

Influence of Chinese cultural health beliefs among Malaysian Chinese in a suburban population: a survey

Chew K S, Tan T W, Ooi Y T

ABSTRACT

Introduction: In a multiethnic nation, it is not uncommon for doctors to encounter patients of different cultural backgrounds. Often, patients' cultural beliefs influence their perception of health and illnesses, and their treatment option. Many Chinese cultural beliefs are influenced by the Taoist concept of yin-yang balance.

Methods: We interviewed 50 Malaysian Chinese from the general public of a suburban population in order to unravel the impact of Chinese cultural health beliefs on their decision-making, and this was compared with the opinions of 50 Chinese medical students from second to final year. Convenience sampling was then applied.

Results: From the survey, 78 percent of the general public believed that 'too much heat' or 'too much coldness' in the body could cause diseases. Compared to the medical students, a significantly higher number of the respondents held such beliefs, including the beliefs that abdominal colic is due to excessive 'wind' in the abdomen, consuming certain food can dispel wind from the body, and the importance of observing taboos during the confinement period after delivery. The majority of respondents from both groups believed that it is acceptable to combine both traditional Chinese medicine and modern medicine.

Conclusion: There is a discrepancy in the extent to which these beliefs influence the perception of health and illnesses among the general public and among medical students. Healthcare providers need to be aware of such beliefs and practices regarding traditional Chinese medicine among their Chinese patients.

Keywords: cultural background, Malaysia, modern medicine, traditional Chinese medicine

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Table 1. Demographic data of the respondents.

Demographic	No. (%)	
	General public (n = 50)	Medical students (n = 50)
Mean age \pm SD (yrs)	43.7 \pm 17.7	22.0 \pm 1.1
Gender		
Male	22 (44)	22 (44)
Female	28 (56)	28 (56)
Religion		
Buddhism	25 (50)	36 (72)
Taoism	25 (50)	0
Christianity	0	14 (28)
Occupation		
Medical students		50 (100)
Self-employed	5 (10)	
Employee	9 (18)	
Retiree	2 (4)	
School students	10 (20)	
Housewife	22 (44)	
Others	2 (4)	

SD: standard deviation

INTRODUCTION

Malaysia is a multiethnic, multicultural and multilingual society with a population of about 28.3 million people (as of July 2009).⁽¹⁾ The majority of its population in 2004 consisted of Malays (50.4%), Chinese (23.7%), indigenous groups (11%), Indians (7.1%) and other races (7.8%).⁽²⁾ Each ethnic group in Malaysia is rich in its own culture and traditions.

Culture, defined as an integrated shared pattern of learned convictions and behaviours,⁽³⁾ has permeated and influenced health-seeking decisions among the various Malaysian ethnic groups. With such diverse ethnicities, Malaysians' perception of health and illnesses, healthcare expectations as well as treatment choices are often heavily coloured by their cultural beliefs and practices.⁽³⁻⁶⁾ It is not uncommon for physicians to encounter patients from different cultural backgrounds, be it in the emergency department, outpatient clinics or wards.⁽³⁾ Within their local practice context, doctors should possess knowledge of some of these cultural beliefs that may influence their patients' decisions. Furthermore, many traditional medications have side effects that may be compounded by potential

School of Medical Sciences,
Universiti Sains Malaysia,
Kubang Kerian 16150,
Malaysia

Chew KS, MD,
MMed
Senior Lecturer

Tan TW
Medical Student

Ooi YT
Medical Student

Correspondence to:
Dr Chew Keng-Sheng
Tel: (60) 19986 9520
Fax: (60) 9765 9630
Email: cksheng74@yahoo.com

Table II. Comparison of respondents who agreed with statements regarding cultural beliefs.

