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Table SI. Origin of the participants

Provinces	n	%
Beijing	598	49.87%
Fujian	142	11.84%
Jilin	113	9.42%
Hebei	66	5.50%
Liaoning	32	2.67%
Shandong	32	2.67%
Jiangsu	26	2.17%
Tianjin	24	2.00%
Inner Mongolia	17	1.42%
Guangdong	16	1.33%
Hubei	14	1.17%
Hunan	11	0.92%
Shanghai	11	0.92%
Others	97	8.10%

Table SII. KAP score summary

	Median	25th percentile	75th percentile	Minimum	Maximum	<median, n (%)
Knowledge	12	6	18	0	30	497 (47.1)
Attitude	20	18	22	6	30	450 (42.6)
Practice	27	24	29	7	35	498 (47.2)

Table SIII. Distribution of the scores in the knowledge dimension

	Well known	Heard of	Unclear
K1. Urticaria is a localized edematous reaction due to dilation and increased permeability of small blood vessels in the skin and mucous membranes.	263 (24.9)	569 (53.9)	224 (21.2)
K2. The clinical presentation of urticaria typically involves wheals accompanied by itching.	444 (42.0)	495 (46.9)	117 (11.1)
K3. Usually, acute urticaria can have identifiable causes, while the etiology of chronic urticaria is often unclear.	278 (26.3)	486 (46.0)	292 (27.7)
K4. Chronic urticaria is defined as symptoms lasting >6 weeks.	195 (18.5)	375 (35.5)	486 (46.0)
K5. Helicobacter pylori can trigger urticaria.	52 (4.9)	179 (17.0)	825 (78.1)
K6. Mast cells play a crucial role in the pathogenesis of urticaria, being induced to activate through both immune and non-immune mechanisms.	110 (10.4)	274 (25.9)	672 (63.6)
K7. Urticarial lesions in a single location typically resolve within 24 hours.	236 (22.3)	380 (36.0)	440 (41.7)
K8. During urticaria episodes, the body produces histamine and inflammatory factors.	220 (20.8)	344 (32.6)	492 (46.6)
K9. Cetirizine and loratadine are commonly used medications for treating urticaria.	421 (39.9)	328 (31.1)	307 (29.1)
K10. Severe urticaria or urticaria with laryngeal edema in patients may lead to anaphylactic shock, posing a life-threatening risk.	336 (31.8)	426 (40.3)	294 (27.8)
K11. Traditional Chinese medicine and therapies have a certain efficacy in treating urticaria but require differentiation for treatment.	207 (19.6)	548 (51.9)	301 (28.5)

K12. For pregnant and breastfeeding women and children, if urticaria symptoms recur and significantly affect life and work, medication can be used for treatment.	230 (21.8)	421 (39.9)	405 (38.4)
K13. Providing psychological counseling is also a way to manage recurrent episodes of chronic urticaria.	147 (13.9)	378 (35.8)	531 (50.3)
K14. Urticaria is generally self-limiting, with the majority having a benign course. (Self-limiting: a disease that, after developing to a certain extent, can be controlled by the body and gradually recover)	222 (21.0)	497 (47.1)	337 (31.9)
K15. Chronic urticaria that persists for a long time is often associated with abnormal autoimmune status or the occurrence of other autoimmune diseases.	225 (21.3)	511 (48.4)	320 (30.3)

Table SIV. Distribution of the scores in the attitude dimension

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
A1. Urticaria is just an allergic reaction.	166 (15.7)	652 (61.7)	42 (4.0)	177 (16.8)	19 (1.8)
A2. Having urticaria must be due to a low immune system.	104 (9.8)	542 (51.3)	42 (4.0)	344 (32.6)	24 (2.3)
A3. Urticaria must cover the entire body to the end.	27 (2.6)	120 (11.4)	51 (4.8)	737 (69.8)	121 (11.5)
A4. As long as the itching can be stopped, there's no need to worry about other symptoms and their effects on the body.	25 (2.4)	146 (13.8)	36 (3.4)	693 (65.6)	156 (14.8)
A5. Urticaria is contagious.	20 (1.9)	175 (16.6)	41 (3.9)	619 (58.6)	201 (19.0)
A6. It has some self-limiting properties, so there's no need to take medication for treatment.	24 (2.3)	238 (22.5)	43 (4.1)	670 (63.4)	81 (7.7)
A7. If traditional Chinese medicine (TCM) and therapies are used to treat urticaria, I believe their advantages include:					
(1) Minimal side effects and high safety	248 (23.5)	663 (62.8)	60 (5.7)	76 (7.2)	9 (0.9)
(2) Ability to balance the overall constitution	256 (24.2)	700 (66.3)	45 (4.3)	48 (4.5)	7 (0.7)
(3) Less likelihood of recurrence after treatment.	136 (12.9)	454 (43.0)	76 (7.2)	368 (34.8)	22 (2.1)
A8. If TCM and therapies are used to treat urticaria, I believe their disadvantages include:					

