

Approach to the Chinese Patient

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ABSTRACT

Background: The number of Chinese people is increasing every year all over the world. Chinese ethnicity is the sixth most common ethnic group in the UK. Even Chinese patients are not the most frequently attended in most Western countries, they might be one of the groups with the most difficulties to communicate with, mainly because of the extreme differences in culture and language.

Objective: The main objective of this review article is to give all doctors working in Western countries (above all family physicians / general practitioners), a brief introduction about main customs and behavior of Chinese patients. In this way, they can get a realistic idea of Chinese patients' thinking and ideas about diseases. This should be very helpful in their clinical approach.

Medical aspects and clinical interview: In this review article, we explain (among others) Chinese's sociocultural aspects, their general medical problems and ideas about disease and their clinical peculiarities of clinical interview.

Most frequent diseases: At the end of the article, a practical review of the literature about the most frequent diseases in Chinese ethnicity, with their clinical implications.

KEY WORDS: Chinese Ethnicity, Frequent Diseases

BACKGROUND

Chinese ethnicity is the sixth most common ethnic group in the UK. ^[1] Although the Chinese are one of the UK's smallest minorities (only 379,503 people: 0.72% of England's population), ^[2] they might be one of the groups with the most difficulties to communicate with, mainly because of the extreme differences in culture and language. ^[3]

About 92% of China's population is Han Chinese. There remaining 8% is divided among Zhuang, Uygur, Yi, Miao, Mongolian, and Tibetan ethnicities. ^[3] The vast majority of Chinese in the UK are Han, which represents the oldest Chinese community in Western Europe and the second or third largest group of overseas Chinese in Europe (after France and Russia).

Traditionally, Chinese immigrants in the UK arrived from the British colony (from 1841 to 1997) in China, namely, Hong Kong. In recent years, plenty of Chinese immigrants arrived from Mainland China as students. ^[2]

Sociocultural Aspects

In all provinces of China, the surname (first syllable or character) is named first, followed by the first name, which may be of one or two characters. Second-generation Chinese, or first-generation Chinese who have spent many years living in the UK, have adopted our customs, so they may have Christian names (or associated with their Chinese name) before their last name.

There are numerous languages and dialects in China. Nonetheless, the official Chinese language or common language (“Putonghua”) is Mandarin, which is the most spoken language worldwide. There are eight main languages in China (Wu, Hakka, Cantonese, Minan, Minbei, Gan, Xiang and Mandarin), with different pronunciations that do not allow understanding among them; nonetheless, the written language is the same for all of them, being fully understood by all literate Chinese. Chinese

immigrants from Hong-Kong, Macau and Canton speak Cantonese. Chinese from Mainland China and Taiwan speak Mandarin, as well as their own local language. The phonetic transcription of Chinese phonemes to Western language or romanisation is called “*pinyin*”.

Compared with other ethnicities, the Chinese retain a socio-familiar structure and cultural activities, with little contact with social activities of the country they are living. [4] The family is the main nucleus of their social life; it is the essential, basic, traditional and strongest institution. First-generation Chinese immigrants value responsibility in their children, so they are taught this value early in life, such as by going alone to school at an early age. For young people, respect for parents, older people and authority figures, such as teachers, monks, doctors and nurses, [4] are a very important part of their attitude to life. Unfortunately, such practices are not always observed nowadays in the society in which they are transplanted. [4]

The Chinese are usually very diplomatic, especially when speaking to a Westerner. When addressing a Chinese individual, we should always refer to him/her as “Mr.” or “Ms.” with his/her surname; never call him/her by his/her first name. They always greet by shaking hands or with simply a bow.

Britons might stereotypically believe that the Chinese people possess the following characteristics: first-generation Chinese run a self-employed takeaway restaurant. They are business oriented and family focused, hardworking, thrifty, friendly but very insular, inscrutable, socially conservative, apolitical and non-threatening; they do not try to impose their values but keep to themselves. Second-generation Chinese students are quiet, shy, usually “light drinkers”, non-smokers, outstanding students and easy-going individuals who never get into trouble; if they are international students, most likely they only blend with other Chinese, will get

along with what they are doing and will not cause any trouble.

If you receive a gift from a Chinese person, the item must be handled with both hands (even if of small size) and must never be opened in his/her presence.

Chinese food is known for its variety. Chinese people usually eat more vegetables than the average Briton. Other ingredients that are seldom used in the UK but are consumed by the Chinese include soybeans (and all its derivatives), bamboo, fish and monosodium glutamate.

