

Who are the users of a traditional Chinese sanfu acupoint herbal patching therapy in China?

A cross-sectional survey

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Abstract

Sanfu acupoint herbal patching (SAHP) is a unique traditional Chinese medicine therapy, which has become popular for preventing acute attack of respiratory diseases such as asthma and chronic obstructive pulmonary disease, in many regions of mainland China. However, the knowledge about its users is lacking, especially the characteristics of the users and their experience and perspectives.

To investigate the demographics of users, conditions for its use and the previous experience of SAHP, as well as users' perspectives to provide baseline information for its practice.

A cross-sectional consecutive-sample survey was conducted at outpatient departments from 3 traditional Chinese medicine hospitals in northern China. Each participant completed a questionnaire, after informed consent. Data description and analyses were done using SPSS 20.0.

Among 949 SAHP users from 3 hospitals, female was predominant (n=592; 62.4%), aged from 2 to 96 years (median=52 years). 64.7% (380/587) of regular users have applied consecutively for 3 years or over, and the self-perceived satisfaction rates of respiratory diseases were from 45.9% to 77.7%. Positive attitude toward traditional Chinese medicine was the top reason for choosing SAHP. 42.4% of users held a motivation of being cured by SAHP and with great outcome expectancy on SAHP (70.8%).

SAHP users were mainly female adults or elderly population; more than half were regular users, who predominantly used SAHP for various chronic respiratory diseases during their stable stage. The majority of users expressed satisfaction to previous SAHP for their respiratory diseases. 42.4% of users held a motivation of being cured by SAHP and with great outcome expectancy on SAHP (70.8%). The findings from this survey deserve further clinical trials for their clinical effectiveness.

Abbreviations: SAHP = *sanfu* acupoint herbal patching, STROBE = the strengthening the reporting of observational studies in epidemiology, TCM = traditional Chinese medicine.

Keywords: acupoint herbal patching, complementary and alternative medicine, patient perspective, respiratory disease, *sanfu*, traditional Chinese medicine

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All authors contributed extensively to this study and commented on the manuscript at all stages.

Conceived and designed the survey: FZ and J-PL; designed the questionnaire, collected and managed the data: FZ, H-JW, J-PZ, G-YZ, YS, XT, R-YX, L-YJ, W-YL, NL, X-YY, R-HW, KZ, X-LL, C-CW, and J-PL; cleaned, analyzed, and interpreted the data: FZ and J-PL; wrote the paper: FZ; revising manuscript: J-PL.

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1. Introduction

Fu is a special period in lunar calendar when *yang* (a moral connotation of light)^[1] is the strongest in both human body and outside environment.^[2] There are 3 or 4 *fus* every year, each of them lasting 10 days, and together are called as *sanfu* (dog days). Usually, *sanfu* starts from middle of July to middle of August. According to traditional Chinese medicine (TCM), applying certain therapies during *sanfu* could help to decrease or even stop the recurrence of winter-susceptible diseases (winter diseases) by taking advantage of inner-body and outside strongest *yang* qi during *sanfu* period, which was called “*winter diseases treated in summer*”.^[3] And among several therapies, *sanfu* acupoint herbal patching (SAHP) is the most common one in China. SAHP is a TCM external therapy that combines the function of herb, the stimulation of acupuncture points and environment which only applied during *sanfu*.^[4] The origin can be traced back to *Zhang Shi Yi Tong* in 1695.^[5] According to TCM, when *yang* deficiency fails to control *yin*, some diseases always recur in winter, SAHP keep body healthy by means of absorbing *yang* from the environment, strengthening *yang* inside the body, and rebalancing *yin* and *yang*. Consequently, the body’s disease-resistant ability can be improved to defend against the diseases that occurred in the cold days.^[6] Modern biologists have discovered that there are the convergent points of the organs’ *qi* and blood along meridians.^[7] Placing an herbal patch directly on the acupuncture point therefore helps to maximize its therapeutic effects, with the aggregate effect being a combination of herbal action plus the acupoint response acting synergistically.^[8] The details of SAHP and its practice procedure could be found in Fig. 1.

