中國醫藥大學針灸研究所碩士論文

編號：GIAS-98-97101

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A Study of Acupuncture Practice in Taiwan Today

台灣針灸使用現況調查研究

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中 華 民 國 九 十 九 年 七 月 一 日

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論文指導教授推薦書

針灸研究所，Pascale Schmied 鐵雲 君所提之論文 A Study of Acupuncture Practice in Taiwan Today 台灣針灸使用現況調查研究，係由本人指導撰述，同意提付審查。

指導教授_____（簽章）

中　華　民　國　九　十　九　年　七　月　一　日

中 國 醫 藥 大 學 碩 士 班 研 究 生

論文口試委員審定書

針灸研究所，Pascale Schmied 鐵雲 君所提之論文 A Study of Acupuncture Practice in Taiwan Today 台灣針灸使用現況調查研究，經本委員會審議，認為符合碩士資格標準。

論文口試委員會　　委員 _____（簽章）

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中 華 民 國 九 十 九 年 七 月 十 四 日

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A Study of Acupuncture Practice in Taiwan Today

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Abstract

Acupuncture as a part of Chinese medicine is not a uniform field of knowledge and practice but known for its plurality. Historians of Chinese medicine, medical anthropologists or physicians conducting clinical trials, all underlined the plurality of diagnosis and practices in the field of Chinese Medicine. Although some literature analysed the case of Chinese medicine in Taiwan, mentioning the scope of acupuncture use, little is known about acupuncture practice particularly.

The purpose of this research was to determine how education, the age and the years of practice of the Chinese medicine physicians and as well as the direct environment influence in their practice of acupuncture. In order to understand what leads to different practices, we designed a questionnaire. The questionnaire contained three parts. The first part gathered demographic data, the second part addressed questions about the general use of acupuncture and the third part concerned the diagnosis and treatment of low back pain. The questionnaire was sent to 403 Chinese medicine physicians practicing in Western and Chinese medicine hospitals and 177 physicians responded (44%).

The results obtained trough the questionnaire showed that the geographical situation and the education course had a strong influence on the therapeutic methods used by the Chinese medicine physicians and on the categories of diseases treated by acupuncture. The age and the years of practice of the physicians were also correlated and the different type of hospitals showed some differences too. In the north of the island acupuncture

was more frequently used and physicians used to treat a larger scope of diseases categories with acupuncture. Special licence qualified physicians treated more categories of diseases with acupuncture than the physicians graduated of the school of Chinese medicine and the school of Post baccalaureate Chinese medicine. Older physicians having a long clinical experience also used acupuncture to treat a large variety of diseases. Then physicians working in Chinese medicine hospitals used to treat a larger scope of diseases categories with acupuncture and they founded more important to use Chinese medicine diagnosis tools than physicians working in Western medicine hospitals.

The plurality found in acupuncture practice is a complex process where different factors interact at different levels. The geographical situation and the education background were the two main factors influencing acupuncture practice. However, further studies are needed to understand the situation of acupuncture practice in private clinic and examine the role played by the health insurance coverage.

Keywords: Taiwan, acupuncture, questionnaire, western medical hospital, Chinese medical hospital

1. Introduction

1.1 Practice of acupuncture in Taiwan

Acupuncture is widely practiced in Taiwan. Most of the time it is used with other therapeutic techniques of Chinese medicine (prescription of Chinese medicinal, manipulation techniques, etc.), there are very few Chinese medicine practitioners who rely solely in acupuncture. Nevertheless in some hospital there is a specialized department of acupuncture, where the physicians practice mainly acupuncture.

In Taiwan, only licensed Chinese medicine physicians can legally dispense acupuncture. There are two distinct ways of being legally recognized as a Chinese medicine physician in Taiwan: through the Chinese Medicine Physician Licence Examination and through the Chinese Medicine Physician Special Licence Qualifying Examination. The former is only open to the students issued from the courses dispensed at China Medical University (undergraduate course or Post baccalaureate course) or at Changgung[1] University while the latter do not require a Chinese medicine institutional background.

Chinese medicine physicians practice mainly in private clinics but also in Chinese medicine hospitals and in Western medicine hospitals that possess a Chinese medicine unit or a specialised department of acupuncture. Non-recognized practitioners also practice acupuncture, but we choose not to take in account this part of the Taiwanese reality. Therefore the present research is limited to the field of legal acupuncture practice and do not take into account other forms of popular practice used in Taiwan.

1.2 Purpose of the research

Acupuncture as a part of Chinese medicine is not a uniform field of knowledge and practice but known for its plurality. The purpose of this research was to determine what leads to the plurality of acupuncture practice we observed. We wanted to focus on Taiwan area and chose to take an interest to acupuncture practice only. Our purpose is to understand how the physician, the education and the direct environment influence the practice of acupuncture. When we speak about the physician this include his age and his clinical practice and experience. The education refers to educational course followed. The direct environment is a broad concept that includes the environment of practice (type of hospitals) and the area of practice in Taiwan (cities or districts areas; north, centre or south part of Taiwan). Because of the limited time we had to conduct this research, we temporarily will not analyse in detail the influence of political, economical and social fields upon acupuncture practice.

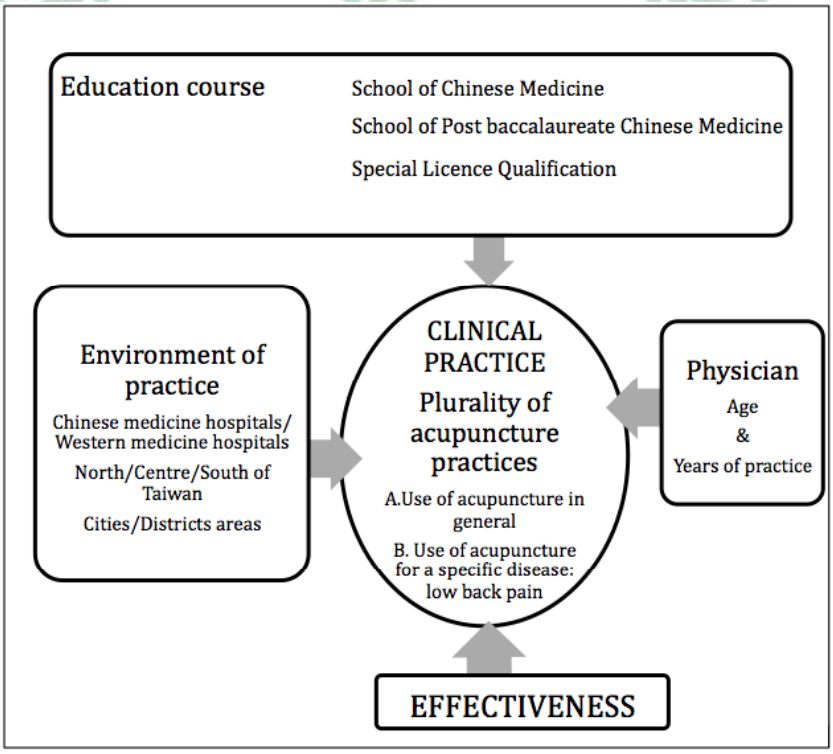


Figure 1 Purpose of the research

2. Literature review

2.1 Chinese Medicine in Taiwan

The recent history of acupuncture as a part of Chinese medicine in Taiwan differs considerably of what happen in mainland China this past century. In Taiwan, before the Japanese colonization, Chinese medicine was the predominant medical system used. The education of Chinese medicine was assured in the most usual way it has been held under the past centuries: through apprenticeship and self-study[2]. When the Japanese arrived to Taiwan in 1895 they began to replace Chinese medicine by Western medicine, and established the first school of modern Western medicine, which was also in charge for the training of Chinese medicine practitioners[3]. During the Japanese colonisation (1885-1945), Western medicine became the leading medical system and even Chinese medicine was still practiced, the Japan's hostile policy towards Chinese medicine had a devastating effect that lead to a tremendous drop of Chinese medicine physicians[4]. When the Japanese left Taiwan in 1945 only a few dozen of physician remained (from the initial 1903 Chinese medicine physicians recognized by the Japanese7 government in 1901)[5].

The Chinese nationalist government came to Taiwan in 1945 and pursued the policy held in mainland China. During 1945 to 1954, because of the massive arrival of immigrants from Mainland China, coupled by a loosened governmental regulations and control of Chinese medical practice, the number of licensed Chinese medicine practitioners suddenly increase from two dozen physicians in 1945 to 1545 physicians in 1954. As Chi remarked this was both beneficial and treacherous for the sake on Chinese medicine. In one hand, it allowed the Taiwanese population to have a wider

access to Chinese Medicine. In another hand, because of the poor quality of some practitioners the public trust toward licensed Chinese Medicine physicians was reduced[6]. A licensure system examination was established by the nationalist government in 1946 and was open to anybody without a specific educational background. This licensure is named Chinese Medicine Physician Special Licence Qualifying Examination (referred as special licence qualification) and is still in effect today. It is organized in a more or less regular basis of every one or two years[7].

In 1958 the China Medical College (named China Medical University CMU until 1999) was establish but it is only in 1966 that the institutionalized education of Chinese medicine really began with the establishment of the department of Chinese medicine, whose aim was to "develop Chinese Medical science, catch up with modern Western medical sciences, and to combine Chinese and Western medical science in order to establish a new system of medical science"[4]. In this department, the students took a seven years course (the course was extended to eight years until 1996) and study jointly Chinese and Western medicine. At the end of their studies and internship they can take the examinations to have a licence both in Chinese Medicine and in Western Medicine, but they are not allowed to practice under the both licence at the same time. Until 1995 a lot of students issued from this courses chose to be registered as Western medicine physicians principally because of the higher income and the social prestige conferred by this position[8]. In 1975, the university established a graduate school of Chinese medicine (a master degree in 1975 and a doctoral degree in 1987) in order "to combine ancient, current, domestic and foreign medical knowledge, to develop Chinese medicine in general and to train teacher of Chinese medicine"[4]. Ten years later, in 1984, the university created a school of Post baccalaureate Chinese medicine. It offered a five years course to

train graduate students to become Chinese medicine physicians. Then in 1996, Changgung University opened a seven years course in Chinese medicine more or less similar as China Medical University.

The teaching and practice of acupuncture is a part of the whole course of a Chinese medicine physician. It is a therapeutic technique among others and does not require specialised course. Nerveless, it exist a specific course of acupuncture open to Western medicine physicians and dentists that offer them a quick formation (a hundred of hours). From 2005, the China Medical University opened a master degree in acupuncture research whose aim is “to cultivate the qualified acupuncture teachers and specialists for research and development purpose”.

In the beginning of the seventies, political policy engaged to encourage Chinese medicine and particularly acupuncture. The Chinese Acupuncture association (中國針灸學會) was created in 1957 but it is only in 1972 that a centre for acupuncture research was created. Following his creation, the first symposium on acupuncture and moxibustion was held. The international recognition of acupuncture abroad helping this process led, in 1982, to the first international symposium organized by the Department of Health and the China Medical College. This symposium gathered over 1000 experts and the aim of this meeting was to unify the academic theories and concepts and therefore enabling scholars to communicate and to promote the interaction between Chinese and Western medicine[9].

A. Kleinman has explored the case of Chinese medicine in Taiwan from an anthropological perspective[10]. He offered a broad description of the health care system in Taiwan at the end of the seventies. He distinguished three sectors into the health care system: the popular one, the professional one and the folk sector. He explained how popular, professional and folk culture shape illness and therapeutic experiences in distinct ways. He showed that

the professional sector as an institution posses a large power « to create illness and treatment as social phenomena, to legitimate a certain construction of reality, as the only clinical reality »[11]. From this point of view he showed that Western Medicine control most of the power letting few place to other therapeutic systems, including Chinese medicine.

Some other studies focused more on Chinese Medicine, like C.C. Chi, who offers a condensed description of the education, training and licensure system of Chinese medicine physicians in Taiwan[3]. L.D. Chen, in his doctoral thesis, explored in detail the characteristics of the Chinese Medicine practitioners linked to different educational backgrounds[5]. Other articles about the uses of Chinese medicine in Taiwan have demonstrated the general increase of use of Chinese Medicine the last decades especially until its inclusion in the heath care system[12,13,14].

All these studies help us to understand the actual trends of Chinese Medicine in Taiwan. Nevertheless very few studies have addressed the case of acupuncture. The few articles related to acupuncture focused on the pattern of acupuncture use and the characteristics of the patients[12].

2.2 Plurality of Chinese Medicine

The plurality found in Chinese Medicine has been subject to much interest and has been approach under different point of views.

Historical and Anthropological perspectives

From an historical perspective, P. Unschuld[15] has underlined the variety of Chinese medicine trends and corrected the common idea in the West understanding Chinese Medicine as an homogeneous tradition. Kuriyama[16] in his comparison between the history of ancient Greek and Chinese medicine has noted some essential differences between the two medicines. He

explained clearly how the perception of and theories about the body differed in the two cultures and therefore in the two medicines. Even if his book is about ancient medicine it still give us some interesting clue to reflect about the particular features of Chinese medicine and to understand the position of a Chinese medicine actually embed in a health care system dominated by the paradigm of Western medicine.

The multiplicity of Chinese medicine has been under the scope of medical anthropologists.