Tea is the most popular brew in China, even more than in the UK; it is also consumed before meals. The Chinese drink very hot tea without milk, lemon or sugar. It is also used when cooking numerous dishes. Tealeaves are composed of water, tannin (7%–15%), caffeine (1%–4%) and other alkaloids, such as theophylline. The presence of tannin implies some diaphoretic effects by dilating the superficial vessels, causing perspiration and astringent properties. Although the content of theophylline per cup of tea is about 1mg, great tea drinkers can achieve plasma concentrations close to the therapeutic level. We should remember that it’s therapeutic range is very narrow (10–20mg/ml). Irritability, nervousness, insomnia, headaches and seizures can be assigned of overdose. Simultaneous administration of some substances (coffee and erythromycin) may increase serum theophylline levels, whereas administration of some enzyme-inducing drugs, such as Phenobarbital, will decrease theophylline levels. These types of interactions are generally not clinically relevant among moderate consumers of tea but should be considered in patients simultaneously treated with theophylline. [5]

Western food that do not usually have much acceptance among the Chinese population (not acclimated to Western flavors) are as follows: cured (hard) cheese, milk (thrifty lactose intolerance), jam (raw meat) and legumes (peas and lentils). Western food is generally considered too salty, and desserts are too sweet. Rice in China is usually

cooked well done, softer than in Western countries.

In Chinese cuisine (especially Cantonese), sugar is added to plenty of dishes (beware diabetics). A condiment that is widely used, especially in urban areas of China, is monosodium glutamate (*vetsin*, *ajinomoto*). Therefore, by introducing low-sodium diets, we must remind our Chinese patients not only to avoid salt but also monosodium glutamate and soysauce.

The native wine in China is made from rice (probably the world's oldest alcoholic beverage) and generally has a high alcoholic content. "Medicinal" wines, which are prepared with lizards or snakes macerated in brandy, reportedly possess healing and invigorating properties. Ginseng wine is also widely celebrated by those same properties. The Chinese believe that cold drinks can induce bad digestion, so some spirits and wines are served hot.^[3] Families and relatives of admitted patients will typically bring special food that will help with recovery according to traditional Chinese medicine (TCM).

China has no official religion. Most Chinese from the People's Republic of China profess no religion. Under the influence of the communist regime, religion was tolerated and not encouraged. Unlike in the West, where different religions are clearly differentiated from each other, mestizo religions exist in China. The minority that professes some religion is usually a Buddhist, Taoist or Christian. Confucianism, rather than a religion, is a doctrine or a catalogue of rules of social function, which has been the basis of all life in China for centuries. Such rules have not been easy to eradicate in a generation of communist rule.^[5]

The Chinese theory of the process of getting sick is difficult to summarize, as this would lead us to the philosophical foundations of Nature itself, and the human being is only one component in it.^[5] The first idea that we should retain is that of globalism: every human being is a microcosm that is inseparable from its

environment or macrocosm. Both are constantly changing and formed of matter and energy; the interactions between these two are the basis of vital phenomena, and energy is what gives life to the matter and the body.^[5]

The second idea is the "Tao", which is defined as "the unchangeable course of Nature" or "what happens by itself". This idea is manifested mainly in two aspects, the "yin" (representing the dark, the moon, femininity, passivity, what yields, etc.) and "yang" (representing the clarity, the sun, the masculine, activity, what resists, etc.). They are neither opposites nor contraries, but complementary and interdependent principles.^[5] The yin is as important as the yang, and the total absence of one cancels out the other. The light is not the opposite of the shadow, nor what gives in, it is the opposite of what resists. In a healthy person, yin and yang are in a continuous dynamic balance. Both contribute to vital energy, which adequately circulates throughout the body through a network of circuits or meridians, each of which is directly connected to an internal organ or function, and all organs are interconnected. The state of health depends on the balance of energy flow, which must be harmonious, rhythmic and proportional to the needs of an individual. Obstruction (deficit) or overflow (excess) in the circulation of that energy produces an imbalance that results in disease.^[5]

General Medical problems

Usually, Chinese immigrants use medical or social community services much less frequently than immigrants from other ethnic groups and the British people. This disparity may be because the Chinese patient generally employs auto-dispensable natural remedies, including Chinese herbal medicine and massage therapy (cultural factors). As they are usually working most of the day, they have little time to see a doctor (labor factors). However, perhaps the greatest obstacle to seeking healthcare might be the language barrier.^[4] This seems

logical if we consider that most of the will have serious difficulties in making themselves understood when explaining their symptoms, and they may even be very worried about understanding the information given to them by the doctor, and how to follow the treatment correctly. [4]

In the case of undocumented patients, the problem is even more accentuated. These patients usually only go to private and recommended doctors by other friends who know their situation, because they are afraid that the National Health System (NHS) will report them to the police (extrapolation of president Trump's deportation policies). Similar to what occurs with patients of other ethnicities, absolute ignorance about the linguistic difficulty to communicate health and social services is crucial when accessing such services.