Generally, SAHP could be applied to different diseases depending on selected herbs and acupuncture points, including rheumatism and rheumatoid disease, joint and muscle disease, gastrointestinal disease, and etc. According to our previous bibliometric analysis on the clinical trials of SAHP,^[9] respiratory disease was the top target condition. Currently, there are 2 kinds of SAHP in clinical use, 1 is pharmaceutical factory made with patent herbal patch, usually used in community-based medical centers; other one is hospital pharmacy made which is more flexible with different conditions, can be applied in different departments of hospitals.

SAHP earns a highly popularity in China;^[10] every *sanfu* period, thousands of thousands people are actively rushing into different medical institutions to seek SAHP application. Although there is no published data about the prevalence of SAHP use, the number of medical institutions providing SAHP service is increasing according to official data. In 2014, the State Administration of Traditional Chinese Medicine reported there had been 620 medical institutions providing SAHP in Beijing,^[11]

an increase of 13.14% compared with 2013.^[12] These institutions covered different levels of general hospitals, special hospitals, and community health centers. Some hospitals even use their staff canteen as SAHP application site and employ medical students as applier with a short training temporarily to relieve stress from such substantial amount of SAHP users in such short period. In addition, there have been clinical trials conducted in mainland China, Hong Kong, and Taiwan to test effectiveness and safety of SAHP.^[13,14] And several systematic reviews have reported that SAHP might be effective and safe on the prevention of chronic obstructive pulmonary disease, allergic rhinitis, and asthma.^[15–17]

Faced with such substantial amount of SAHP users, we just wondered: who are they? Why they choose SAHP? How about their previous use of SAHP? What are their perspectives, expectations, and experience toward SAHP? However, no complete epidemic data was available. To find out such answers could give important hints to practitioners and healthcare policy makers when making decisions about practicing SAHP, as evidence-based medicine requires that patients should be fully considered for medical decisions as well, with regard to their characteristics, subjective attitudes, treatment history, and future plan on treatment.^[18] Besides, expectation to the treatment might have an influence on patients’ engagement, adherence, and outcome measures.^[19–24] Furthermore, previous treatment experience may influence the healing process, as shown by classical conditioning studies.^[25] Therefore, in clinical practice, patients’ related information need to be validated and accessible by physicians. In addition, these data also might be the base for related authorities to make healthcare decision.

Based on the previous study,^[9] respiratory disease was the top target condition. Hence, we chose people with respiratory diseases as our investigation population. In order to inform clinical practice, this study was to explore the demographics, medical characteristics, history, motivations, and expectations of SAHP users from respiratory departments in 3 tertiary hospitals in northern China.

2. Methods

This survey was prepared according to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement.^[26]

2.1. Study design

This cross-sectional study surveyed a consecutive sample of SAHP users from the outpatient respiratory departments of 3 TCM hospitals in Beijing, Jinan/Shandong, and Ningcheng/Inner

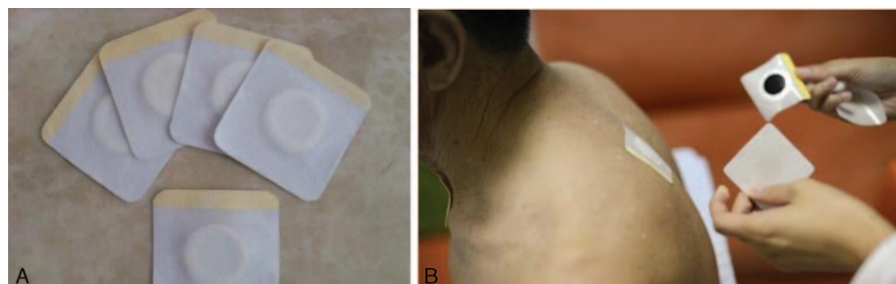


Figure 1. Photographs of SAHP and its practice procedure. A, SAHP (Sanfu acupoint herbal patching). B, Physician is applying SAHP therapy. Quoted from <http://hn.cnr.cn/>. SAHP = sanfu acupoint herbal patching.