(1) Uncertain efficacy	50 (4.7)	444 (42.0)	87 (8.2)	439 (41.6)	36 (3.4)
(2) Difficulty or inconvenience in preparation/administration	78 (7.4)	587 (55.6)	94 (8.9)	272 (25.8)	25 (2.4)
(3) Not cost-effective.	32 (3.0)	311 (29.5)	153 (14.5)	504 (47.7)	56 (5.3)

Table SV. Distribution of the scores in the practice dimension

	Always	Often	Sometimes	Rarely	Never
P1. Actively seek possible causes or triggering factors.	174 (16.5)	509 (48.2)	168 (15.9)	147 (13.9)	58 (5.5)
P2. Avoid relevant irritants or triggering factors.	209 (19.8)	572 (54.2)	150 (14.2)	92 (8.7)	33 (3.1)
P3. Seek medical attention promptly during an outbreak.	235 (22.3)	493 (46.7)	191 (18.1)	105 (9.9)	32 (3.0)
P4. Adhere to prescribed medication regimen rather than using medication on an as-needed basis.	255 (24.1)	540 (51.1)	138 (13.1)	92 (8.7)	31 (2.9)
P5. Avoid certain foods (e.g., spicy or irritating foods).	264 (25.0)	538 (50.9)	139 (13.2)	86 (8.1)	29 (2.7)
P6. Maintain a cheerful mood and alleviate emotional and mental stress.	240 (22.7)	611 (57.9)	138 (13.1)	55 (5.2)	12 (1.1)
P7. Use traditional Chinese medicine treatments.	152 (14.4)	415 (39.3)	278 (26.3)	174 (16.5)	37 (3.5)
P8. If I undergo TCM treatment, I would choose:	n (%)				
a. Oral Chinese herbal medicine	827 (78.3)				
b. Herbal baths or topical applications	714 (67.6)				
c. External therapies such as acupuncture, moxibustion, cupping, scraping, or bloodletting.	393 (37.2)				

Table SVI. Multiple linear regression analysis of the knowledge scores

		Univariable		Multivariable (P<0.10)	
	No.	β (95%CI)	P	β (95%CI)	P
Gender					
Male	152/346	ref.			
Female	407/710	2.368(1.356, 3.380)	<0.001	0.505(-0.379-1.388)	0.263
Age					
<30 years	99/189	ref.		Ref	
30-39 years	224/365	1.603(0.220, 2.985)	0.023	0.228(-1.080-1.537)	0.732
40-49 years	121/234	0.414(-1.095, 1.923)	0.590	0.217(-1.323-1.757)	0.782
50-59 years	62/132	-0.639(-2.388, 1.111)	0.474	-0.020(-1.740-1.700)	0.982
≥60 years	53/136	-2.124(-3.858, -.389)	0.016	0.093(-1.684-1.869)	0.918
Reproductive status					

Not yet given birth	178/315	ref.		ref	
Already given birth	381/741	-0.529(-1.577, 0.519)	<0.001	-0.140(-1.252-0.971)	0.804
Education level					
High school/technical school or below	48/158	ref.		ref.	
College/bachelor's	408/712	4.892(3.563, 6.220)	<0.001	2.035(0.753-3.317)	0.002
Master's degree or above	103/186	6.586(4.952, 8.220)	<0.001	3.268(1.667, 4.868)	<0.001
Place of residence					
Urban	500/917	ref.		Ref	
Suburban	32/70	-1.825(-3.742, 0.092)	0.062	-0.556(-2.187-1.076)	0.504
Rural	27/69	-3.966(-5.896, -2.037)	<0.001	-0.690(-2.400-1.019)	0.428
Occupation					
Medical personnel	274/324	ref.		ref.	
Other	285/732	-8.237(-9.150, -7.323)	<0.001	-7.388(-8.307, -6.469)	<0.001

History of urticaria

No	272/618	ref.		ref.	
Yes	287/438	3.984(3.040, 4.927)	<0.001	2.740(1.899, 3.581)	<0.001