Statements that respondents agreed on	No. (%)		
	General public	Medical students	p-value
1. Certain diseases are caused by 'too much heat' or 'too much coldness' in the body.	39 (78.0)	41 (82.0)	0.617
2. Fever is due to excessive heat inside the body.	44 (88.0)	27 (54.0)	< 0.001
3. One should consume less amount of rice or totally abstain from taking rice when having fever.	31 (62.0)	14 (28.0)	0.001
4. Joint pain/rheumatism is due to excessive 'wind' accumulated in that joint.	21 (42.0)	8 (16.0)	0.004
5. Abdominal colic is due to excessive 'wind' accumulated in the abdomen.	33 (66.0)	22 (44.0)	0.027
6. Consuming certain fruits like jackfruits or watermelon can precipitate excessive 'wind' to enter the body.	22 (44.0)	17 (34.0)	0.305
7. Consuming certain vegetables like bean sprout can precipitate excessive 'wind' to enter the body.	21 (42.0)	18 (36.0)	0.539
8. Consuming certain food like garlic and ginger can help dispel 'wind' from the body.	45 (90.0)	32 (64.0)	0.002
9. Consuming certain 'toxic' food like crabs and prawns can cause skin diseases with rashes.	45 (90.0)	42 (84.0)	0.372
10. Exposure to rain water can cause respiratory tract infection.	23 (46.0)	14 (28.0)	0.062
11. In chickenpox, consuming beans can leave behind spotty scars.	35 (70.0)	15 (30.0)	< 0.001
12. In chickenpox, consuming soy sauce can leave behind black marks.	33 (66.0)	27 (54.0)	0.221
13. Consuming certain 'heaty' food or herbs/spices can result in miscarriages.	12 (24.0)	19 (38.0)	0.130
14. After childbirth, a woman must observe a period of confinement and taboos.	48 (96.0)	39 (78.0)	0.007
15. After childbirth, a woman must not wash her hair during the period of confinement.	29 (58.0)	20 (40.0)	0.072
16. After childbirth, a woman must take 'hot' food like ginger and red wine during the period of confinement.	48 (96.0)	33 (66.0)	< 0.001
17. After childbirth, a woman must not be exposed to excessive wind or water, as it can cause 'wind-related' illnesses such as chronic joint pain.	40 (80.0)	24 (48.0)	0.001

Chi-square test is employed for the categorical data analysis.

drug interactions when the patient uses both traditional and modern medicine together.⁽⁷⁾ Although cultural influence on health and the practice of traditional medicine are not one and the same entity, they are intrinsically linked.

Traditional Chinese medicine (TCM) views the body, soul and spirit as an integrated whole with well-balanced yin-yang forces, and considers man and his environment to be linked as one entity.^(3,7) Yin and yang is a dialectical Taoist concept that is deeply embedded in the Chinese culture. According to this philosophy, the yin and yang are complementary opposite forces that are interconnected and interdependent.⁽³⁾ Everything has both the yin and yang aspects, and together with the 'qi' energy, these complementary forces control the multifaceted relationship between humans and their surroundings.⁽³⁾ Within the health context, an imbalance in these two forces or in the 'qi' results in illnesses.⁽⁷⁾ Many patients who use TCM, therefore, believe that modern medicine is not holistic enough, as it disregards the interaction between the individual and his environment.⁽⁷⁾

Many commonly held Chinese cultural health beliefs among Malaysian Chinese have been elucidated in length in a previous article by Ariff and Beng in 2006,⁽³⁾ but the extent to which these beliefs affect the attitude and behaviour of Chinese patients has not been well studied. Therefore, we formulated a set of questions based on some of the beliefs mentioned in the previous

study⁽³⁾ so as to evaluate the extent to which common cultural Chinese beliefs influence the perception of health and illnesses among the Chinese residing in Senai, a transit town situated 25 km northwest of Johor Bahru, Malaysia.⁽⁸⁾

METHODS

This was a cross-sectional voluntary interview study conducted over a period of two months starting from June 2009. Convenience sampling was applied. The participants were briefed on the purpose of the study, i.e. to determine the extent to which cultural beliefs influence their perception, and not to prove or disprove the accuracy of these beliefs from a scientific point of view. We randomly interviewed adult residents aged \geq 18 years in housing areas around Senai town using a bilingual (English and Chinese) questionnaire (Appendix 1). Categorical data analysis was conducted using the Statistical Package for the Social Sciences version 12.0.1 (SPSS Inc, Chicago, IL, USA). We repeated the questionnaire on 50 medical students of Chinese ethnicity from year two to year five, and compared the responses of the two groups.

RESULTS

Out of the 50 respondents from the general public, 22 (44%) were male. This was matched with 22 males (44%) among the 50 Chinese medical students (Table I). The results of the influence of Chinese cultural beliefs,

Table III. Attitude and practice regarding traditional Chinese medicine among the respondents.