Mongolia, respectively, China. The target sample size of each site was set to 300 participants. The study protocol was approved by the Institutional Review Board at Beijing University of Chinese Medicine (Approval No. 2015BZHYYL0408). Each participant got informed consent. All the questionnaire written by adult patients or parents of children, except for elders who are unable to read and write, our investigator would help to read the contents to them and fill the questionnaires for them.

2.2. Setting

We recruited outpatient participants from respiratory department at 3 TCM hospitals, which are located in northern China. Two of them (Beijing, Jinan/Shandong) are teaching hospitals (tertiary-level), while the other one (Ningcheng/Inner Mongolia) is nonteaching hospital (tertiary-level hospital). Each site has 3 to 5 master students as investigators to screen the eligibility (see below) of participants and to disseminate questionnaires. Because participants must come to hospitals to receive SAHP during the first 3 days of first *fu*, our investigation was conducted during this special period.

2.3. Participants

Eligibility criteria were: physician-confirmed diagnosis of respiratory disease or previously diagnosed respiratory disease, age 2 years or older, the ability to attend 3 SAHP treatment sessions within 40 days. Participants should be excluded who met the following exclusion criteria: skin allergy to the patching herbs and inability to understand the contents of questionnaire.

2.4. Variables and measurement

Eligible participants were seen at their hospital by a master student for baseline assessment. After being informed about SAHP therapy, participants then completed a questionnaire. For elders who were unable to read and write, investigators would help them to complete all the questions using the same predefined instructions; whereas for the younger who are too young to be able to understand, their supervisor would be the replier (Their supervisors should be living with the participants for at least 1 year). Investigators should check the completeness of each questionnaire in case of missing information.

Questionnaire was a self-defined baseline assessment battery, which was constituted of 5 parts: general information: demographic data (sex, race, birth data, contact information), socioeconomic data (employment status, occupation, educational status, insurance status), medical data (confirmed or self reported respiratory disease categories, course, and stage), reasons for choosing SAHP (2 questions; routes to know, reasons to choose SAHP), SAHP therapy history (3 questions; when was the first time, for which disease, self-perceived effectiveness), motivation (being cured, recurrence prevention, symptom alleviation, and respiratory disease prevention), expectation for current SAHP therapy (have a try, have a great outcome expectancy on SAHP), whether to refer SAHP to significant others.

2.5. Bias

We tried hard to reduce potential sources of bias. First, we collected data consecutively, to decrease the selection bias from nonrandomization sample. Furthermore, the questionnaire used was designed by 3 experts with traditional Chinese medicine and clinical epidemiological background as well to make certain of its

validation. In addition, our pilot survey of 20 people showed the retest reliability of our instrument was 0.92.

2.6. Statistical methods

An electronic database was established by using EpiData version 3.1 (The EpiData Association, Odense, Denmark). Data then are transferred into SPSS software (version 20; IBM Corporation, Armonk, NY) by performing double entry to ensure the data transfer was correct. Respondents were grouped into 6 age groups for analysis: preschool age=younger than 6 years, adolescents=7 to 14 years; young people=younger than 24 years, mature adults=25 to 44 years; middle-age adults=45 to 64 years, and older people=65 years and older. Frequency, percentage, median, range, means, and standard deviations, χ^2 test, and one-way ANOVA were applied in description of variables.

3. Results

3.1. User participation rates

Out of the 1200 questionnaires distributed, 1008 (84%) questionnaires were returned; 59 were incomplete because of refusing to participate halfway. The survey was completed during July 2015. The final analytic sample included 949 participants who were taking SAHP.