J. Farquhar, focusing her research on the clinical encounter in Chinese medicine, underlined the fact that in Chinese medicine the knowledge are directly related to the practice and therefore to the physician. She also showed how, in Chinese medicine, illness is transformed into an actionable pattern with the help of a classificatory logic. This logic allows some flexibility and improvisation in the process of diagnosis and treatment[17]. She therefore described the central position of the physician in mastering Chinese medicine, as well as a certain range of freedom he had making diagnosis and treatment.

E.Hsu has examined the variation of key concepts of Chinese medicine under different mode of transmission (secret, personal and standardized mode of transmission)[18]. She underlined that different ways of learning also implied different ways of knowing. Therefore she demonstrated the difficulties for the actual standardized way of teaching Chinese medicine to match with the clinical practice reality, a problem that didn't exist before the standardization the knowledge. She explained how "Chinese medicine uses word meanings to manipulate reality in a very different way from that the twentieth century Western science" that is to say the Chinese character has a multiplicity of meaning[19] that allow flexibility and helps the physician to deal with the clinical reality[20].

V. Scheid, in his impressive work, has offered an outstanding explanation of the plurality of Chinese medicine[21]. He used ethnographic methods as well as theories from the Science and Technology Studies (STS) to understand field of human practices. For him three interrelated features define this plurality. The first one is the heterogeneity found in Chinese medicine, that is to say the fact that different domains (like biomedicine, calligraphy, painting among others) and various periods of time permeate Chinese medical tradition and practitioners. The second feature is the multiplicity, it is a consequence of heterogeneity and a product of outside influences that leads to a variety of ways of thinking about body, diagnosis and treating illnesses. Both features are descriptive concepts emphasizing the plural constitution of the field of Chinese medicine practice. The last feature is the synthesis, it is a result or product of the interaction of different infrastructures. It is more a concept employed to understand the constitution of Chinese medicine practice as "a process of simultaneous emergence and disappearance"[22] of concepts and practices. His account offers a detailed and helpful explanation of the plurality found in Chinese Medicine.

In another article, V. Scheid described how Chinese medicine physicians use to combine knowledge issued from Chinese and Western medicine without major problem because of the openness, flexibility and adaptability, that are some key characteristics of Chinese Medicine[23]. His account shows how physicians in their daily practice synthesize two different kinds of medicine without conflict or contradiction.

Both historical and anthropological approaches offer a solid and broad view of the essence and specificity of Chinese Medicine. They show some key features of Chinese medicine that can help us to understand the plurality we found in acupuncture practice. These approaches also offer reflexions about Chinese Medicine development, assimilation and adaptation process

from the past until today. Therefore it is possible to distinguish how Chinese medicine and particularly acupuncture has been transformed and adapted to fit the modern Taiwanese health care system.

Acupuncture clinical trial design

More specific, some other studies about acupuncture were conducted by physicians worried to find a unity to conduct clinical trial. These studies focused on differential diagnosis and variety of treatment of the low back pain (in the United States and in United Kingdom). In their literature review of Chinese medicine treatment of low back pain, Birch and Sherman concluded that there are many explanatory models, approaches to practice and techniques used by acupuncturists[24]. In another study, Sherman and al. showed the influence of the practitioner identity on recorded diagnosis as well as on acupuncture point prescriptions[25]. The result of a survey conducted by the same researchers demonstrated that Chinese medicine physicians used several different diagnoses for the same Western medical diagnosis and used a great variety of Chinese medicine treatments[26]. In another paper, Hogeboom et al. showed that the teaching and practice of acupuncture was heterogeneous and that the variations in training contributed to the variability of styles of diagnosis and treatments[27]. MacPherson et al. stated the diversity found in acupuncture practice shows that this medical tradition is not static, “there are no clear boundaries as to what constitutes the practice of acupuncture as it continues to adapt and evolve over time”[28]. In an article, Kalauokalani et al. showed that despite a difference of theory in the choice of acupuncture points between physician and non physician acupuncturists in the US, the final selection of acupuncture points to treat low back pain was almost the same for the two types of physicians[29]. The last article put in light an interesting point that is

even the theory for choosing the acupuncture points sometimes differ, the selection of points is often quite similar at the end.

Almost all these studies stated the variety of diagnosis and treatment used by different acupuncturists to cure low back pain but they didn’t try to explain the plurality found in acupuncture practice.

3. Methodology

In order to understand what's lead to the plurality found in acupuncture practice, we conducted several fieldworks and interviews. A questionnaire was designed from our observations and literature review about acupuncture practice. Besides, our involvement to China Medical University master degree courses gives us access to many useful information. From the discussions with professors and classmates to the participation to undergraduate courses inside and outside the university, we gathered very different points of view about acupuncture practice.

3.1 Questionnaire contents

The questionnaire contained nine pages and took twenty minutes to complete. It was pretested among the students and professors of the acupuncture research department. Then it was also distributed in two meetings organized by Chinese medicine physicians association in Tainan and Taichung. Finally we asked five professors and clinically experimented physicians of China Medical University to give their advice about the content and the design of the questionnaire. We amended the questionnaire with regards to the reaction and advices of the professors, physicians and students.

The questionnaire contained three parts:

1. The first part contained items about demographic data (age, sex, clinical experience, type of practice), learning and mastering processes, participation and contribution of the physician to medical world and about the environment of practice (medical structure of practice, location of professional practice, NHI participation).

2. The second part concerned the general use of acupuncture. We measured the place of acupuncture treatment among other therapeutic methods used in Chinese medicine. Then we evaluated the scope of acupuncture use, that is to say, for which category of diseases Chinese medicine physicians frequently use acupuncture. The evaluation of the second part of the questionnaire was done by using a range of five gradations: 0=Never used; 1=Rarely; 2=Occasionally; 3=Frequently; 4=Very frequently. Every items corresponded to an approximate number of patients: Never used = no patients; Rarely = if 100 patients, used on 1 to 25 patients; Occasionally = if 100 patients, used on 25 to 50 patients; Frequently = if 100 patients, used on 50 to 75 patients; Very frequently = if 100 patients, used on 75 to 100 patients.

3. The third part was specifically about the diagnosis and treatment of low back pain. In the first sub part the physician were asked to explain which kind of diagnosis tools he will use to diagnose low back pain. The second sub part concerned the treatment of low back pain. We asked question about needles techniques, stimulation of the needles and acupuncture points. We evaluated the importance the physician accorded to each item by his reply within a four gradations answer: 1. Not familiar with; 2. Not important; 3. Important; 4. Very important. Then doctors were asked to describe three acupuncture points they frequently use to treat acute and chronic low back pain, the retention time of the needles and the frequency of the treatment. Finally, we enquired about the co treatment methods they will frequently use to cure low back pain.

3.2 Analysis methods

The data collected though questionnaire were entered to Microsoft Excel then exported and analysed through SPSS.

Descriptive statistics

We first analysed the data using simple descriptive statistics. The results are reported through the analyses of frequencies and we used valid percent to present the data in the figures and tables.

Comparative statistics

Our aim was to understand how the physician, his Chinese medicine education course and the environment influenced his acupuncture practice. Therefore we chose six groups of factors, which were the age of the physician, his years of clinical practice, his education course, the type of hospital he works in, the geographical situation of the hospital and the density of urbanisation.

The different groups were subdivided into different variables and we performed the chi-square test to determine if there were notable differences between the variables into each group with regards to acupuncture practice.

Table 3.2.1 Factor 1: Education course

Variable 1	School of Chinese medicine
Variable 2	School of Post baccalaureate Chinese medicine
Variable 3	Special license qualification examination

Table 3.2.2 Factor 2: Age of the Chinese medicine physicians

Variable 1	Under 30 years
Variable 2	30 to 39 years
Variable 3	40 to 49 years

Variable 4	50 and more years

Table 3.2.3 Factor 3: Years of practice

Variable 1	1 to 5 years
Variable 2	6 to10 years
Variable 3	11 to 20 years
Variable 4	More than 20 years

Table 3.2.4 Factor 4: Type of hospitals

Variable 1	Teaching hospital
Variable 2	Regional hospital
Variable 3	Rural hospital
Variable 4	Chinese medicine hospital

Table 3.2.5 Factor 5: Geographical situation

Variable 1	North
Variable 2	Centre
Variable 3	South

For the distinction between North, Centre and South, we used the National Health Insurance district boundaries that divided the countries in six regions[30]. The North referred to the northern region and the Taipei area, the Centre to the central region and the South to the southern region and the Kaoping region. We didn't include the eastern region because the sample was too small to be computed in the statistics.

Table 3.2.6 Factor 6: Urbanisation

Variable 1	Cities area
Variable 2	Districts area

The cities and districts areas are administrative boundaries planned out by the Taiwanese government. We assumed that cities areas were more urbanized than districts areas. The cities areas included Taipei city, Keelung city, Hsinchu city, Taichung city, Chiayi city, Tainan city and Kaohsiung city. The districts areas included all the districts in the north, central and south part of the island.

For the questions 2.1 and 2.2 in the second part of the questionnaire, which included a frequency rating (Never used=0; Rarely=1; Occasionally=2; Frequently=3; Very frequently=4), we also performed the one-way Anova test (the T test for the comparison between cities and districts areas) to determine the differences of frequencies between the different variables. Then we used the post hoc analysis Tukey's test to determine which variable were significantly different and which were not.

Finally in order to test the potential association of the different groups of factors with the items of our questionnaire we performed a multiple linear regression analysis for the questions concerning the treatment methods (question 2.1), the diseases categories treated by acupuncture (question 2.2), the importance accorded to the diagnosis tools (question 3A1), the importance accorded to the pattern identifications (question 3A2), questions about needles techniques (questions 3B4 and 3B5) and the rational for choosing acupuncture points as well as the importance accorded to acupuncture points categories (question 3B6).

Questionnaire reliability

We tested the validity of the questionnaire on 14 physicians. After of the reception of the first questionnaire we sent back two weeks later the same questionnaire and analysed the reliability of the answers. We tested the main questions of the questionnaire: 2.1 (15 items); 2.2 (16 items); 3A1 (16 items); 3A2 (4 items); 3B4 (4 items); 3B5(6 items) and 3B6 (12 items). If

we reported the average measure of ICC (Intraclass correlation) we obtained an average of 0.7 that signify a very good reproducibility. If we reported the single measure of ICC, we obtained an average of 0.53, which still indicate a fair reproducibility[31]. The two main questions which obtained the lower alpha value were the question 3A1 (Alpha= 0.49) and 3A2 (Alpha= 0.46), which concerned the diagnosis tools.

4. Results

4.1 Questionnaire distribution

The questionnaire was send to 403 Chinese medicine physicians working in hospitals. We selected Chinese medicine hospitals and Western medicine hospitals[32] with a department of Chinese medicine. The physicians that received the questionnaire were asked to carefully fill it, in return they will obtain 2 credit points from the Chinese Medical Association of Acupuncture[33] (中華針灸醫學會). From the 403 questionnaire sent, 177 physicians returned the questionnaire (44%). However, only 160 questionnaires were used for this study (39.9%). We excluded 17 questionnaires because 11 were blank with sometimes a note explaining that the Chinese medicine physician didn't use acupuncture as a therapeutic method. The 6 other questionnaires were excluded because they contained too much missing data.

4.2 Profile of the questionnaire respondents

The age range of the respondents of the questionnaire was from 28 to 75 years, the average age was 39 years.

Table 4.2.1 Age of the respondents

Age of the respondents (n=159)	
Under 30 years	6.9%
30 to 39 years	44.7%
40 to 49 years	43.0%
50 years and more	14.5%

A majority of respondents were male (67%). The results showed a female predominance in younger physicians (group age: “under 30 years” and “30 to 39 years”). This result was also correlated with the years of clinical practice where we found less female physicians with a long clinical experience.

Most of the physicians obtained a bachelor degree in Taiwan. A lot of them also had a master degree. A few possessed a PhD but one third of these PhD were issued from mainland China.

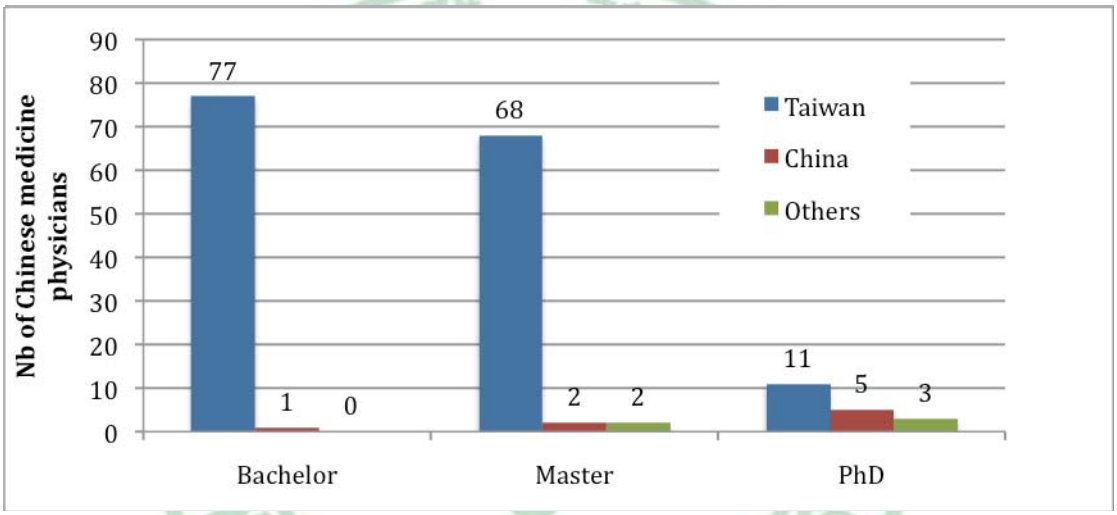


Figure 4.2.1 Degree obtained by the physicians

A majority of the respondents were graduated from the school of Chinese medicine and the school of Post baccalaureate Chinese medicine.