	No. (%)		p-value
	General public	Medical students	
1. Ever sought traditional Chinese medicine.	47 (94.0)	33 (66.0)	< 0.001
2. Would rather choose traditional Chinese medicine alone as the initial choice of treatment.	25 (50.0)	3 (6.0)	< 0.001
3. Believe that modern medicine, comprising 'manufactured' drugs can weaken the body's immune system.	44 (88.0)	35 (70.0)	0.027
4. Believe that it is acceptable to combine both traditional Chinese medicine and modern medicine for consumption.	45 (90.0)	46 (92.0)	0.727
5. Would be uncomfortable to reveal to their doctor that he/she has taken traditional Chinese medicine prior to consultation.	48 (96.0)	49 (98.0)	0.558

Chi-square test is employed for categorical data analysis.

Table IV. Subgroup analysis of medical students according to religion.

Statements that medical students agreed on	No. (%)		p-value
	Buddhist (n = 36)	Christian (n = 14)	
1. Certain diseases are caused by 'too much heat' or 'too much coldness' in the body.	33 (91.7)	8 (57.1)	0.040
2. Consuming certain food like garlic and ginger can help dispel 'wind' from the body.	25 (69.4)	11 (30.6)	0.198
3. Consuming certain 'toxic' food like crabs and prawns can cause skin diseases with rash.	30 (83.3)	12 (85.7)	0.837
4. After childbirth, a woman must observe a period of confinement and taboos.	28 (77.8)	11 (78.6)	0.951

Chi-square test is employed for categorical data analysis.

the attitude toward TCM and the practice of TCM among our respondents are shown in Tables II and III, respectively. The mean age of the general public was 43.7 ± 17.7 years, while that of the more homogeneous group of medical students was 22.0 ± 1.1 years. Half of the respondents from the general public were Taoists and half were Buddhists. None indicated Christianity as a religion. On the other hand, 14 (28%) medical students were Christians and 36 (72%) were Buddhists, but none was a Taoist. Nevertheless, we believed that Taoism and Buddhism may often be mixed and practiced together among many Malaysian Chinese, and as such, we anticipated few differences in the influences of Chinese cultural beliefs between these two groups. However, contrary to expectation, our subgroup analysis in Table IV shows few differences even between Christian and Buddhist medical students with regard to the impact of some of the selected cultural beliefs.

DISCUSSION

It is believed that disease results from an obstruction to any of the flow of yin-yang channels.^(3,7) For example, a ear infection is thought to be due to 'excessive heat', and therefore, the restoration of balance can be achieved by avoiding 'hot' food such as scrambled eggs and by increasing the intake of 'cold' food such as winter melon.⁽⁶⁾

The majority (78%) of respondents from the general

public interviewed agreed that 'too much heat' or 'too much coldness' in the body could cause certain diseases. This is generally in agreement with the yin-yang concept. Disruption of the yin-yang balance in the body is believed to result in diseases that manifest in the weaker side of the two forces, e.g. when the yang becomes stronger, symptoms such as heaty rash and fever arise, but when the yin becomes stronger, symptoms of cough and cold arise.⁽⁹⁾ The majority (80%) of the medical students interviewed also subscribed to this concept.

However, when asked the next question "Do you believe that fever is due to excessive heat inside the body?", a significant difference in the number of respondents who agreed was observed between respondents from the general public and the medical students (88% vs. 54%, $p < 0.001$). This could be due to the medical students' superficial understanding of the influence of this particular Chinese cultural belief on health, or the fact that they regarded this belief as hearsay when judged in the light of modern medicine.

Nevertheless, as the mean age of the general public was higher than that of the medical students (43.7 ± 17.7 vs. 22.0 ± 1.1 years), the age factor may have influenced the perceptions of the respondents. Interestingly, two recent studies conducted in Taiwan found that one of the significantly associated predisposing factors influencing TCM use is age.^(10,11) In both studies, TCM use in Taiwan peaked in individuals aged 30–40 years.^(11,12)

Other cultural beliefs that a significantly higher number of respondents from the general public agreed on included the following: joint pain/rheumatism is due to excessive 'wind' accumulated in that joint; abdominal colic is due to excessive 'wind' in the abdomen; consuming certain food can dispel 'wind' from the body; and observing certain taboos during the confinement period after delivery of a baby is important. A comparable number of medical students and respondents from the general public believed that consuming certain 'toxic' food like crabs and prawns can cause skin diseases and rash. This is not surprising given the fact that medical students learn that food allergy manifests as rashes, and it is also a well-known fact that consuming seafood may cause allergy. Hence, there is a discrepancy in the extent to which cultural beliefs influence the perception of health and illnesses among our respondents.