3.2. User demographic and medical data

Table 1 shows the frequency distribution of the users' socio-demographic variables and Table 2 describes the medical variables. Overall, the users were predominantly female (n=592; 62.4%); aged from 2 to 96 years (median=52 years, (Q1, Q3) (33,62)); of *Han* ethnic background (n=912; 96.1%); and SAHP insurance covered (n=464; 48.9%). This sample of 949 participants contained 15.1% juveniles (n=144), 2.3% young people (n=22), 21.7% mature adult (n=206), 38.9% middle-aged adult (n=369), and 21.9% older people (n=208). In addition, among participants who aged 18 years old or more, most had up to a high school education (n=535; 66.5%); employed (n=465; 57.8%), or retired (n=305; 37.9%). Except age and gender, other sociodemographic variables (such as ethnicity, education, employment, and insurance status) have shown significant statistical difference (Table 1).

3.3. Conditions for SAHP application

Table 2 shows the current primary conditions of SAHP application. SAHP was mostly applied in participants with chronic bronchitis (n=368; 38.8%), followed by asthma (n=202; 21.3%) and rhinitis (n=162; 17.1%); while the chronic cough was on the lowest rank (n=43; 4.5%). The primary disease duration was from 3 months to 55 years, with a median 5 years, (Q1,Q3) (3 months,10 years), and most of these diseases were in a stable status (n=761; 80.2%).

3.4. Status and satisfaction on previous SAHP application

Table 2 gives the history of SAHP application and Fig. 2 provides the distribution of sustained SAHP application duration by year. More than half of the users were regular users who have received SAHP for more than 1 year (n=587; 61.9%). Among them, 380 (64.7%) users applied consecutively

Table 1

Sociodemographic profile of the 949 SAHP users.

Variables	Beijing n=330 (%)	Jinan/Shandong n=305	Ningcheng/Inner Mongolia n=314	Total n=949	
Age, y				Median (Q ₁ ,Q ₃) 52 (33,62)	F=1.076; P=0.221
~6	5 (1.5)	31 (10.2)	43 (13.7)	79 (8.3)	
7-17	6 (1.8)	17 (5.6)	42 (13.4)	65 (6.8)	
18-24	7 (2.1)	11 (3.6)	4 (1.3)	22 (2.3)	
25-44	76 (23.0)	85 (27.9)	45 (14.3)	206 (21.7)	
45-64	137 (41.5)	100 (32.8)	132 (42.0)	369 (38.9)	
65~	99 (10.4)	61 (0.2)	48 (15.3)	208 (21.9)	
Gender					$\chi^2=0.516$; P=0.773
Male	128 (38.8)	110 (36.1)	119 (37.9)	357 (37.6)	
Female	202 (61.2)	195 (63.9)	195 (62.1)	592 (62.4)	
Ethnicity					$\chi^2=21.199$; P<0.001
Han	322 (97.6)	301 (98.7)	289 (92.0)	912 (96.1)	
None-han	8 (2.4)	4 (1.3)	25 (8.0)	37 (3.9)	
Level of education*	n=319	n=257	n=229	n=805	$\chi^2=62.792$; P<0.001
Master or above	22 (6.9)	18 (7.0)	1 (0.4)	41 (5.1)	
College	190 (3.1)	117 (45.5)	51 (22.3)	358 (44.5)	
High school	55 (17.2)	48 (18.7)	33 (14.4)	136 (16.9)	
Primary or below	52 (16.3)	74 (28.8)	144 (62.9)	270 (33.5)	
Employment status*					$\chi^2=16.706$; P=0.010
Employed	161 (50.5)	160 (62.3)	144 (62.9)	465 (57.8)	
Unemployed	5 (1.6)	3 (1.2)	4 (1.8)	12 (1.5)	
Retired	147 (46.1)	86 (33.5)	72 (31.4)	305 (37.9)	
Students	6 (1.9)	8 (3.1)	9 (3.9)	23 (2.9)	
Insurance status					$\chi^2=334.234$; P<0.001
SAHP covered	289 (87.6)	121 (39.7)	54 (17.2)	464 (48.9)	
SAHP not covered	41 (12.4)	184 (60.3)	260 (82.8)	485 (51.1)	

The denominators do not add up to 100% because of rounding off.