Table 4.2.2 Chinese medicine course

Chinese medicine course (n=160)	
School of Chinese medicine	51.3%
School of Post baccalaureate Chinese medicine	44.4%
Special licence qualification	4.4%

In the school of Post baccalaureate Chinese medicine, we found a larger proportion of female physicians (41.5%) than in the other groups (25.7% for

the school of Chinese medicine and 14.3% for the special licence qualification group). The special licence qualified physicians were older than the physicians in the two other groups, 86% of them fell in the categories of "40 to 49 years" and "50 and more years" (49% for the physicians of the school of Chinese medicine and 45% for the physicians of the school of Post baccalaureate Chinese medicine). Furthermore, they were working only in regional hospitals (71.4%) and teaching hospitals (28.6%). For the two other groups, the physicians were distributed in all the different hospitals.

The majority of the respondents didn't have a lot of clinical experience. Their average years of practice was 7 years (from 1 to 36 years). A large proportion of the physicians of the school of Chinese medicine and the school of Post baccalaureate Chinese medicine fell in the category of "1 to 5 years" of clinical practice. In comparison the special licence qualified physicians had more clinical experience, 43% of them had more than 10 years of clinical experience (37% for the physicians of the school of Chinese medicine and 19% for the physicians of the school of Post baccalaureate Chinese medicine).

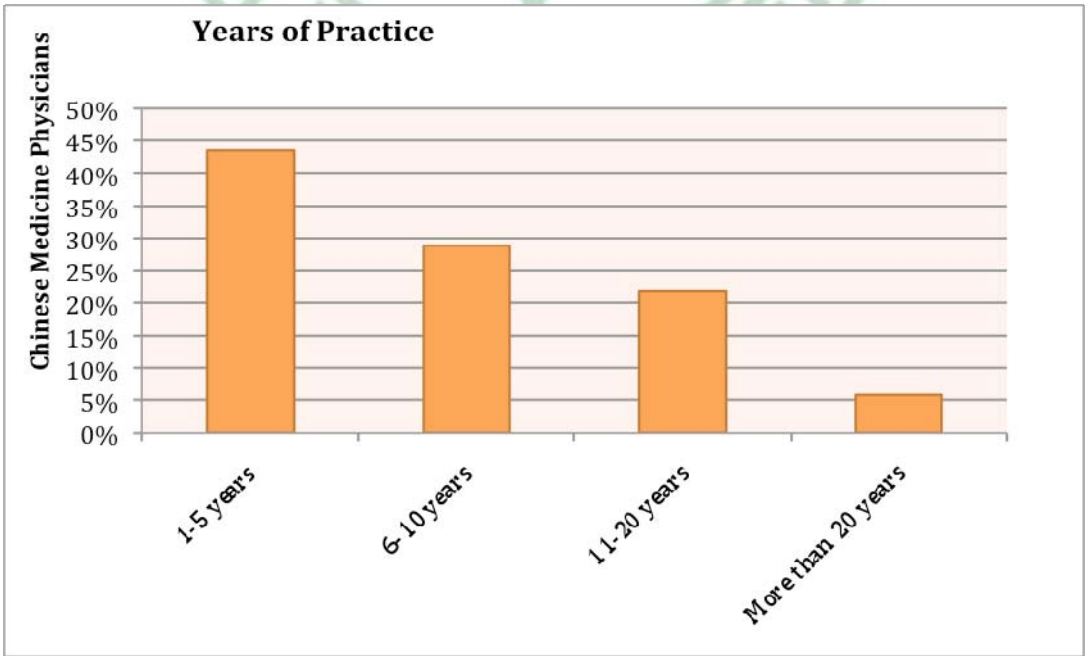


Figure 4.2.2 Years of practice

Most of the physicians worked in a teaching hospital or a regional hospital. The location of the hospitals within cities areas or a districts areas was well balanced. 56% of the hospitals were situated in cities areas and 46% in districts areas.

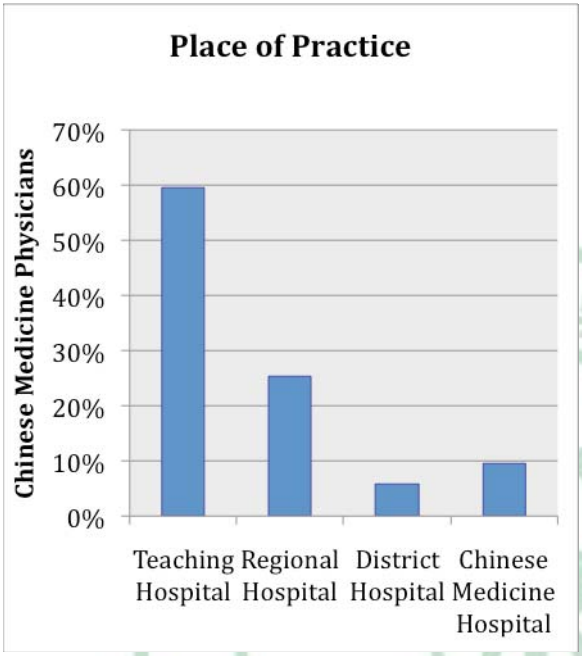


Figure 4.2.3 Place of practice

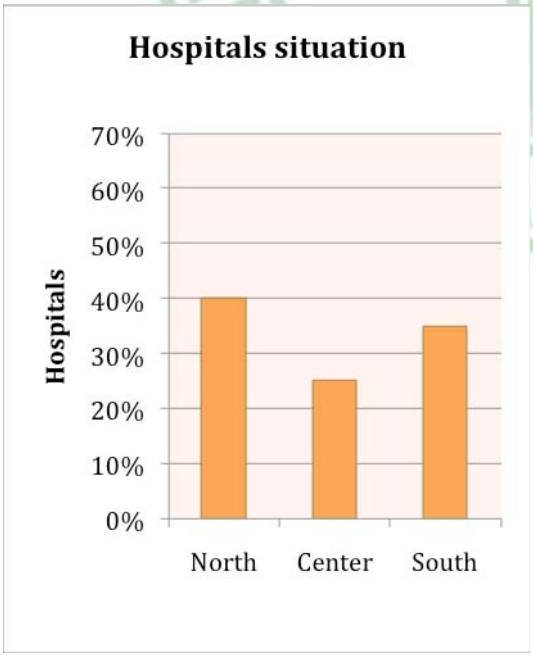


Figure 4.2.4 Hospitals geographical situation

There were a majority of hospitals situated in the North, but the three regions were well represented. The teaching hospitals were distributed in the three parts of the island. A majority of rural hospitals were located in the central part of the island and the Chinese medicine hospitals were mainly situated in the North and in the South. The rural hospitals were more likely to be located in districts areas and the Chinese medicine hospitals were mainly located in cities areas. Teaching and regional hospitals were almost equally distributed between cities and districts areas.

We found a high rate of teaching experience as well as publication that showed an active participation and contribution of the physicians to the medical field. 60.6% of the physicians had teaching experience and 60% of the physicians published articles. Most of the publications were in Chinese.

Table 4.2.3 Publications

Publication	Chinese journal	SCI journal	Chinese & SCI journals
	48.8%	6.9%	4.4%

This participation was related to the age, the years of practice and the education background. In general, teaching experience, publications and participation of international meeting showed a higher rate for the older physicians and for physicians with a long clinical practice. Statistical evidences demonstrated that the teaching experience was correlated to the age and years of practice of the physicians and that the age was also related to the publication's rate.

Table 4.2.4 Participation and contribution regarding the age of the physicians

Age	Under 30 years	30 to 39 years	40 to 49 years	50 years and more
Teaching experience*	18.2%	53.5%	78.2%	60.9%
Publication*	18.2%	49.3%	78.2%	69.6%
Participation to international meetings	27.3%	20.3%	31.5%	36.4%

Table 4.2.5 Participation and contribution regarding the years of practice of the physicians

Years of practice	1 to 5 years	6 to 10 years	11 to 20 years	More than 20 years
Teaching experience*	44.1%	68.9%	79.4%	77.8%
Publication	50.0%	62.2%	73.5%	77.8%
Participation to international meetings	27.9%	16.7%	35.3%	37.5%

It is interesting to note that younger physicians and physicians with less years of clinical practice were more used to teach in students or public associations as older physicians and physicians with more years of clinical practice were teaching in universities, hospitals, medical associations or opening their own classes.

The education background also played a role even there was no statistical evidence for it. Special licence qualified physicians showed a higher rate of participation and contribution. They were mainly teaching in medical associations, student or public associations or having their own class. Physicians from the school of Chinese Medicine were more likely to teach in the universities and finally physicians of school of Post baccalaureate Chinese medicine were less involved in teaching than the two other groups.

Table 4.2.6 Participation and contribution regarding education course of the physicians

Education background	School of Chinese medicine	School of Post baccalaureate Chinese medicine	Special licence qualification
Teaching experience	66.2%	53.7%	85.7%
Publication	67.6%	52.4	71.4%
Participation to international meetings	30.0%	22.8%	49.2%

4.3 Use of acupuncture in general

Acupuncture in Chinese Medicine practice

Chinese Medicine is characterized by its multiplicity of therapeutic methods, the main ones are the medicinal treatment and the acupuncture and moxibustion treatments, besides comes the manipulations techniques [34] including massage or tuina and the prevention techniques that optimize the circulation of Qi like Qigong. Finally other minor techniques as cupping, guasha, bloodletting, the application of plasters and fumigations are also frequently used. In Taiwan, one Chinese medicine physician usually relies on many therapeutic methods[35]. Nevertheless some choose to specialize only in the field of medicinal treatment, some others use both acupuncture and medicinal treatment and add others techniques like manipulation, cupping, guasha and so on. Therefore acupuncture is one of the therapeutic methods used by Chinese Medicine physicians.

The data obtained through the questionnaire showed that the most used therapeutic method was the powdered Chinese medicinal, followed by life style advices and then acupuncture.