For the reasons explained above, one may easily understand why a Chinese patient, before going to a Western physician or to emergency department, would have already tried home treatment or medication dispensed by the pharmacist. If the patient knowledge staking Chinese herbal medicine (recognized as the largest pharmacopoeia in the world), doctors do not need not waste their valuable time into figure out the active ingredients in such medications. Such herbs should all be written in Chinese, and only in rare cases are the names soft he plants written in English or in Latin: they are native herbs that are not found in common Western formulas. [5]

Chinese patients usually prefer remedies of TCM to treat less serious diseases. In situations in which fast relief is required or when the causative organic pathology is clearly defined, they will probably choose Western Medicine (WM). In China, both medicines have coexisted for over two centuries, and both have their advantages depending on certain conditions, speed of results, accessibility and type of patients. [5]

The perception is that TCM has as low erection and fewer adverse effects.

TCM usually solves the problem and does not only relieve the symptoms: therefore, it is not suitable for urgent and ill-defined conditions. In exchange for a faster result or a specific and well-defined pathology (acute febrile infectious disease or appendicitis), they prefer WM. For example, a patient with insomnia may prefer WM to alleviate the problem with drugs if the patient will be leaving for a weeklong trip; however, in their usual environment, they will surely prefer TCM to combat the problem even if several weeks are needed. [5]

In recent decades, people in China have been bombarded by the media with healthcare products from both the TCM and the WM. The former emphasizes the absence of adverse effects, and the latter focuses on the speed of the results. In this battle, WM presents an advantage in the sense that many more headlines and front pages are targeted (e.g. new treatments such as gene therapy and monoclonal antibodies). Chinese urban environments will be more supportive of WM than other inhabitants from rural environments, where the charge to relieve their ailments will be a 'barefoot doctor' (not trained in medical school but an expert of TCM remedies, although they might have some notion of WM). [5]

Studies in which the above statements are based have been made in China, but the question that remains is whether these results can be extrapolated to the Chinese immigrant population in the UK. Currently, we have no available evidence to answer this question. In the modest opinion of the author of this article, the answer is "no": the Chinese immigrant population in the UK is not at all representative of the general Chinese population. It is a biased, more open-minded population, which is closer to the Chinese of the great city than in rural areas. Therefore, in general, the Chinese immigrants we see in our daily practice will be less influenced by the idea soft CM than the average Chinese of a local Chinese population, except in older patients from rural areas or living a shorter time in the UK. [5]

Chinese immigrants generally have no problem in receiving treatment via oral contraceptives, intrauterine devices, abortions, blood transfusions or organ transplants.

Some Medical Myths and Medical Ideas of Many Chinese

They are summarized in Table 1.

Table 1. Main medical myths and ideas of many Chinese patients

<p>Droppers. They are regarded as a panacea for treatment of any disease. Many sick Chinese patients (in emergency department) request 'to put IV fluids'.</p>
<p>Medicines. Like many other patients of other ethnic groups, Chinese patients usually consider German or American manufactured medicines more effective than drugs made elsewhere.</p>
<p>Predilection for presentations. Broadly speaking, they prefer parenteral administration, except younger patients or patients with <i>try pan phobia</i> (needle phobia).</p>
<p>Traditional Chinese Medicine. This term encompasses the whole of TCM practices developed over millennia. They include acupuncture and its variants, herbal medicine, dietetics, "<i>tui na</i>", "<i>tai chi</i>" and "<i>chi kung</i>". In herbal medicine, the most famous and precious plant is ginseng (<i>Panax ginseng</i>). Its qualities of panacea (aphrodisiac, tonic and rejuvenator) have been extensively discussed. Its use and acceptance are widespread.^[5]</p>
<p>Acupuncture. Usually preferred by older patients who have lived in China for many years and/or young patients who have had favorable experience with it. For centuries, millions of people have been treated with this technique (and variants, mentioned below) for various conditions, although the most frequent is chronic pain. Variants of acupuncture are acupressure (the action of the needles is replaced by finger pressure on the same energy points), auricular acupuncture (auriculotherapy), (the field of needles is reduced only to the patient's ear, which is supposed to reflect all points of the body) and moxibustion (the needles are replaced by burning mug wort leaves, resembling cigar snuff).^[5] Some techniques such as "<i>gua sha</i>", with residual purpura and ecchymoses, must not be confused with physical abuse.^[6]</p>
<p>Blood tests. Chinese patients dislike repeated blood tests, as they believe that blood withdrawal "weakens" health.^[4]</p>
<p>Teeth. Most immigrants of Chinese origin have little or no dental culture. In the elderly, tooth decay is inevitable with age. Another reason for the infrequent visits to the dentist is the huge difference in prices of dental services in the UK compared with the rates in their country of origin.^[7]</p>
<p>Diet. In general, Chinese patients have difficulty in following their diet strictly according to tradition.</p>
<p>Feeding in infants. In many families (especially in those with both parents working, and children are raised by the grandparents), children from 9 months (if not before) start eating the most varied food, such as eggs, meat, fish, fruits and vegetables, regardless of the GP's or pediatrician's advice. However, they usually strictly follow their immunization schedule.^[6]</p>

