovascular disease, hypertension, diabetes, dyslipidaemia, and other related conditions.

Table S2. Univariate and multivariate logistic regression analysis of influencing factors for anxiety in patients with PCD

Characteristics	Anxiety			
	Univariate analysis, OR (95% CI)	P-value	Multivariate analysis, OR (95% CI)*	P-value
BMI in kg/m ² †				
<24	Ref.			
24–28	1.09 (0.78–1.55)	0.609		
≥28	1.94 (1.24–3.03)	0.004		
Age in years				
30–40	Ref.			
41–60	1.76 (0.84–4.16)	0.160		
≥61	1.99 (0.95–4.73)	0.088		
Occupation†				
Labourer	Ref.			
National business unit personnel	0.58 (0.38–0.88)	0.010		
Unemployed	0.82 (0.56–1.20)	0.303		
Education level†				
Primary school or below	Ref.			
Secondary school	1.33 (0.79–2.29)	0.297		
University	0.66 (0.38–1.18)	0.154		
Master's degree or above	0.19 (0.01–1.03)	0.119		
Monthly household income in CNY				
<4000	Ref.		Ref.	
4000–7999	0.96 (0.67–1.41)	0.847	1.26 (0.83–1.94)	0.281
8000–12 000	0.69 (0.42–1.12)	0.139	0.90 (0.51–1.55)	0.698
>12 000	0.36 (0.13–0.85)	0.030	0.44 (0.15–1.13)	0.106
Duration of illness in years†				
<1	Ref.		Ref.	
1–3	0.37 (0.23–0.62)	<0.001	0.49 (0.27–0.88)	0.016
4–10	0.49 (0.29–0.84)	0.009	0.51 (0.28–0.94)	0.032
>10	0.62 (0.33–1.17)	0.141	0.62 (0.30–1.28)	0.198
Gender				
Male	Ref.			
Female	0.98 (0.73–1.34)	0.921		
Marital status				
Married	Ref.			
Single	1.32 (0.86–2.01)	0.196		
Medical insurance†				
No	Ref.			
Yes	3.45 (1.96–6.56)	<0.001		
Psychological consultation†				

<i>No</i>	Ref.		Ref.	
<i>Yes</i>	0.17 (0.08–0.33)	<0.001	0.40 (0.17–0.82)	0.018
Psychological therapy†				
<i>No</i>	Ref.			
<i>Yes</i>	0.42 (0.16–0.94)	0.053		
Region†				
<i>North</i>	Ref.		Ref.	
<i>South</i>	0.07 (0.04–0.11)	<0.001	0.08 (0.04–0.13)	<0.001
Three-question symptom†	0.82 (0.68–0.98)	0.030		
Cardiovascular-related medical history	0.83 (0.74–0.94)	0.004		
Comprehension degree of PCD				
<i>Low</i>	Ref.			
<i>High</i>	0.91 (0.67–1.24)	0.549		
Impact of psychological factors on CVD†				
<i>No impact</i>	Ref.			
<i>Minor</i>	0.90 (0.21–6.17)	0.894		
<i>Certain</i>	1.42 (0.35–9.47)	0.662		
<i>Noticeable</i>	2.12 (0.52–14.31)	0.348		

BMI – body mass index, CI – confidence interval, CVD – cardiovascular disease, OR – odds ratio, PCD – psycho-cardiovascular disease, ref – reference

*The final covariates were included through a stepwise regression approach.

†A statistically significant difference in the level of anxiety associated with this characteristic.

Table S3. Univariate and multivariate logistic regression analysis of influencing factors for depression in patients with PCD

Characteristics	Univariate analysis, OR (95% CI)	Depression	
		<i>P</i> -value	Multivariate analysis, OR (95% CI)* <i>P</i> -value
BMI in kg/m ²			
<24	Ref.		
24–28	1.09 (0.81–1.46)	0.566	
≥28	1.29 (0.86–1.95)	0.220	
Age in years†			
30–40	Ref.		
41–60	0.54 (0.29–0.98)	0.044	
≥61	0.38 (0.20–0.69)	0.002	
Occupation			
<i>Labourer</i>	Ref.		
<i>National business unit personnel</i>	0.97 (0.68–1.40)	0.879	

<i>Unemployed</i>	0.82 (0.58–1.16)	0.262		
Education level†				
<i>Primary school or below</i>	Ref.			
<i>Secondary school</i>	1.51 (0.95–2.43)	0.084		
<i>University</i>	1.11 (0.69–1.80)	0.673		
<i>Master's degree or above</i>	0.45 (0.12–1.45)	0.205		
Monthly household income in CNY†				
<i><4000</i>	Ref.			
<i>4000–7999</i>	1.10 (0.79–1.53)	0.587		
<i>8000–12 000</i>	0.46 (0.30–0.70)	<0.001		
<i>>12 000</i>	0.14 (0.06–0.32)	<0.001		
Duration of illness in years†				
<i><1</i>	Ref.		Ref.	
<i>1–3</i>	0.94 (0.58–1.52)	0.796	0.70 (0.41–1.17)	0.173
<i>4–10</i>	0.82 (0.49–1.36)	0.441	0.79 (0.46–1.37)	0.397
<i>>10</i>	0.49 (0.26–0.90)	0.022	0.29 (0.15–0.58)	<0.001
Gender				
<i>Male</i>	Ref.			
<i>Female</i>	0.88 (0.67–1.15)	0.348		
Marital status				
<i>Married</i>	Ref.			
<i>Single</i>	1.12 (0.76–1.65)	0.571		
Medical insurance†				
<i>No</i>	Ref.		Ref.	
<i>Yes</i>	0.45 (0.30–0.66)	<0.001	0.66 (0.41–1.06)	0.088
Psychological consultation†				
<i>No</i>	Ref.		Ref.	
<i>Yes</i>	2.23 (1.54–3.25)	<0.001	1.55 (0.99–2.45)	0.057
Psychological therapy				
<i>No</i>	Ref.			
<i>Yes</i>	0.61 (0.32–1.12)	0.118		
Region†				
<i>North</i>	Ref.		Ref.	
<i>South</i>	0.73 (0.56–0.96)	0.024	0.38 (0.27–0.52)	<0.001
Three-question symptom†	1.44 (1.23–1.71)	<0.001		
Cardiovascular-related medical history†	1.57 (1.41–1.75)	<0.001	1.62 (1.41–1.86)	<0.001
Comprehension degree of PCD†				
<i>Low</i>	Ref.			
<i>High</i>	1.72 (1.32–2.26)	<0.001		
Impact of psychological factors on CVD†				
<i>No impact</i>	Ref.			
<i>Minor</i>	0.82 (0.23–3.28)	0.760		

<i>Certain</i>	1.83 (0.54–7.15)	0.345
<i>Noticeable</i>	2.38 (0.69–9.42)	0.182

BMI – body mass index, CI – confidence interval, CVD – cardiovascular disease, OR – odds ratio, PCD – psycho-cardiovascular disease, ref – reference

*The final covariates were included through a stepwise regression approach.

† A statistically significant difference in the level of depression associated with this characteristic.