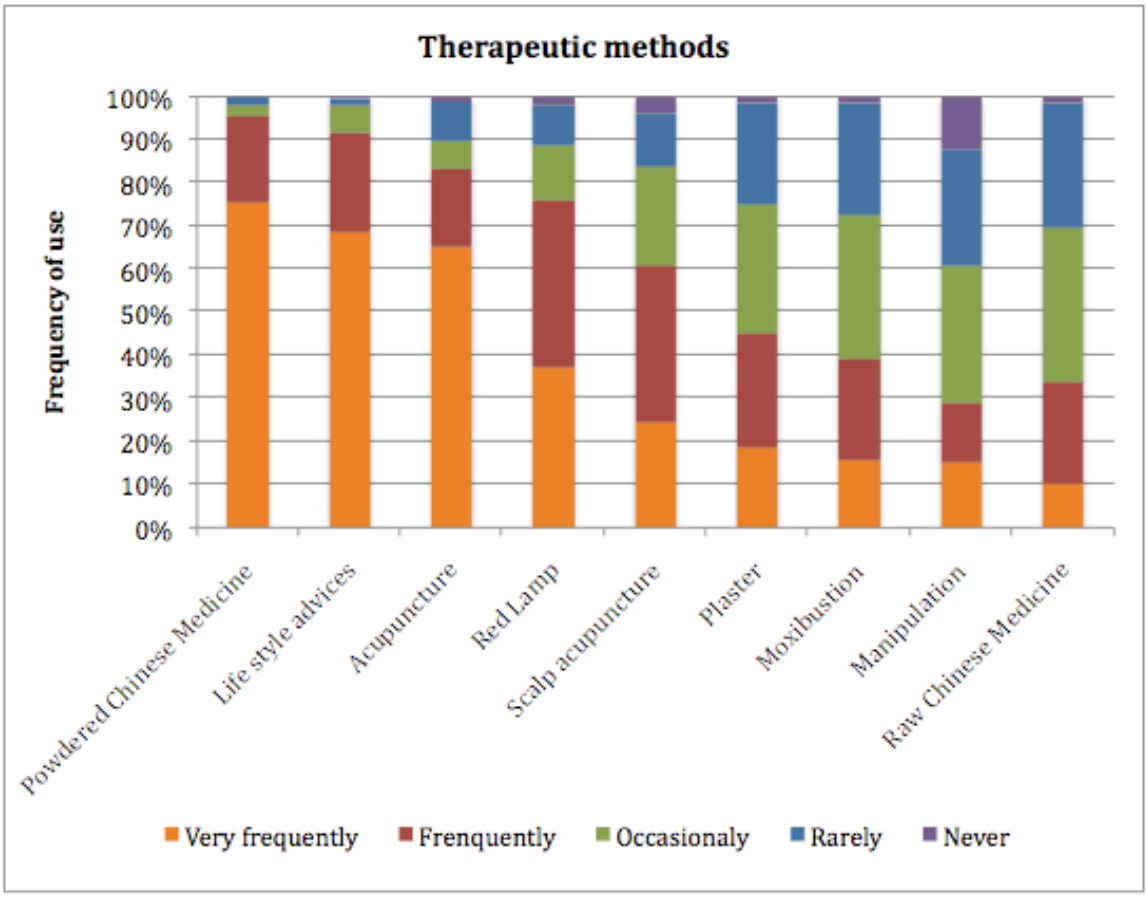


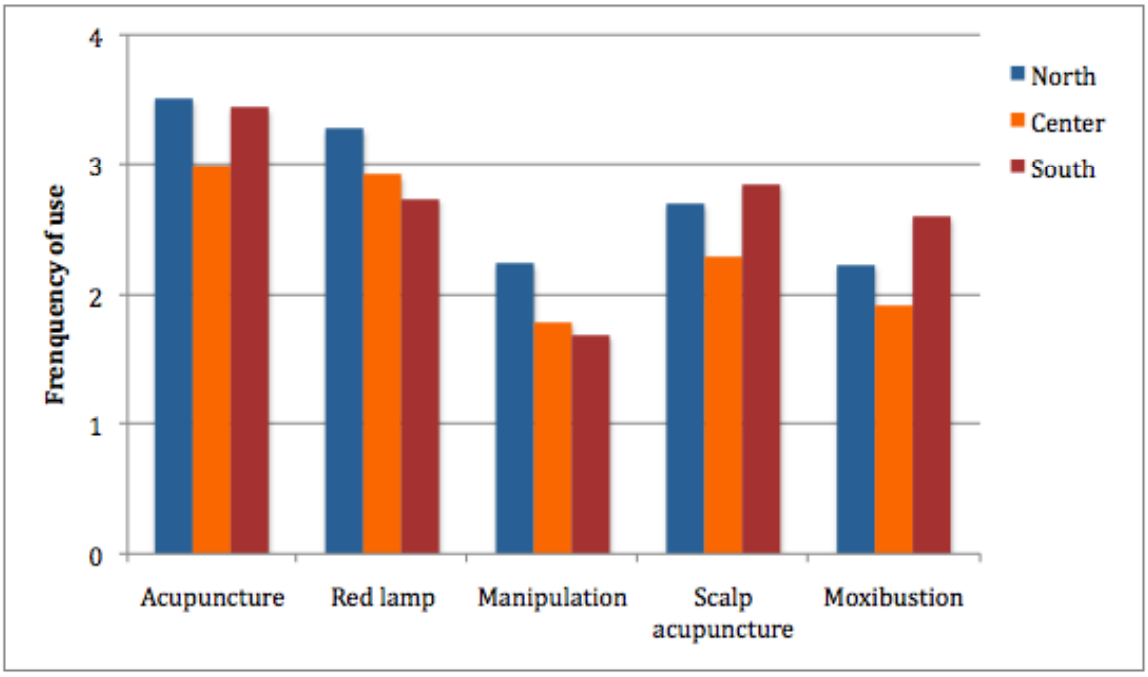
Figure 4.3.1 Therapeutic methods used

75.5% of the physicians used “very frequently” powdered Chinese medicinal and 65% of them used “very frequently” acupuncture. We can also note the high importance of life style advice (68.4% “very frequently”) that includes recommendations about diet, sleep and exercises.

Statistical evidence demonstrated that the different therapeutic methods were strongly correlated with geographical and urban environment.

There were evidences that acupuncture was more widely used in the North than in the centre of Taiwan. The manipulations methods and the use of red lamp were also more popular in the North of the island. On the contrary, moxibustion and scalp acupuncture are more used in the south than in the centre of the country. A similar trend was also observed for the fumigations, which were more used in the south of the island, even there was

no statistical evidence. There were no differences of the frequency uses of powdered Chinese medicinal and raw Chinese medicinal between the different geographical locations.

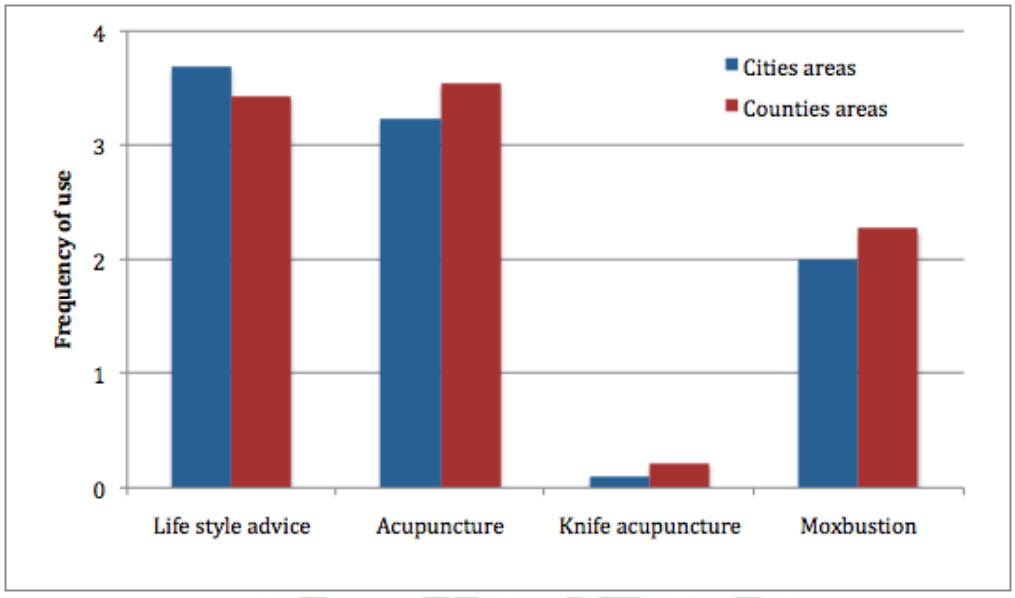


0=Never used; 1=Rarely; 2=Occasionally; 3=Frequently; 4=Very frequently

Figure 4.3.2 Frequency of the therapeutic methods used according the geographical situation

The division between cities areas and districts areas also showed some differences in the use of therapeutics method.

Statistical evidence showed that acupuncture, moxibustion, scalp acupuncture and knife acupuncture were more used in districts areas than in cities areas. By contrast, life style advices were more important into cities areas. In general we found a larger use of therapeutics methods in districts areas than in cities areas.



0=Never used; 1=Rarely; 2=Occasionally; 3=Frequently; 4=Very frequently

Figure 4.3.3 Frequency of the therapeutic methods used regarding the cities and districts areas

Regarding the therapeutic methods there was only one statistical evidence related to the years of clinical practice. Statistics demonstrated that raw Chinese medicinal were more used by physicians with a longer clinical experience. We found the same tendencies for the bloodletting technique. In contrast, the use of powdered Chinese medicinal was more frequently use by the physician with 6 to 10 years of clinical experience.

The use of raw Chinese medicinal and bloodletting technique was also correlated with age. Older physicians favoured more the use of these two therapeutic methods than younger physicians. That also was the case for the use of ear acupuncture, which was more popular for the group age between 40 to 49 years and 50 and more years. The use of powdered Chinese medicinal was predominant for the physicians between 30 to 49 years old.

Statistical evidences also showed that the bloodletting technique was correlated to educational background. Special licence qualified physicians used considerably more this techniques than the two other groups. The

special licence qualified physicians also stand out of the other groups by the fact they used more raw Chinese medicinal and didn't used at all knife acupuncture nor Qigong techniques. We can note that if bloodletting technique and the use of raw Chinese medicinal were strongly correlated with special licence qualified physicians that could be due to the fact that in this group the physicians were older than the physicians from the school of Chinese medicine and the school of Post baccalaureate Chinese medicine (see profile of the respondent p. 20-1).

There were no evidences for the correlation between the different hospitals and the therapeutics methods. However we can distinguish some tendencies especially concerning rural hospitals and Chinese medicine hospitals. In the rural hospitals we found a higher rate of moxibustion and fumigation use. On the contrary, we found less use of raw Chinese medicinal and knife acupuncture than in the other type of hospitals. We also found some similarity between rural hospitals and Chinese medicine hospitals were the use of manipulations and plasters were higher than in teaching and regional hospitals.

Through the multiple linear regression analysis, we found that the group of factors that influenced strongly the use of the treatment methods was those correlated with the environment. There were four evidence of association related to geographical areas (moxibustion, knife acupuncture, manipulations and the use of red lamp). Two evidences were related to the cities/districts areas (manipulations and life style advice) and finally one was related to the type of hospitals (manipulations). The age was also influencing the choice of therapeutic methods (two evidences for the use of acupuncture and the use of red lamp). Finally, one evidence was related to the education background of the physicians and it concerned the use of the bloodletting technique.

Table 4.3.1 Factors associated with the treatment methods (1st Page)

Factors	Acupuncture				Moxibustion				Manipulation				Bloodletting			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	-.03	**.95**	-.89	.84	.51	**.27**	-.40	1.42	-.18	**.73**	-1.22	.86	-.98	**.01***	-1.68	-.29
School of PB of CM	.32	**.45**	-.52	1.16	.29	**.53**	-.61	1.19	-.16	**.76**	-1.18	.87	-.98	**.01***	-1.67	-.29
Special licence	0[a]	**.**	.	.	0[a]	**.**	.	.	0a		.	.	0[a]	**.**	.	.
Under 30 years old	-.59	**.28**	-1.67	.49	.01	**.99**	-1.06	1.08	-.09	**.90**	-1.41	1.24	-.31	**.46**	-1.13	.51
30 to 39 years old	-.55	**.20**	-1.38	.29	.16	**.70**	-.66	.97	-.32	**.54**	-1.34	.71	-.08	**.81**	-.71	.56
40 to 49 years old	-.76	**.05***	-1.52	-.01	.06	**.87**	-.68	.80	-.42	**.37**	-1.35	.51	.12	**.69**	-.45	.69
More than 50 years old	0[a]	**.**	.	.	0[a]	**.**	.	.	0 [a]		.	.	0[a]		.	.
1 to 5 years of practice	.37	**.49**	-.68	1.42	-.31	**.57**	-1.38	.76	.91	**.17**	-39	2.20	-.10	**.82**	-.91	.72
6 to 10 years of practice	.61	**.52**	-.44	1.66	.00	**.99**	-1.06	1.06	.90	**.17**	-39	2.20	-.06	**.89**	-.87	.76
11 to 20 years of practice	.37	**.42**	-.53	1.27	-.14	**.77**	-1.06	.78	.55	**.33**	-.56	1.67	-.10	**.78**	-.81	.60
More than 20 years of practice	0[a]	**.**	.	.	0[a]	**.**	.	.	0 [a]		.	.	0[a]	**.**	.	.
Teaching hospital	-.11	**.71**	-.69	.47	.18	**.55**	-.40	.76	-1.03	**.01***	-1.75	-.31	-.14	**.52**	-.59	.30
Regional hospital	-.34	**.29**	-.97	.29	-.11	**.72**	-.74	.51	-1.25	**.00****	-2.03	-.47	-.09	**.70**	-.57	.39
Rural hospital	-.37	**.46**	-1.33	.60	.09	**.86**	-.88	1.06	-1.29	**.03***	-2.48	-.10	.17	**.66**	-.57	.91
Chinese medicine hospital	0 [a]		.	.	0[a]	**.**	.	.	0 [a]	**.**	.	.	0[a]	**.**	.	.
North of Taiwan	.12	**.58**	-.30	.54	-.09	**.67**	-.50	.33	.72	**.01***	.21	1.23	-.03	**.84**	-.35	.29
Centre of Taiwan	-.37	**.12**	-.83	.10	-.54	**.02***	-.99	-.08	.53	**.07**	-.03	1.10	-.29	**.11**	-.64	.07
South of Taiwan	0[a]	**.**	.	.	0[a]	**.**	.	.	0 [a]	**.**	.	.	0[a]	**.**	.	.
Cities areas	-.30	**.11**	-.68	.07	-.66	**.00****	1.03	-.29	-.47	**.04***	-.92	-.03	-.08	**.59**	-.36	.21
Districts areas	0[a]	**.**	.	.	0[a]	**.**	.		0 [a]	**.**	.	.	0a	**.**	.	.