Clinical Peculiarities of Clinical Interview

Overall, the Chinese patient is very respectful of authority figures, such as doctor, teacher or monk. Even if they do not agree with certain medical advice, they will not manifest it openly.

Usually old male Chinese patients are more comfortable in dealing with a male doctor, especially in the case of surgical specialties. Chinese women, except in very young patients, do not usually have problems when being physically explored by male doctors or doctors of the same sex. As in all cases, it is always prudent to explain to the patient (or the interpreter) how the examination will be performed and its purpose.

Secularly, Chinese women have been discriminated against in society, especially in rural environments. Today Chinese women in the 21st century, at least in theory, have been equaled to male, enjoying a social situation, that even quite improvable, never reached before.

Chinese women in the UK, above all the self-employed, can work even more time than men, if we add the time working at own home. They even have to sacrifice their own careers and prioritize the interest of the family.^[2]

Elderly Chinese people think that all kind of food is divided into "heating" and "cooling" food.

Pregnancy is a heating condition, and that is the reason why pregnant women should reduce the intake of heating food (i.e.: red meat, fat, etc.), and increase cooling food intake (i.e.: vegetables, fruits, etc.).

It is an ancient custom that after giving birth, a Chinese mother traditionally stays for a month at home doing nothing but eat, rest and sleep.^[8] During this time should not take cooling food (fruits and vegetables), but on the contrary, should eat foods rich in protein and calories (typically braised chicken in sesame oil and rice wine, soup and peach seeds, Chinese herbs and rice wine).^[5]

In China, it is common breastfeeding for many months; however, many Chinese

immigrants cannot breastfeed their children due to work.

Similar to patients of other nationalities who do not understand English, for additional tests or aggressive treatments that require informed consent, we must ensure that the patient is aware of the dangers and possible consequences.

For Chinese people, life is a continuous process and death is accepted as the end of the road. Children are the prolongation four life times. For first-generation Chinese patients, when asked their age, they always add on year (relative to the age as counted in the West). In China, birth is not the beginning of life; we began to live in the moment of conception, and when we are born, we are already a year old.

Whenever a Chinese patient is diagnosed abroad with a deadly disease in the short to medium term, the first course of action taken is to consult a native doctor, with whom he/she can communicate directly in their language. Very often, they will strongly consider the possibility of returning to China to be assessed by a trusty hospital, usually in Beijing or Shanghai, or seek a second opinion. When the diagnosis is confirmed, the classic defense mechanisms of the human mind play a decisive role, just like in Western patients. An old Chinese proverb says, "A tree may grow a thousand feet tall, but when its leaves fall, they return to its root" (people residing far from home will eventually return to their native soil).^[9] This is the main reason why the vast majority of elderly Chinese patients (older than 65) prefer to die in their native village, surrounded by their elderly parents (if still alive) or other family members (brothers, uncle and nephews). If these family ties were of little weight, the patient may opt to stay and die in his British family atmosphere.

Most Prevalent Diseases

They are summarized in Table 2 (for pediatric patients), and Table 3 (adults)

Table2. Most prevalent diseases in Chinese children

Pediatric age
Lactose intolerance ^[3,4]
Thalassemia syndromes ^[10-13]
Glucose 6-phosphate dehydrogenase deficit
Mongolian spot (congenital dermal melanocytosis) ^[14]

Table3. Most prevalent diseases in Chinese adults.