* Age ≥ 18 years old participants were reported for this variable.

for 2 to 18 years (median=2), and almost half applied consecutively 3 years or over (n=173; 45.5%). In addition, 207 (35.5%) users reported unconsecutive use of SAHP. The mean of the total out-of-pocket expenditure on SAHP ranged from 150 to 300 RMB (15.69–31.38 GBP) per *sanfu*.

After combined “very satisfied” with “satisfied,” the general outcome satisfactory rate of previous use of SAHP was 72.7% (314/432) (Fig. 3). For the association between characteristics of users and their satisfaction on previous SAHP use, none of

statistically significant results was found for the different subgroups of SAHP users in terms of their sociodemographic characters (such as age, gender, education level, and insurance status) (Table 3). However, the general satisfactory rates of previous SAHP use in different conditions varied from 45.9% (rhinitis; 39/85) to 82.4% (pharyngitis; 70/85). Among them, general satisfactory rates for the outcome of other respiratory diseases were different: common cold prevention was on the second rank with 77.4% (48/62), chronic cough was on the third

Table 2

Medical characteristics and history of SAHP application among the 949 users.

Variables	n	%	Variables	n	%
Current respiratory disease*			New user	362	38.1
Asthma	202	21.3	Regular user	587	61.9
Chronic bronchitis	368	38.8	Sustained use	380	64.7
COPD	52	5.5	Nonsustained use	207	35.3
Pneumonia	37	3.9	Previous primary target disease* (regular user)		
Pharyngitis	146	15.4	Asthma	108	18.4
Rhinitis	162	17.1	Chronic bronchitis	221	37.7
Chronic cough	42	4.4	COPD	31	5.3
Common cold prevention	100	10.5	Pneumonia	22	3.8
Current primary disease duration			Pharyngitis	85	14.5
Median=5 y, (Q1,Q3) (3 mo, 10 y)			Rhinitis	85	14.5
The primary disease status			Chronic cough	20	3.4
Stable	761	80.2	Common cold prevention	62	10.6
Acute attack	88	9.3	Other condition	23	3.9
Nondisease	100	10.5	(nonrespiratory disease)		

COPD=chronic obstructive pulmonary disease, Q1=1st quartile, Q3=3rd quartile.

* The denominators do not add up to 100% because of rounding off; the total is more than 587 because some users had more than 1 target disease.

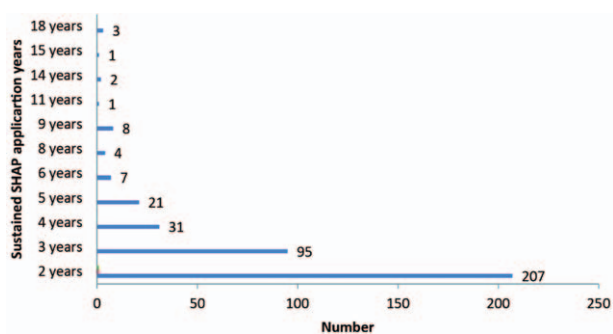


Figure 2. Sustained SAHP application years.

(65%; 13/20), the fourth was chronic bronchitis (59.7%; 132/221), pneumonia was the fifth (59.1%; 13/22), others were near to 50%.

3.5. Information source to know SAHP and reasons to choose SAHP

Figure 4 summarizes the users' sources of information about SAHP. Health professional introduction (412; 43.4%) and word of mouth by acquaintance (including family members, friends

(397; 41.8%) were the main 2 sources, while the television (139; 14.7%) and newspaper (99; 10.4%) was relatively low.

Figure 4 shows the reasons for choosing SAHP. The users' main reasons of choosing SAHP were trust TCM (n=372; 39.2%), and physician introduction (n=331; 34.9%), and safe (no adverse reaction) (n=287; 30.2%), whereas only 11.9% of users (n=113) just followed the example of other SAHP users. When the question turned to be a multiple one, the answers were relatively dispersed. The primary reason for choosing SAHP of respondents were still trust on TCM (n=321; 33.8%), followed by physician introduction (n=199; 21%); However, curious and want to experience of SAHP was up to the fifth reason (n=74; 7.8%); whereas no pain (n=17; 1.8%), safe (no adverse reaction) (n=66; 7%), and convenient (n=73; 7.7%) were down to the last one, last third, and fourth, respectively.