Data were analysed through Multiple Linear Model analysis and we chose to represent only the factors that attained statistical evidences.
The factors didn't showed a difference with the following treatment methods: ear acupuncture, scalp acupuncture, raw Chinese medicinal, powdered Chinese medicinal, plaster, fumigations, cupping, guasha, qigong

[a]. This parameter is set to zero because it is redundant

* P<.05

**P<.001

Table 4.3.1 Factors associated with the treatment methods (Page 2)

Factors	Knife acupuncture				Life style advices				Redlamp			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	.34	**.13**	-.58	.68	.37	**.26**	-.28	1.01	.29	**.52**	-.60	1.2
School of PB of CM	.20	**.37**	-.10	.78	.32	**.33**	-.32	.95	.53	**.24**	-.36	1.4
Special licence	0[a]	**.**	-.24	.63	0[a]	**.**	.	.	0[a]	**.**	.	.
Under 30 years old	-.07	**.81**	-.63	.49	-.27	**.51**	-1.08	.54	-.84	**.12**	-1.89	.21
30 to 39 years old	.09	**.70**	-.37	.55	.16	**.62**	-.47	.79	-.85	**.04**	-1.65	-.05
40 to 49 years old	-.00	**.99**	-.41	.40	.24	**.40**	-.32	.80	-.45	**.22**	-1.17	.28
More than 50 years old	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**		.
1 to 5 years of practice	-.16	**.58**	-.74	42	.27	**.50**	-.52	1.07	.60	**25**	-.42	1.6
6 to 10 years of practice	.03	**.93**	-.55	.60	.20	**.63**	-.60	.99	.47	**.37**	-.56	1.48
11 to 20 years of practice	-.09	**.71**	-.58	.40	.14	**.67**	-.53	.82	-.00	**.99**	-.87	.87
More than 20 years of practice	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Teaching hospital	-.03	**.82**	-.32	.25	.23	**.32**	-.22	.67	.31	**.29**	-.26	87
Regional hospital	.13	**.42**	-.19	.45	.12	**.62**	-.36	.61	.21	**.50**	-.40	.82
Rural hospital	.36	**.14**	-.12	.84	.36	**.33**	-.37	1.10	.71	**.14**	-.23	1.6
Chinese medicine hospital	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
North of Taiwan	-.12	**.31**	-.31	.10	-.09	**.67**	-.50	.33	.69	**.00****	29	1.10
Centre of Taiwan	-.27	**.02***	-.50	-.04	-.54	**.02***	-.99	-.08	.17	**.45**	-.28	.62
South of Taiwan	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]		.	.
Cities areas	-.02	**.80**	-.20	.16	.37	**.01***	.10	.65	-.24	**.19**	-.60	.12
Districts areas	0a	**.**			0a	**.**	.	.	0a	**.**	.	.

Data were analysed through Multiple Linear Model analysis and we chose to represent only the factors that attained statistical evidences.
The factors didn't showed a difference with the following treatment methods: ear acupuncture, scalp acupuncture, raw Chinese medicinal, powdered Chinese medicinal, plaster, fumigations, cupping, guasha, qigong

[a]. This parameter is set to zero because it is redundant

* P<.05

**P<.001

Diseases treated by acupuncture

Acupuncture is used to improve the communication and circulation between the meridians and regulate the flow of the Qi and the blood in the meridians[36]. Therefore it can treat many diseases.

Results issued from the questionnaire data showed that the most common kind of diseases treated by acupuncture were mainly diseases of the musculoskeletal system and nervous and vascular system[37]. Then came the ear, throat and nose diseases, digestive system disease and rheumatoid and immune diseases.

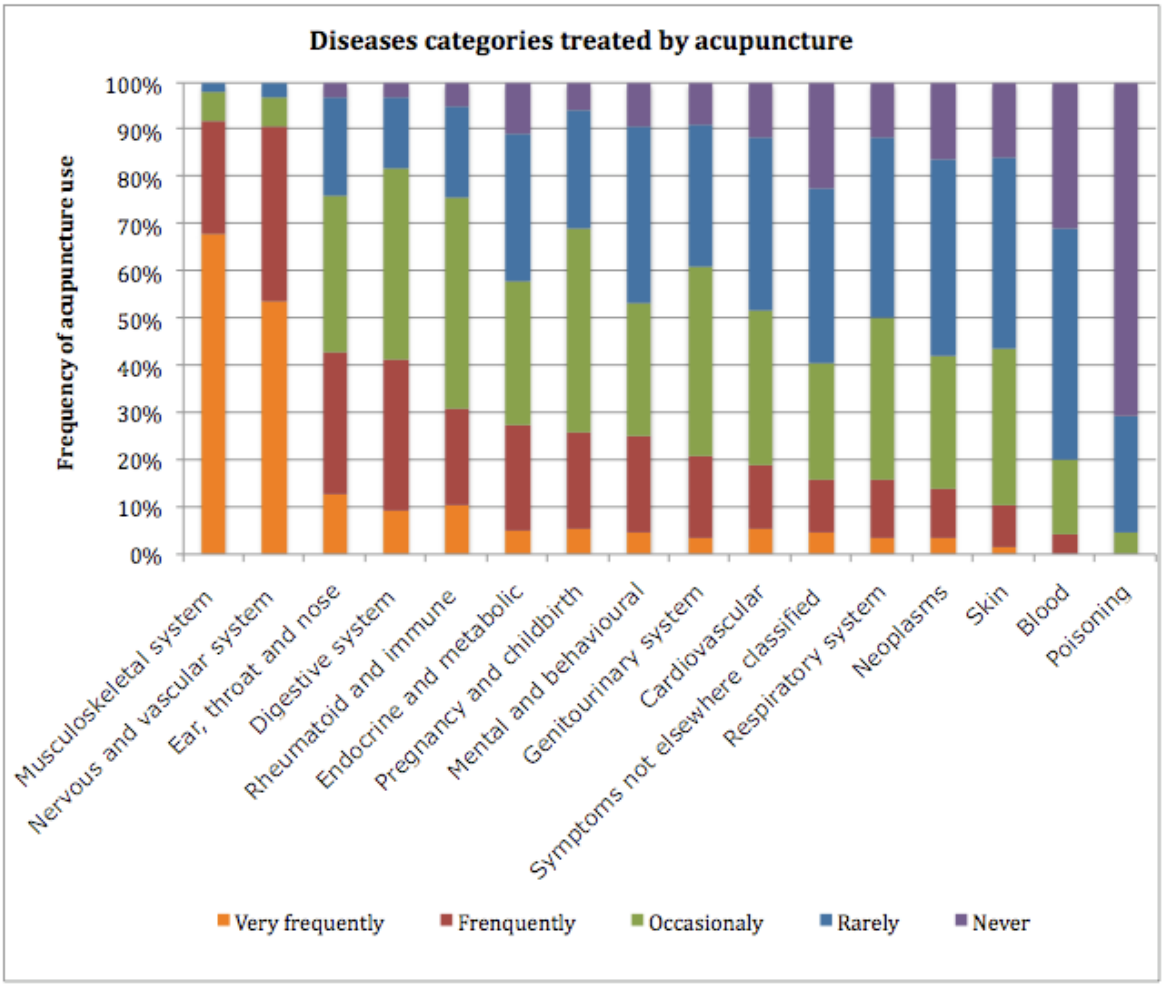


Figure 4.3.4 Diseases categories treated by acupuncture

Besides the ten major diseases picked up among the list of 64 diseases recommended by the WHO for acupuncture treatment were: low back pain, sciatica, sprain and strain, scapulo humeral periarthritis, headache, myopia of children, chronic pain of the locomotor system, dysmenorrhea, backache and facial paralysis[38].

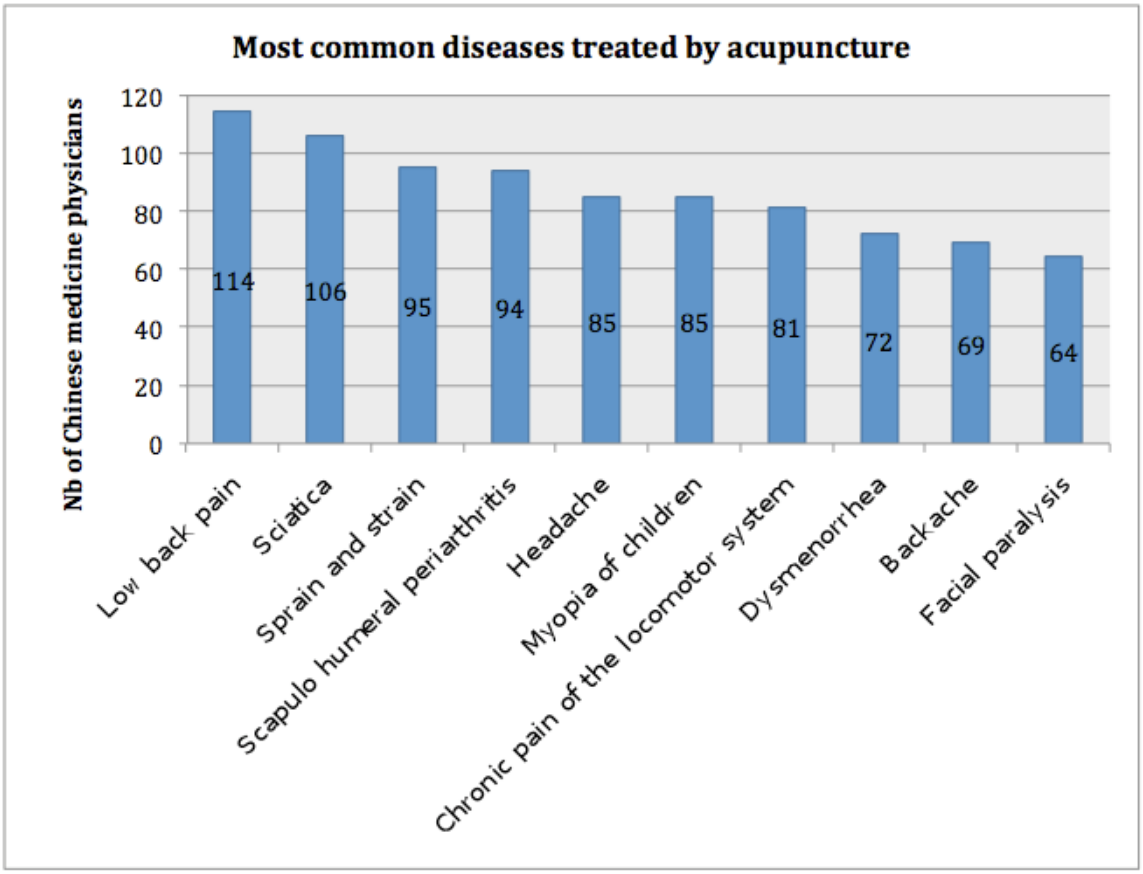
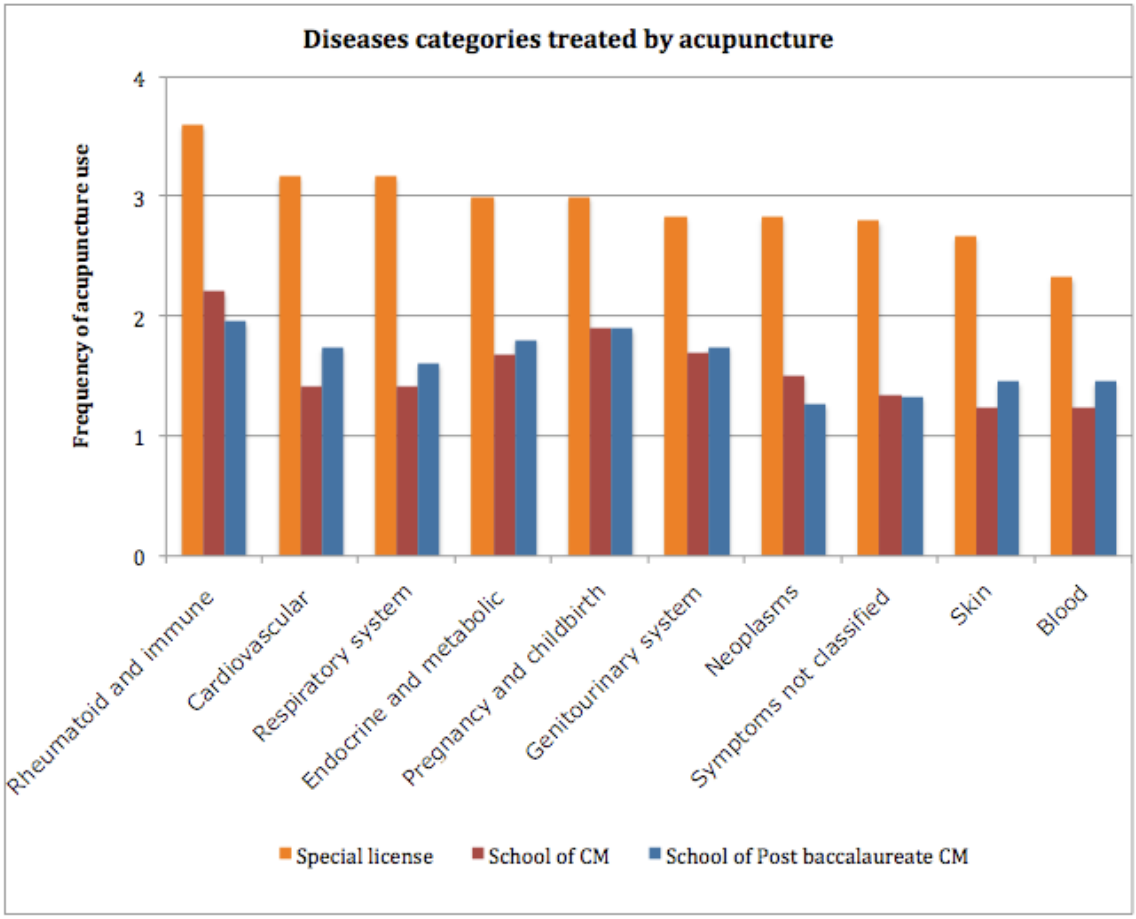


Figure 4.3.5 Most common diseases treated by acupuncture

Apart these ten first common diseases commonly treat with acupuncture, Chinese medicine physicians are also used to treat cervical spondylopathy (60 physicians), hemiplegia (58 physicians), tennis elbow (55 physicians), insomnia (55 physicians), rhinallergosis (53 physicians), migraine (36 physicians), tonic headache (32 physicians), nausea and vomiting (32 physicians), oppilation (27 physicians), prosopalgia (25 physicians)and simple obesity (20 physicians).