Furthermore, the majority of the respondents and medical students agreed that it is acceptable to combine TCM and modern medicine (90% and 92%, respectively), and admitted that they would be uncomfortable to reveal to their doctors if they have used TCM prior to their medical consultation (96% and 98%, respectively). The significance of this is compounded by the fact that most TCM decoctions are prepared and boiled by the family members at home; thus, decoctions prepared in an unscientific way (e.g. without a standardised amount of water used, or with differing temperatures and duration of heating) can result in variable dosages, resulting in adverse side effects if the dose taken by the patient is too high. In addition, there are many possible interactions when both modern medicine and TCM are taken together.⁽⁷⁾

In terms of pregnancy and the postpartum confinement period, an overwhelming majority of respondents from the general public (96%) interviewed believed unequivocally that all mothers should observe a period of confinement. This period of confinement is also known as 'zuo yuezi' in Chinese, or translated as 'the sitting month', as the women literally sit or stay in bed for many hours and are not allowed to leave the home.⁽¹²⁾ Many agreed that certain taboos must be observed, including the advice not to wash hair (56%), increasing the consumption of certain 'hot' food like ginger and red wine (96%), and avoiding exposure to wind or water (80%). These taboos are not only common in Malaysia, but are also commonly observed in many Chinese communities worldwide.⁽¹²⁾

Besides the confounding influence of age, as elucidated earlier, education level is another limitation of this study, as it may also influence the perception of these two groups. While the medical students would homogeneously have had post secondary education, the education level of the respondents from the general public was unknown and could well have been very diverse. This is especially so, as 22 of the 28 female respondents from the general public were housewives. Their education level may have coloured their preferences for healthcare treatment modalities.

Our study has shown that there is a discrepancy in the extent of influence that cultural health beliefs have on medical students and members of the general public in Senai. Healthcare providers should be reminded that when patients fall sick, their goal is to recover quickly, regardless of whether they use TCM or modern medicine, as long as the treatment is effective and affordable. Unfortunately, combining TCM and modern medicine can result in potential adverse drug reactions.

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Appendix I**Section A: Demographic data**

Gender: Male/Female

Age: _____

Occupation: _____

Religion: _____

Section B: Influence of Chinese cultural health beliefs

Do you believe that

- | | |
|---|--------|
| 1. Certain diseases are caused by 'too much heat' or 'too much coldness' in the body (disruption of yin-yang balance)? | Yes/No |
| 2. Fever is due to excessive heat inside the body? | Yes/No |
| 3. One should consume less amount of rice or totally abstain from taking rice when having fever. | Yes/No |
| 4. Joint pain/rheumatism is due to excessive 'wind' accumulated in that joint? | Yes/No |
| 5. Abdominal colic is due to excessive 'wind' accumulated in the abdomen? | Yes/No |
| 6. Consuming certain fruits like jackfruit or watermelon can precipitate excessive wind to enter the body? | Yes/No |
| 7. Consuming certain vegetables like bean sprout can precipitate excessive wind to enter the body? | Yes/No |
| 8. Consuming certain food like garlic and ginger can help dispel wind from the body? | Yes/No |
| 9. Consuming certain 'toxic' food like crabs and prawns can cause skin diseases with rash? | Yes/No |
| 10. Exposure to rain water can cause respiratory tract infection? | Yes/No |
| 11. In chickenpox, consuming beans can leave behind spotty scars? | Yes/No |
| 12. In chickenpox, consuming soy sauce can leave behind black marks? | Yes/No |
| 13. Consuming certain 'heaty' food or herbs/spices can result in miscarriages? | Yes/No |
| 14. After childbirth, a woman must observe a period of confinement and taboos? | Yes/No |
| 15. After childbirth, a woman must not wash her hair during the period of confinement? | Yes/No |
| 16. After childbirth, a woman must take 'hot' food like ginger and red wine during the period of confinement? | Yes/No |
| 17. After childbirth, a woman must not be exposed to excessive wind or water as it can cause 'wind-related' illnesses such as chronic joint pain? | Yes/No |

Section C

- | | |
|--|--------|
| 1. Have you ever sought traditional Chinese medicine (TCM)? | Yes/No |
| 2. Would you rather choose TCM alone as the initial choice of treatment? | Yes/No |
| 3. Do you believe that modern medicine, comprising 'manufactured' drugs can weaken the body's immune system? | Yes/No |
| 4. Do you believe that it is acceptable to combine both TCM and modern medicine together for consumption? | Yes/No |
| 5. If you have taken TCM prior to visiting your doctor, would you be uncomfortable to reveal to your doctor that you have taken TCM prior to the consultation? | Yes/No |