Experience with traditional

Chinese medicine treatment

No	295/633	ref.		ref.	
Yes	264/423	3.527(2.571, 4.482)	<0.001	2.402(1.562, 3.242)	<0.001

Table SVII. Multiple linear regression analysis of the attitude scores

		Univariable		Multivariable (P<0.10)	
	No.	β (95%CI)	P	β (95%CI)	P
Knowledge		0.052(0.025-0.079)	<0.001	0.006(-0.026-0.037)	0.734
Gender					
Male	178/346	ref.		ref.	
Female	428/710	0.656(0.198, 1.114)	0.005	0.527(0.064, 0.990)	0.026
Age					
<30 years	121/189	ref.		Ref	
30-39 years	219/365	-0.238(-0.864, 0.388)	0.455	-0.271(-0.957-0.414)	0.437
40-49 years	129/234	-0.465(-1.148, 0.218)	0.182	-0.069(-0.876-0.738)	0.867
50-59 years	74/132	-0.509(-1.302, 0.283)	0.207	0.086(-0.815-0.987)	0.852
≥60 years	63/136	-1.264(-2.049, -0.478)	0.002	-0.441(-1.372-0.490)	0.353

Reproductive status

Not yet given birth	206/315	ref.		ref.	
Already given birth	400/741	-0.884(-1.353, -0.416)	<0.001	-0.658(-1.240, -0.076)	0.027

Education level

High school/technical school or below	77/158	ref.		ref.	
College/bachelor's	391/712	0.515(-0.089, 1.120)	0.095	-0.030(-0.705, 0.644)	0.930
Master's degree or above	138/186	2.237(1.493, 2.980)	<0.001	1.573(0.728, 2.418)	<0.001

Place of residence

Urban	533/917	ref.		Ref	
Suburban	35/70	-0.897(-1.764, -0.029)	0.043	-0.739(-1.594-0.116)	0.090
Rural	38/69	-0.593(-1.467, 0.280)	0.183	-0.157(-1.052-0.739)	0.732

Occupation

Medical personnel	209/324	ref.		ref.	
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Other	397/732	-0.996(-1.460, -0.532)	<0.001	-0.679(-1.215, -0.143)	0.013
History of urticaria					
No	343/618	ref.		ref	
Yes	263/438	0.590(0.153, 1.027)	0.008	0.332(-1.117-0.781)	0.147
Experience with traditional Chinese medicine treatment					
No	350/633	ref.		Ref	
Yes	256/423	0.636(0.198, 1.075)	0.005	0.435(-0.012-0.882)	0.056

Table SVIII. Multiple linear regression analysis of the practice scores

	No.	Univariable	Multivariable (P<0.10)		
		β (95%CI)	P	β (95%CI)	P
Knowledge		0.167(0.133-0.201)	<0.001	0.177(0.137-0.217)	<0.001
Attitude		-0.034(-0.113-0.045)	0.397		
Gender					
Male	169/346	ref.		ref	
Female	389/710	0.559(-0.038, 1.156)	0.067	0.156(-0.426-0.737)	0.599
Age					
<30 years	104/189	ref.			
30-39 years	185/365	-0.199(-1.016, 0.619)	0.634		
40-49 years	115/234	0.006(-0.886, 0.898)	0.989		
50-59 years	73/132	0.370(-0.665, 1.405)	0.483		

≥60 years	81/136	0.457(-0.569, 1.482)	0.383		
Reproductive status					
Not yet given birth	167/315	ref.			
Already given birth	391/741	-0.181(-0.795, 0.432)	0.562		
Education level					
High school/technical school or below	80/158	ref.		ref	
College/bachelor's	392/712	1.018(0.219, 1.818)	0.013	0.225(-0.447-1.119)	0.400
Master's degree or above	86/186	0.308(-0.675, 1.292)	0.539	-0.627(-1.593-0.339)	0.230
Place of residence					
Urban	480/917	ref.			
Suburban	42/70	0.198(-0.933, 1.328)	0.732		
Rural	36/69	-0.680(-1.818, 0.459)	0.242		
Occupation					

Medical personnel	204/324	ref.		ref.	
Other	354/732	-1.688(-2.288, -1.088)	<0.001	-0.244(-0.916, 0.429)	0.478
History of urticaria					
No	348/618	ref.		ref.	
Yes	210/438	-0.827(-1.394, -0.259)	0.004	-1.689(-2.254, -1.124)	<0.001
Experience with traditional Chinese medicine treatment					
No	318/633	ref.		ref.	
Yes	240/423	1.000(0.430, 1.569)	<0.001	0.746(0.185, 1.306)	0.009