Comparative statistics showed some interesting features on how diseases categories treated by acupuncture were related to the physicians educational background, age and years of clinical practice as well as to the geographical environment. Furthermore some evidences also showed some links between the different kind of hospitals and the diseases treated.

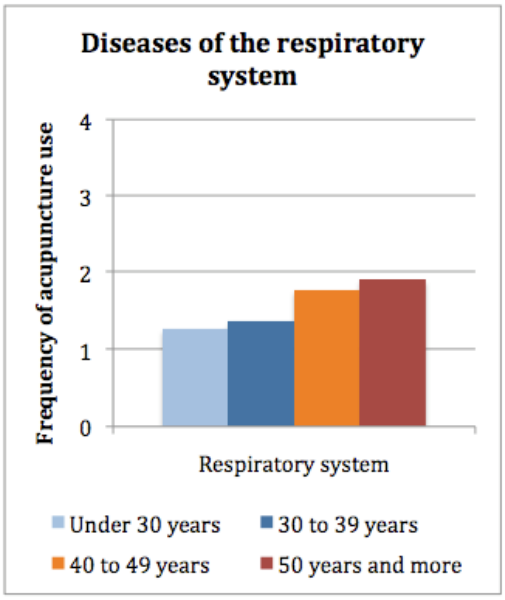
The most striking statistical evidences were linked to the educational background. The special licence qualified physicians used acupuncture for a lager scope of diseases than physician graduated from the school of Chinese medicine and the school of Post baccalaureate Chinese medicine. For the 16 different diseases categories mentionned in the questionnaire, 10 showed evidences of the differences between the special licence qualified physicians with the two other groups (table 4.3) and 3 showed evidences of the differences between the special licence qualified physicians and one of the other groups. Special licence qualified physicians displayed always a higher rate of acupuncture use except for musculoskeletal, neurological diseases and poisoning where there were no differences between the three groups.



0=Never used; 1=Rarely; 2=Occasionally; 3=Frequently; 4=Very frequently

Figure 4.3.6 Diseases categories treated by acupuncture according to the education course

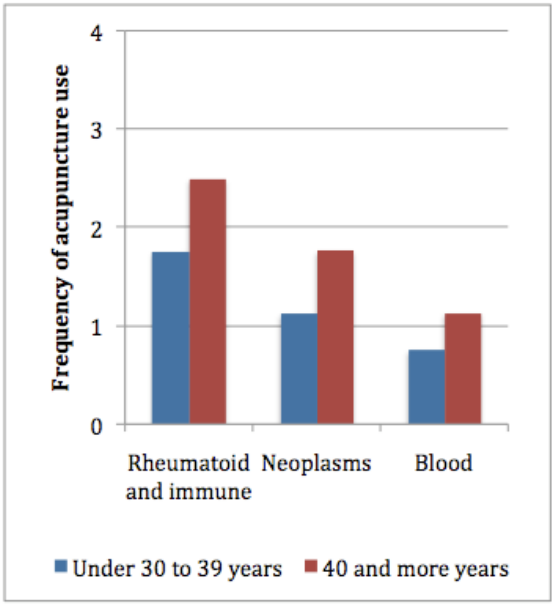
The age of the physician was also strongly correlated with the categories of diseases treated by acupuncture. The older the physicians were, they used acupuncture for a larger scope of diseases. We obtained statistical evidences for four categories: Rheumatoid and immune diseases, neoplasm, diseases of the respiratory system and diseases of the blood. We observed two kinds of tendencies. The first one was a progressive increase of the frequency use proportional to the group age. This tendency is represented by the use of acupuncture for rheumatoid and immune diseases. We found the same tendencies for musculoskeletal diseases, endocrine and metabolic diseases and diseases of the respiratory system.



0=Never used; 1=Rarely; 2=Occasionally; 3=Frequently; 4=Very frequently

Figure 4.3.7 Treatment of the diseases of the respiratory system in relation to the age of the physicians

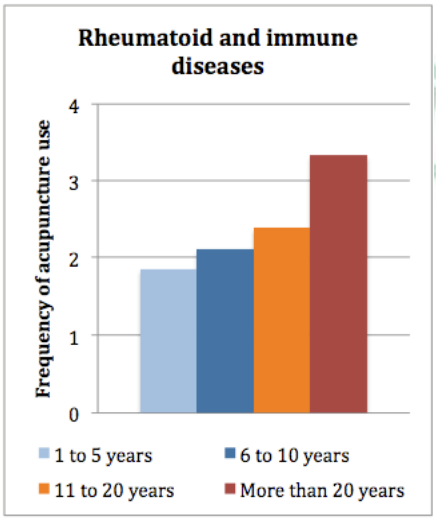
The second tendencies found was an augmentation of acupuncture use proportional to the age if we merged the age of the physician into two groups: “Under 30 to 39 years” and “40 and more years” (sometimes the differences between the group of physicians “Under 30 years” and “30 to 39 years” wasn’t very clear). This allowed us to see the same tendency, that is to say, the older physicians used acupuncture for a larger scope of diseases. This tendency was found for neoplasm, rheumatoid and immune diseases and diseases of the blood with statistical evidence. The same trend was also found for mental and behavioural disorders, diseases of the digestive system, diseases of the ear, throat and nose, diseases of the genitourinary system and symptoms and signs not elsewhere classified.



0=Never used; 1=Rarely; 2=Occasionally; 3=Frequently; 4=Very frequently

Figure 4.3.8 Treatment of rheumatoid and immune diseases, neoplasm and diseases of the blood in relation to the age of the physicians

Regarding the years of clinical practice and the scope of acupuncture use the tendencies were less apparent. We found one statistical evidence for the rheumatoid and immune diseases that was proportionally related to the years of practice.



0=Never used; 1=Rarely; 2=Occasionally; 3=Frequently; 4=Very frequently

Figure 4.3.9 Treatment of rheumatoid and immune diseases in relation to the years of practice

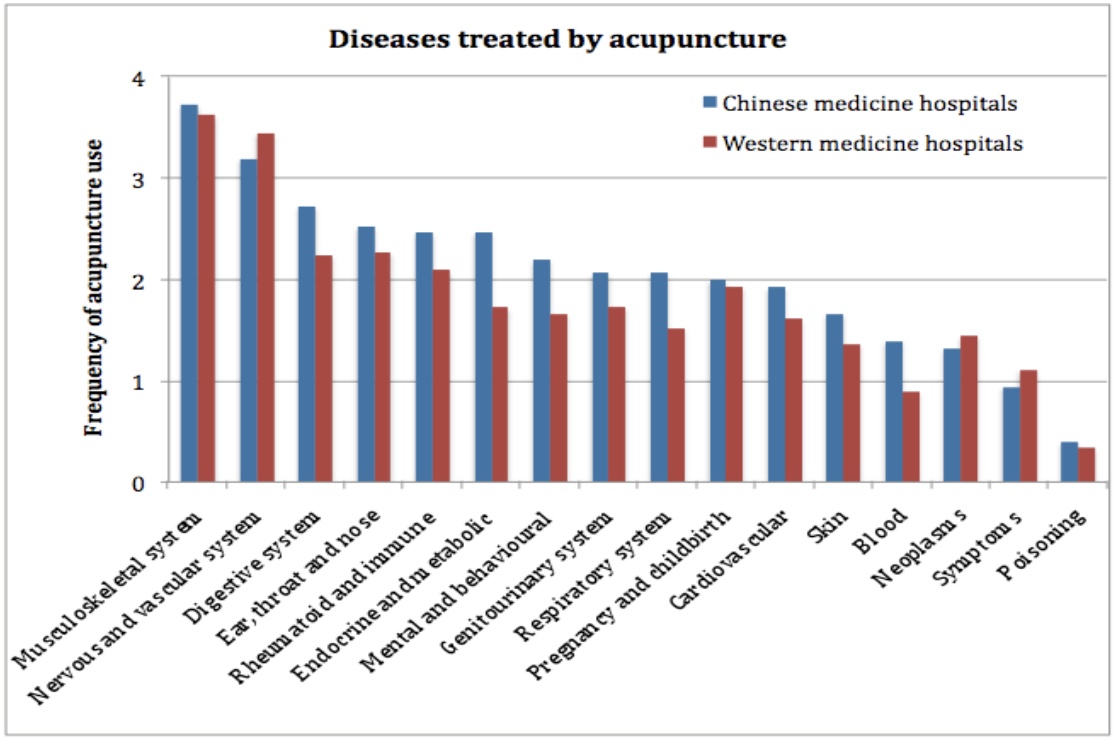
This tendency was unique. The other trend we found was a higher rate of acupuncture use for the musculoskeletal diseases, mental and behavioural disorders, endocrine and metabolic diseases and diseases of the skin by the group of physicians with “more than 20 years” of practice. For the other categories, there were no clear differences between the different groups.

The general trend we found relating geographical situation and the kind of disease treated was that in the north of the island, the physicians used acupuncture for a larger scope of diseases than in the centre of the island. In the centre, acupuncture use was limited to certain categories of diseases (diseases of the musculoskeletal system and diseases of the nervous and vascular system). The south of the island was in between the results found for the north and the centre of the country. However we only found one statistical evidence for the category of “symptoms and signs not elsewhere classified”, the physicians practicing in the north of the country showed an evident prevalence of acupuncture use under both the centre and the South. The same trend was found for neoplasm, cardiovascular diseases and diseases of the respiratory system. The other tendency concerned mainly differences between the north and the centre of the island in the treatment of the diseases with acupuncture. This was the case for mental and behavioural disorders, pregnancy and childbirth, diseases of the skin and diseases of the blood, endocrine and metabolic diseases, diseases of the digestive system, diseases of the ear, throat and nose and diseases of the genitourinary system that displayed a higher use rate in the North. For the other categories of disease there were no specific differences according to the geographical situation.

Regarding the division of the physician between cities and district areas, one evidence of difference was found between the two groups for the endocrine and metabolic diseases. This category of disease was more likely

to be treated by acupuncture in cities areas. Though the tendencies between cities and district areas were not clearly distinct therefore it is difficult to draw conclusion.

Comparing the different hospitals and the categories of disease treated by acupuncture we found a general trend, that was that the rural hospitals tend to have a limited scope of disease treated by acupuncture. In contrast physicians working in Chinese medicine hospital used to treat a larger scope of disease with acupuncture. Chinese medicine hospital showed a higher rate of acupuncture use for rheumatoid and immune diseases, diseases of the digestive system as well as endocrine and metabolic diseases. Regional hospital more frequently used acupuncture for treating questions regarding pregnancy, childbirth and diseases of the nervous and vascular system than the other hospitals. Finally the teaching hospital displayed a more homogeneous use of acupuncture for all the categories of diseases. Now if we separated the hospitals into two groups (Chinese medicine hospitals and Western medicine hospitals), we find an interesting tendency event there are no statistical evidences. Physicians working in Chinese medicine hospitals used acupuncture to treat a larger scope of diseases than those practicing in Western medicine hospitals. This was specially marked for endocrine and metabolic diseases, diseases of the respiratory system as well as for rheumatoid and immune diseases and diseases of the digestive system.



0=Never used; 1=Rarely; 2=Occasionally; 3=Frequently; 4=Very frequently

Figure 4.3.10 Treatment of diseases in relation to the type of hospitals

The multiple linear regression analysis showed that the strongest association of the categories of diseases treated by acupuncture was related to the educational background. Nine items showed an evidence of association with the educational background (rheumatoid and immune diseases, neoplasms, endocrine and metabolic diseases, cardiovascular diseases, diseases of the respiratory system, pregnancy and childbirth, diseases of the skin, diseases of the blood and symptoms, signs not elsewhere classified). Three items showed a correlation with the age (rheumatoid and immune diseases, diseases of the ear, nose and throat and injury and poisoning). Three items showed an evidence of association with the geographical area (neoplasms, mental and behavioural diseases and symptoms, signs not elsewhere classified). Finally the type of hospitals was associated with two items (endocrine and metabolic diseases and diseases of the respiratory system), and the cities/districts areas were associated with one item (neoplasm).