3.6. Motivations and expectancy on SAHP

Figure 3 demonstrates the motivation on SAHP among the 949 users. Of the 900 users' responses on the motivation of the first time use of SAHP, 402 users were with hope of being cured (42.4%), second one was to prevent attack of respiratory disease (n=276; 29.1%), alleviating symptom was ranked in third (n=209; 22%), only a few wished to prevent respiratory disease (n=62; 6.5%).

More than half respondents hold "have a try" (n=491; 51.7%), while the rest thought "have a great outcome expectancy

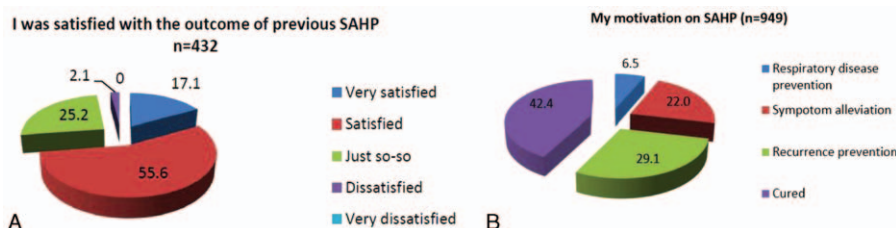


Figure 3. Satisfaction and motivation on SAHP among users. A, The general outcome satisfactory rate on previous SAHP. B, Users' motivations on SAHP.

Table 3

Sociodemographic characters and satisfaction on previous SAHP use from univariate analysis (n=432).

Variable	Satisfied* (n=314)	Unsatisfied† (n=118)	
Age, y	Median (Q ₁ ,Q ₃) 51.5 (32,65)	Median (Q ₁ ,Q ₃) 53.5 (39.5,68)	$\chi^2=7.571; P=0.182$
~6	28 (8.9)	8 (6.8)	
7-17	29 (9.2)	3 (2.5)	
18-24	8 (2.6)	2 (1.7)	
25-44	56 (17.8)	20 (17.0)	
45-64	114 (36.3)	52 (44.1)	
65~	112 (35.7)	33 (28.0)	
Gender			$\chi^2=0.003; P=0.956$
Male	118 (37.6)	44 (37.3)	
Female	196 (62.4)	74 (62.7)	
Level of education			$\chi^2=4.744; P=0.192$
Master or above	11 (3.5)	8 (6.8)	
College	117 (37.3)	47 (39.8)	
High school	49 (15.6)	23 (19.5)	
Primary or below	129 (41.1)	38 (32.2)	
Insurance status			$\chi^2=0.139; P=0.710$
SAHP covered	164 (52.2)	64 (54.2)	
SAHP not covered	150 (47.8)	54 (45.8)	

The denominators do not add up to 100% because of rounding off.

* Satisfied includes 2 choices (very satisfied and satisfied).

† Unsatisfied includes 3 choices (just so-so, unsatisfied, and very unsatisfied).