Adults
Lactose intolerance ^[3,4] Due to lactase deficit. About 80% of Chinese populations have a certain degree of lactose intolerance.
Hepatitis B ^[15,16] The high prevalence of HBV carriers in the Chinese population (15%) is due to mother-to-child transmission during child birth.
Hepato carcinoma (hepatocellular carcinoma) ^[17-19] Usually associated with chronic hepatitis B.
Nasopharyngeal carcinoma ^[20] Squamous cell carcinoma. The Epstein-Barr virus is involved in its genesis.
Esophageal carcinoma ^[21] The most common type is squamous cell carcinoma. More common in males and the elderly.
Gastric carcinoma ^[22,23] Mainly adenocarcinoma. Gastros copy is often conducted in Chinese patients aged 55 years or more and in patients expressing a feeling of fullness and/or heartburn. The cancer spreads via the lymphatic system, ^[21] with three time's lower incidence of liver metastases compared with other ethnicities. ^[22]
Cholelithiasis ^[24] Taiwan has an extremely high prevalence (53.5%) compared with Hong Kong (3.1%) and Singapore (1.7%).

Least Prevalent Diseases

Chinese patients have also lower prevalent diseases, compared with Caucasians.

Table4. Least prevalent diseases in Chinese

Obesity ^[25]
Coxartrosis ^[26]
Leukoplakia in oral cavity ^[27]
Giant cell arteritis ^[28]
Hodgkin's disease ^[29]
Follicular lymphomas ^[30]
Paget's disease ^[31]
Melanoma ^[32]
Dermatitis herpetiformis ^[33]
Psoriasis ^[34]

Miscellany, Other Diseases/Clinical characteristics

In Table 5, we summarize other clinical characteristics or varied diseases, clinically relevant.

Table5. Other prevalent diseases or clinical characteristics in Chinese

<p>Epicanthus ^[3] This feature is normal not only in the Chinese, but also in Asians. Pseudo strabismus can be difficult to distinguish from true strabismus (differential diagnosis: cover test), especially in children. The incidence of strabismus in Chinese children is not more prevalent than in other ethnic groups.</p>
<p>“Chinese restaurant” syndrome ^[35-37] This syndrome consists of posterior cervical numbness radiating to both arms and back, general weakness and palpitations that appear about 15–20 min after intake of Chinese food prepared with monosodium glutamate. Such symptoms last for about 2 h, with no hangover.</p>
<p>Alcohol metabolism ^[3] Alcohol is metabolized in the human body mainly through the isoenzymes alcohol dehydrogenase (ADH) and cytochrome p450 2E1 (CYP2E1). They metabolize ethanol to acetaldehyde, which is oxidized to acetate by aldehyde dehydrogenase (ALDH2). When the activity of this enzyme decreases, acetaldehyde accumulates in the liver and into the circulation. Symptom so facet al dehyde accumulation in clued flushing, tachycardia and circulatory collapse. About half of the Chinese population is deficient in aldehyde dehydrogenase.</p>
<p>Acetylation ^[3] A number of drugs (e.g. isoniazid, hydralazine and procainamide) are metabolized by acetylation of a <i>hydrazino</i> or <i>amino</i> group. The enzyme N-acetyl-transferase in the liver, which transfers an acetyl group from acetyl-coenzyme-A., catalyses this reaction. The rate of acetylation is genetically controlled and slow acetylation is inherited as autosomal recessive. A majority of Chinese people are slow-acetylators.</p>
<p>Tuberculosis (TB) ^[38] Although plenty of effective measures to control TB are being done, China is still a country with high TB prevalence. The characteristics in terms of presentation and forms of treatment do not differ substantially from those we find in our environment. The Mantoux test must be performed on every child adopted and brought in from China.</p>
<p>Malaria ^[39] In China, malaria exists only in remote rural communities (1500 m below the Southeastern regions of the country). The disease occur north of 33° N, from July to November; 33° to 25° N from May to December and S 25° N throughout the year. <i>Plasmodium vivax</i> is usually resistant to Chloroquine and Mefloquine. However, malaria by <i>Plasmodium falciparum</i> is prevalent in Yunnan province (border with Vietnam, Laos and Myanmar).</p>

CONCLUSIONS

Given the increasing number of immigrants in the European Union and the UK, every doctor (and above all, GPs) should have an updated version of the most prevalent diseases in different ethnicities. Although, Chinese patients are not the most common race in our daily practice, they can be the most challenging and difficult to communicate with. Extensive knowledge and understanding of their customs and most common diseases will be most helpful in the clinical approach, diagnosis and management of these patients.

Mediators between the Chinese communities and local social services would be most desirable, so that Chinese immigrants have equal access to health systems like other immigrants and native patients.

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Contributorship statement

Domingo Ly Pen is the only author: conceived the paper, looked for the references and wrote the manuscript.

Conflict of Interest of Financial Disclosure

None

Competing Interests

None

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