Table 4.3.2 Factors associated with the categories of diseases treated by acupuncture (1st Page)

Factors	Poisoning				Neoplasm				Endocrine and metabolic diseases				Diseases of the respiratory system			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	-.27	**.34**	-.83	.29	-1.06	**.02***	-1.93	-.20	-1.23	**.01***	-2.23	-.30	-1.45	**.00****	-2.29	-.60
School of PB of CM	-.08	**.79**	-.63	.48	-1.16	**.01***	-2.02	-.31	-1.05	**.03***	-2.00	-.09	-1.26	**.00****	-2.10	-.43
Special licence	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Under 30 years old	-.84	**.01***	-1.49	-.18	-.74	**.16**	-1.77	.30	.02	**.97**	-1.12	1.15	-.55	**.27**	-1.54	.44
30 to 39 years old	-.71	**.01***	-1.22	-.21	-.75	**.07**	-1.56	.05	-.36	**.42**	-1.24	.52	-.70	**.07**	-1.46	.07
40 to 49 years old	-.50	**.03***	-.95	-.05	.01	**.99**	-.72	.73	.05	**.91**	-.74	.83	-.25	**.48**	-.93	.44
More than 50 years old	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
1 to 5 years of practice	.66	**.04***	.02	1.30	-.15	**.77**	-1.16	.86	-.12	**.83**	-1.23	.99	.17	**.72**	-.79	1.14
6 to 10 years of practice	.70	**.03***	.06	1.33	-.16	**.76**	-1.17	.85	-.07	**.91**	-1.17	1.04	.16	**.75**	-.81	1.12
11 to 20 years of practice	.44	**.11**	-.10	.99	-.57	**.20**	-1.44	.30	-.46	**.34**	-1.41	.49	-.15	**.71**	-.98	.67
More than 20 years of practice	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Teaching hospital	.05	**.79**	-.31	.40	.17	**.54**	-.38	.72	-.71	**.03***	-1.32	-.09	-.56	**.04***	-1.10	-.02
Regional hospital	-.09	**.64**	-.47	.29	-.11	**.71**	-.71	.48	-.72	**.03***	-1.38	-.06	-.43	**.14**	-1.01	.15
Rural hospital	-.15	**.63**	-.74	.45	-.33	**.48**	-1.25	.60	-.83	**.11**	-1.86	.20	-.63	**.17**	-1.52	.27
Chinese medicine hospital	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
North of Taiwan	-.03	**.82**	-.28	.23	.46	**.03***	.06	.86	-.07	**.77**	-.51	.38	.13	**.49**	-.25	.52
Centre of Taiwan	-.06	**.70**	-.34	.23	.19	**.41**	-.26	.63	-.25	**.32**	-.75	.25	-.14	**.53**	-.56	.29
South of Taiwan	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Cities areas	-.08	**.51**	-.30	.15	-.40	**.03***	-.76	-.05	-.03	**.90**	-.42	.37	-.18	**.31**	-.52	17
Districts areas	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.

Data were analysed through Multiple Linear Model analysis and we chose to represent only the factors that attained statistical evidences.
The factors didn't showed a difference with the following categories of diseases: musculoskeletal diseases, diseases of the nervous and vascular system, diseases of the digestive system and diseases of the genitourinary system.

[a]. This parameter is set to zero because it is redundant

* P<.05

**P<.001

Table 4.3.2 Factors associated with the categories of diseases treated by acupuncture (Page 2)

Factors	Rheumatoid and immune diseases				Symptoms and signs not elsewhere classified				Diseases of the skin				Cardiovascular diseases			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	-.79	**.09**	-1.72	.14	-1.14	**.04***	-2.23	-.04	1.20	**.01***	-2.02	-.38	-1.42	**.00****	-2.32	-.52
School of PB of CM	-1.00	**.03***	-1.91	-.09	-1.16	**.03***	-2.21	-.10	-.96	**.02***	-1.78	-.15	-1.19	**.01***	-2.08	-.30
Special licence	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Under 30 years old	-1.08	**.04***	-2.10	-.06	-.22	**.72**	-1.47	1.02	.01	**.99**	-.96	.97	-.33	**54**	-1.38	.73
30 to 39 years old	-.99	**.02***	-1.78	-.20	-.71	**.15**	-1.68	.26	.07	**.85**	-.68	.81	-.52	**.21**	-1.33	.30
40 to 49 years old	-.45	**.22**	-1.16	.26	-.26	**.57**	-1.16	.64	.14	**.69**	-.53	.80	-.07	**.84**	-.80	.66
More than 50 years old	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
1 to 5 years of practice	-.44	**.39**	-1.44	.57	.77	**.22**	-.47	2.01	-.86	**.08**	-1.80	.09	.25	**.64**	-.79	1.28
6 to 10 years of practice	-.42	**.41**	-1.41	.58	.69	**.27**	-.54	1.92	-.75	**.12**	-1.69	.19	.07	**.89**	-.96	1.10
11 to 20 years of practice	-.57	**.19**	-1.43	.29	.54	**.34**	-.57	1.64	-.68	**.10**	-1.48	.13	-.18	**.69**	-1.06	.70
More than 20 years of practice	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Teaching hospital	-.37	**.18**	-.92	.18	.09	**.80**	-.59	.77	-.26	**.32**	-.79	.26	-.49	**.09**	-1.06	.08
Regional hospital	-.12	**.69**	-.71	.47	-.23	**.54**	-.96	.51	-.05	**.86**	-.61	.51	-.09	**.78**	-.70	.53
Rural hospital	-.24	**.60**	-1.16	.67	.14	**.79**	-.94	1.23	-.29	**.52**	-1.16	.59	-.84	**.08**	-1.80	.12
Chinese medicine hospital	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
North of Taiwan	.27	**.19**	-.13	.66	.78	**.00****	.29	1.27	-.03	**.88**	-.40	.35	.28	**.18**	-.13	.69
Centre of Taiwan	.10	**.64**	-.33	.54	.13	**.62**	-.40	.66	-.22	**.31**	-.63	.20	.17	**.46**	-.29	.63
South of Taiwan	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Cities areas	-.27	**.13**	-.62	.08	-.21	**.34**	-.64	.22	. .05	**.79**	-.29	.38	-.24	**.19**	-.61	.13
Districts areas	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.

Data were analysed through Multiple Linear Model analysis and we chose to represent only the factors that attained statistical evidences.
The factors didn't showed a difference with the following categories of diseases: musculoskeletal diseases, diseases of the nervous and vascular system, diseases of the digestive system and diseases of the genitourinary system.

[a]. This parameter is set to zero because it is redundant

* P<.05

**P<.001

Table 4.3.2 Factors associated with the categories of diseases treated by acupuncture (Page 3)

Factors	Diseases of the blood				Diseases of the ear, nose and throat				Pregnancy and childbirth				Mental and behavioural diseases			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	-1.27	**.00****	-1.97	-.56	-.38	**.39**	-1.26	.50	-.83	**.07**	-1.71	.05	-.37	**.42**	-1.28	.54
School of PB of CM	-1.10	**.00****	-1.80	-.40	-.43	**.32**	-1.30	.43	-.97	**.03***	-1.84	-.10	-.44	**.33**	-1.33	.45
Special licence	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
Under 30 years old	-.21	**.63**	-1.04	.63	-.99	**.08**	-2.09	.11	-.18	**.74**	-1.21	.86	-.35	**.54**	-1.48	.78
30 to 39 years old	-.54	**.10**	-1.18	.10	-.96	**.03***	-1.80	-.12	.17	**.68**	-.64	.97	-.70	**.11**	-1.57	.17
40 to 49 years old	-.26	**.37**	-.84	.31	-.35	**.36**	-1.11	.41	.22	**.54**	-.50	.94	-.11	**.79**	-.89	.67
More than 50 years old	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
1 to 5 years of practice	.22	**.59**	-.59	1.03	.92	**.09**	-.15	1.10	-.11	**.84**	-1.2	.91	.32	**.57**	-.79	1.42
6 to 10 years of practice	.19	**.65**	-.62	.99	.50	**.36**	-.57	1.57	-.02	**.97**	-1.03	.99	.15	**.78**	-.95	1.3
11 to 20 years of practice	.04	**.91**	-.65	.73	.37	**.42**	-.54	1.29	-.37	**.40**	-1.24	.49	-.09	**.84**	-1.03	.85
More than 20 years of practice	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
Teaching hospital	-.37	**.10**	-.82	.08	-.09	**.76**	-.69	.50	-.12	**.67**	-.69	.44	-.46	**.14**	-1.07	.15
Regional hospital	-.37	**.13**	-.86	.11	.01	**.99**	-.64	.65	.06	**.84**	-.54	.67	-.44	**.19**	-1.10	.22
Rural hospital	-.75	**.05***	-1.51	.00	.50	**.32**	-.49	1.50	-.10	**.84**	-1.04	.84	-.42	**.42**	-1.44	.60
Chinese medicine hospital	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
North of Taiwan	.01	**.97**	-.32	.33	.22	**.31**	-.21	.65	.25	**.23**	-.16	.65	.45	**.05***	.01	.89
Centre of Taiwan	-.26	**.15**	-.62	.10	-.33	**.17**	-.80	.14	-.25	**.28**	-.69	.20	-.11	**.66**	-.59	.38
South of Taiwan	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.
Cities areas	.16	**.28**	-.13	.45	.18	**.34**	-.20	.56	-.03	**.86**	-.39	.33	-.15	**.46**	-.54	.24
Districts areas	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.	0[a]	.	.	.

Data were analysed through Multiple Linear Model analysis and we chose to represent only the factors that attained statistical evidences.
The factors didn't showed a difference with the following categories of diseases: musculoskeletal diseases, diseases of the nervous and vascular system, diseases of the digestive system and diseases of the genitourinary system.

[a]. This parameter is set to zero because it is redundant

* P<.05

**P<.001

4.4 Specific use of acupuncture for low back pain

Diagnosis of low back pain

Theory

Chinese Medicine contains a lot of different diagnosis systems to express the cause of a disease. The ways Chinese medicine physicians express the cause of low back pain is never completely the same but broad concepts are in general similar[39].

In the questionnaire, the physicians were asked to give their opinion about the importance of four different pattern identifications to diagnose low back pain.

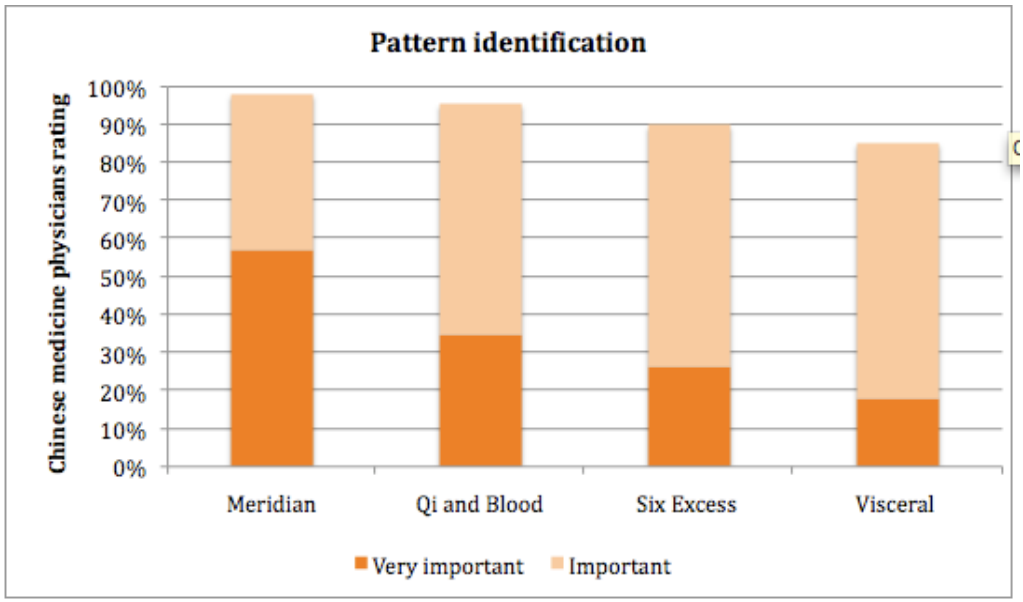
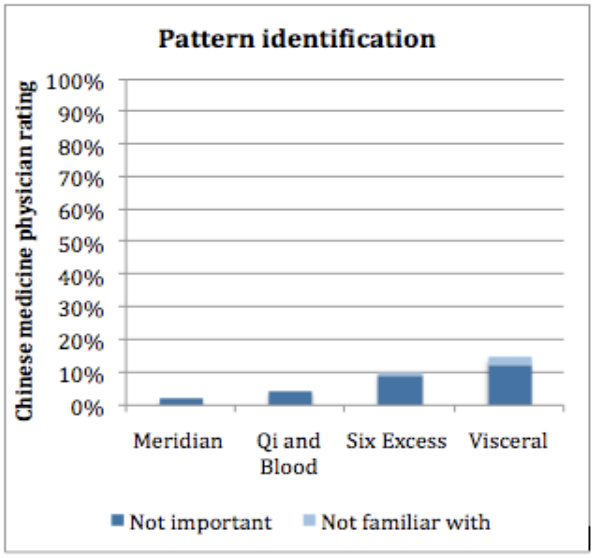


Figure 4.4.1 Patterns identification 1

The meridian pattern identification was considered as the most important tool, followed by the Qi and Blood pattern, the Six Excesses pattern and finally the Visceral pattern identifications.



By opposition, Visceral patterns and the Six Excesses pattern identifications were considered as less important than the Qi and Blood pattern and the Meridian pattern identifications.

Figure 4.4.2 Patterns identification 2

Using comparative statistics, we didn't found any significant trends related to education background, age and years of practice of the physician nor related to the geographical areas or the different hospitals.

But the multiple linear regression analysis showed interesting correlations. The evidence of factors associations was mainly related to the age of the physicians and secondarily to the geographical location. The Visceral pattern, the Meridian pattern and the Six Excesses pattern identification showed and association with age of the physicians. The younger physicians founded less important to use them than older physicians. Concerning the geographical areas, the Six Excesses pattern and the Qi and Blood pattern identification showed and evident association. Those pattern identifications were found more important by the physicians practicing in the north and in the centre of the country than those practicing in the South. The cities/districts areas division showed a difference for the Visceral pattern identification that was more used by physicians practicing in districts areas.