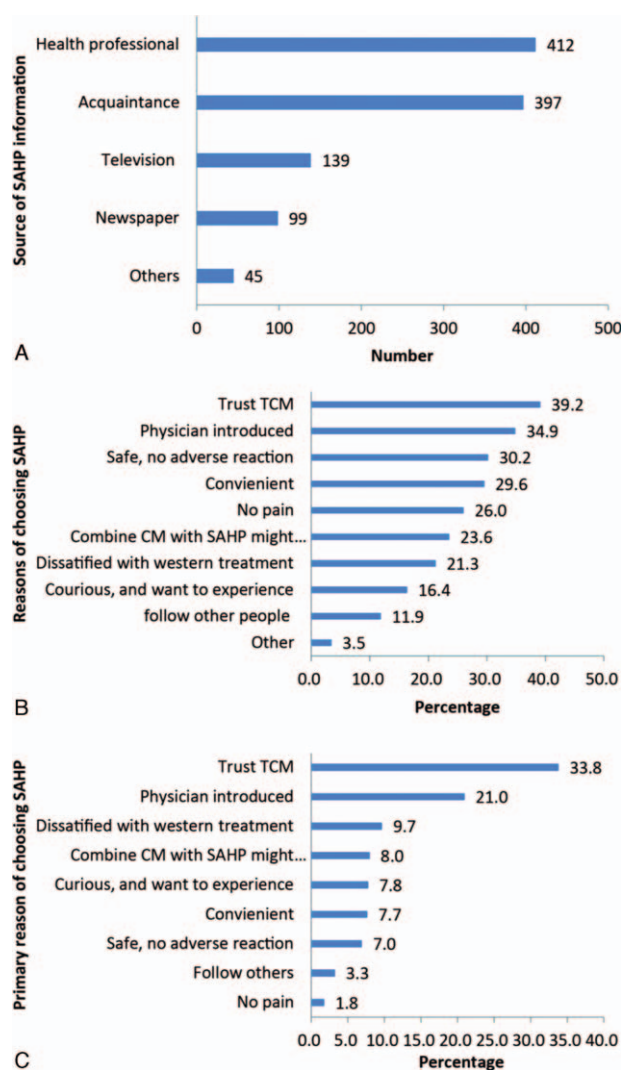


Figure 4. Information sources and reasons to choose SAHP among the 949 users. A, Users' information sources of SAHP. B, Users' reason to choose SAHP. C, Users' primary reason to choose SAHP. CM=conventional medicine, SAHP=*sanfu* acupoint herbal patching, TCM=traditional Chinese medicine.

on SAHP" (n=458; 48.3%). In addition, a vast majority of respondents reported that they would recommend SAHP to others (n=858; 90.5%), and even without reimbursement, still majority of users would take SAHP (n=762; 80.3%).

4. Discussion

4.1. Primary findings

Users were mainly represented by middle or older population group (60.8%); these older adults predominantly used SAHP for various chronic diseases on their stable stage. It is worth noting that the juveniles (15.1%) and young people (2.3%) appeared in our sample. Majority of this young people using SAHP was for common cold prevention.

More than half were regular users; while only half of regular users applied consecutively 3 years or longer. Although the satisfaction on previous SAHP use was not related to user's age, gender, higher education, and insurance status, different conditions showed different general satisfactory rates. Regular

users' self-perceived general satisfactory rate of SAHP previous use on common cold prevention was relatively high (77.4%); seconded was prevention or treatment of other diseases, around 50%, in which, pharyngitis was the highest one (77.7%). It gives a hint that SAHP use might be beneficial upper respiratory diseases. However, we also need to be aware that these conditions are self-healing.

Users' source of information about SAHP was mainly through physician introduction; whereas even there is little encouragement from health personnel, word by mouth by friends and acquaintance were not ignored. Reasons for choosing SAHP were various; however, trust TCM was the main reason. Almost half of users hold a motivation of being cured by SAHP and with great outcome expectancy on SAHP. Even if SAHP is turned to out-pocket medical service, 80.3% users are still willing to choose SAHP. And 90.5% users stated that they would like to recommend SAHP to their significant others.

4.2. Strengths and weaknesses of the study

Based on our knowledge, it is the first multiple-site survey to describe the characteristics and subjective points on SAHP which could provide an up-to-date picture on the current state of provision of SAHP in northern China. Although 3 tertiary-level TCM hospitals investigated located in northern China, their source of users might be different due to their geographic locations (1 in national capital, 1 in provincial capital while the third one at county-level). And the sample from 3 sites owns different ethnicity, education level, employment status, and insurance status distribution. Based on such diversity, our sample might be more representative. On the other hand, we did not select the investigation sites by random method, which might result in limited generalizability of this finding. But we tried to take samples consecutively to minimize potential bias. Besides, our results may not be representative for users from all levels TCM hospitals, especially the lower-level TCM hospitals and western medicine dominated hospitals. Finally, our sample is selectively focusing on SAHP users with respiratory diseases so the result may be affected by the specific population. Ideally, it would be interesting to include nonrespiratory disease users in our study. However, it was not done as this was not our primary objective of the survey.

4.3. Implications for physicians, policymakers, and future research

Compared with the group of juveniles, middle-age, and old adults SAHP users (75.9%), young adults SAHP users group only occupied 2.3%, which is the smallest one in our survey. The possible reason for this is that the susceptible population to respiratory disease is mainly juveniles and elder adults. However, whether there exist some other reasons or not is still unclear; for example, they do not know SAHP or are not familiar with SAHP? SAHP were widely used by female participants (62.4%) compared with their male counterparts (37.6%). In some Western countries, women are increasing utilizing CAM and some surveys also supported our finding.^[27,28] This is probably due to: females might be more concerned about their diseases, even for the nonfatal disease at stable stage. However, further investigations are needed to confirm these conclusions.

Although nearly half of our sample was covered by insurance, majority of users expressed that they could afford the SAHP therapy even at their own expenses. This is remarkably conflicting with the popular saying "no insurance, no SAHP" by some physicians. When developing an evidence-based guideline,

whether patients accept an intervention or not sometimes only depends on the patients' affordability.^[18] Hence, this finding might help to stimulate future clinical trials for their preventive effect on respiratory diseases so as to inform current practice.

It is worthy noting that some of our sample reported their motivations prevent respiratory disease or its recurrence (35.6%). Currently, we could find many clinical studies of SAHP treat on people with different respiratory diseases; however, there remains insufficient evidence of its benefit for preventing respiratory diseases, and if beneficial, whether it is cost-effective compared with other preventing medical intervention. This "evidence gap" provides a major challenge to the research community to develop the evidence base further.

We have provided an important insight into the history of SAHP use. There are 2 research proposals that emerge from our study. First, generally, TCM doctors suggested that SAHP is applied at least for 3 consecutive years,^[29] so we suggest that a deep reason analysis is needed: to understand more about the treatment strategy. Second, we noted that the longest application duration was 18 years in our sample. For users with such higher compliance, we propose an in-depth interview to explore SAHP users' experience and self-perceived outcome on SAHP, which might provide hints to future research and practice.

Trusting TCM was the top reason why choose SAHP in our survey should be noted. In this survey, the age of users is relatively old, with a mean of 52 years old. Within this age group, taking TCM is very common during their childhood. In other words, special affection of TCM rooted in their mind. Lee et al.^[30] reported complementary and alternative medicine was more likely to be used if patients held strong beliefs about it or grow in a complementary and alternative medicine culture background. Whether there are relationships between TCM beliefs and higher satisfactory rate or higher expectancy in our study, is not answered. This may give future researchers a hint: before we introduce SAHP to international clinical context, a trial considering TCM culture as group factor is necessary.

In this survey, we found a desire from the users to recommend SAHP to others, fairly high frequency of word by mouth information source and decent general outcome satisfactory rate on previous SAHP. These may reflect that the subjective feelings of users on SAHP are accepted.

Due to the particularity of investigate time (only conducted in the first day of first session), it is impossible to assess the adverse events of SAHP in our survey. However, according to the literature review,^[14] this therapy appears safe. There were almost no adverse events reported and only several local reactions were present, such as skin itch, redness, and small blisters, and these reactions could gradually vanish after removing patches.

5. Conclusions

By means of analyzing comprehensively 949 SAHP users from 3 TCM hospitals in northern China, we found the demographics of users, conditions for its use and the previous experience of SAHP, as well as users' perspectives. These findings may provide baseline information for SAHP practice and reflect that the subjective feelings of users on SAHP are accepted. Further, clinical trials are urgently needed to validate SAHP's rationale use. We hope that this survey can stimulate much research on this unique TCM therapy in China.

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