Table 4.4.1 Factors associated with the importance accorded to pattern identification

Factors	Meridian pattern identification				Qi and Blood pattern identification				Six Excesses pattern identification				Visceral pattern identification			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	.12	**.62**	-.36	.59	.15	**.55**	-.33	.62	.35	**.17**	-.15	.86	.10	**.73**	-.46	.65
School of PB of CM	.12	**.62**	-.35	.58	.24	**.31**	-.23	.71	.49	**.05***	-.01	.98	.36	**.19**	-.18	.90
Special licence	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Under 30 years old	-.86	**.01***	-1.46	-.26	-.49	**.11**	-1.10	.12	-1.0	**.00****	-1.65	-.38	-.79	**.03***	-1.49	-.09
30 to 39 years old	-.58	**.01***	-1.05	-.12	-.41	**.09**	-.88	.06	-.54	**.03***	-1.03	-.04	-.65	**.02***	-1.19	-.11
40 to 49 years old	-.45	**.04***	-.87	-.03	-.37	**.09**	-.79	.06	-.498	**.03***	-.95	-.05	-.45	**.07**	-.94	.04
More than 50 years old	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
1 to 5 years of practice	.47	**.11**	-.11	1.06	.39	**.19**	-.20	.99	.59	**.07**	-.04	1.21	.05	**.89**	-.66	76
6 to 10 years of practice	.47	**.12**	-.12	1.06	.37	**.22**	-.22	.96	.56	**.08**	-.07	1.18	.09	**.80**	-.62	.80
11 to 20 years of practice	.28	**.28**	-.23	.78	.25	**.33**	-.26	.76	.44	**.11**	-.10	.98	.03	**.92**	-.58	.64
More than 20 years of practice	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Teaching hospital	.11	**.52**	-.21	.42	-.10	**.56**	-.42	.23	.02	**.89**	-.32	.36	.19	**.33**	-.19	.56
Regional hospital	-.00	**.99**	-.35	.34	-.02	**.91**	-.37	.33	.16	**.39**	-.21	.53	.13	**.53**	-.27	.53
Rural hospital	-.16	**.56**	-.69	.38	-.17	**.54**	-.71	.37	-.16	**.58**	-.73	.41	.26	**.41**	-.36	.88
Chinese medicine hospital	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
North of Taiwan	.13	**.28**	-.10	.36	.26	**.03***	.03	.49	.35	**.01***	.10	.59	.25	**.08**	-.03	.52
Centre of Taiwan	.16	**.21**	-.09	.42	.24	**.07**	-.02	.50	.42	**.00****	.15	.70	.22	**.15**	-.08	.53
South of Taiwan	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Cities areas	.00	**.10**	-.20	.20	.04	**.72**	-.17	.24	-.01	**.91**	-.23	.20	-.25	**.04***	-.48	-.01
Districts areas	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.

Data were analysed through Multiple Linear Model analysis

[a]. This parameter is set to zero because it is redundant
* P<.05
**P<.001

Diagnosis methods

Diagnostic in Chinese medicine is characterized by its four examination methods that are the inspection, listening and smelling, inquiry, and palpation.

In the data obtained through the questionnaire, the four major diagnosis tools were the location of pain, the quality and intensity of pain, the factors that make the pain better and worse and the history of pain. All of them are a part of the inquiry diagnosis method. In comparison the diagnosis tools of the inspection methods (observation of the tongue, complexion, vitality, X ray , MRI) are less important to diagnose low back pain.

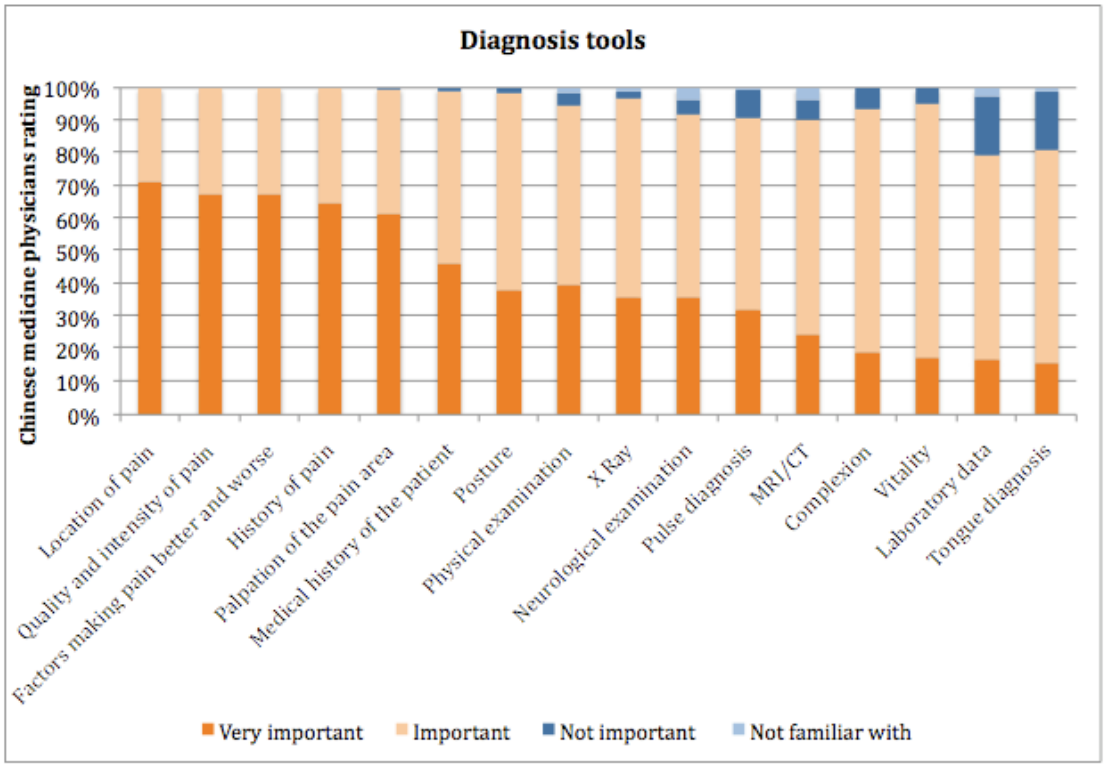


Figure 4.4.3 Diagnosis tools

If we compare diagnosis tools specific to Chinese or Western medicine, we can see that the diagnosis tools of Chinese medicine are clearly less used.

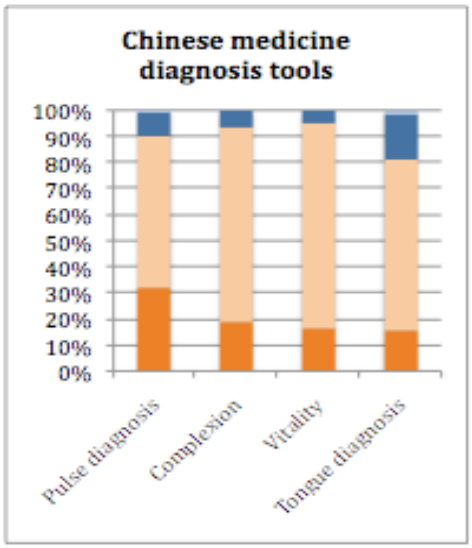


Figure 4.4.4 Chinese medicine diagnosis tools

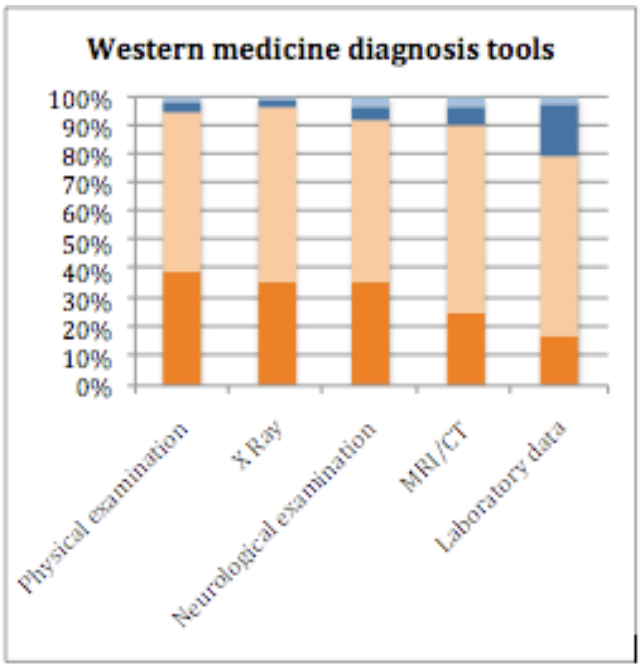


Figure 4.4.5 Western medicine diagnosis tools

The comparative analysis of the different factors didn't showed statistical evidence. Though, we saw some in interesting tendencies.

Regarding the education background, we saw two aspects. On one hand, the special license qualified physicians differed of the two other groups in the importance they accorded to the diagnosis tools (except for the laboratory data where there were no differences between the groups). Special license qualified physicians favored more the inspection of vitality, the complexion, the use of X ray and MRI/CT than the two other groups. On the contrary, they considered obviously less important the tongue diagnosis, the pulse diagnosis and the use of physical and neurological examination. On the other hand, physicians of the School of Post baccalaureate Chinese medicine were less familiar with diagnosis tools specific to Western medicine, that is the use of X ray, MRI/CT, laboratory data, physical examination and neurological examinations.

The age and the years of practice didn't show mutual correlation except

for the tongue diagnosis. The tongue diagnosis was more used by older physicians (“more than 50 years”) or physician with a long clinical experience (‘”more than 20 years”). Younger physician (“under 30 years”) accorded a strong importance to pulse diagnosis as well as the laboratory data in comparison to the other group age. This tendency was not correlated with the years of practice.

An interesting trend related to the years of practice was that the physicians between 1 to 10 years of clinical experience were less familiar with specific Western medicine diagnosis tools.

Table 4.4.2 Diagnosis tools: Percentage of “Not familiar with” regarding the years of practice

Diagnosis tools	X Ray	MRI/CT	Laboratory data	Physical examination	Neurological examination
1 to 5 years	1.5%	4.5%	1.5%	2.9%	7.4%
6 to 10 years	2.2%	2.3%	6.7%	2.2%	2.2%
11 to 20 years	- -	2.9%	- -	- -	- -
More than 20 years	- -	- -	- -	- -	- -

Concerning variations between the different hospitals, we found that Chinese medicine hospitals differed from the other groups. Physicians working in a Chinese medicine hospital found “very important” to look at the tongue, the vitality, the complexion, the posture and the pulse of the patient.

Table 4.4.3 Diagnosis tools: Percentage of "Very important" regarding the type of hospitals

Diagnosis tools	Tongue	Vitality	Complexion	Posture	Pulse
Chinese medicine hospital	26.7%	26.7%	33.3%	46.7%	46.7%
Teaching hospital	14%	15.1%	14.1%	38.3%	30.9%
Regional hospital	17.5%	20.0%	27.5%	35.0%	25.6%
Rural hospital	11.1%	11.1%	11.1%	33.3%	33.3%

On the contrary, they found less important to use X ray, MRI/CT, laboratory data, palpation of the pain area and physical examination than the physicians working in other kind of hospitals.

Table 4.4.4 Diagnosis tools: Percentage of "Very important" regarding the type of hospitals

Diagnosis tools	X Ray	MRI/CT	Laboratory data	Palpation of the pain	Physical examination
Chinese medicine hospital	20.0%	14.3%	0.0%	46.7%	26.7%
Teaching hospital	36.2%	23.9%	14.9%	64.5%	39.4%
Regional hospital	40.0%	30.3%	22.5%	59.0%	27.5%
Rural hospital	33.3%	22.2%	22.2%	55.6%	33.3%

There were no significant correlations worth to be mentioned correlating the diagnosis tools used and the geographical situation of the clinical practice.

Through the multiple linear regression analysis, we found evidences that the groups of factors that influenced the use of diagnosis tools were the education background (the evidence found concerned the pain history which

was more important for the physicians graduated from the school of Chinese medicine), the geographical location (the evidence found concerned the pulse diagnosis which was considered more important by the physicians practicing in the north and in the centre of the island) and the cities/districts areas division (the physicians practicing in districts areas accorded more importance to the pulse diagnosis).

Table 4.4.5 Factors associated with the importance accorded to the diagnosis tools

Factors	History of pain				Pulse			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	.48	**.03***	.06	.91	.36	**.19**	-.18	.90
School of PB of CM	.47	**.03***	.05	.89	.39	**.14**	-.13	.92
Special licence	0[a]	.	.	.	0[a]	.	.	.
Under 30 years old	-.05	**.86**	-.58	.48	-.24	**.49**	-.92	.44
30 to 39 years old	-.09	**.68**	-.49	.32	-.30	**.26**	-.83	.22
40 to 49 years old	-.07	**.70**	-.44	.29	-.07	**.79**	-.54	.41
More than 50 years old	0[a]	.	.	.	0[a]	.	.	.
1 to 5 years of practice	.34	**.20**	-.18	.85	.25	**.46**	-.41	.91
6 to 10 years of practice	.40	**.13**	-.12	.91	.12	**.71**	-.54	.78
11 to 20 years of practice	.42	**.06**	-.02	.86	.10	**.72**	-.46	.67
More than 20 years of practice	0[a]	.	.	.	0[a]	.	.	.
Teaching hospital	.12	**.41**	-.17	.41	-.27	**.15**	-.63	.09
Regional hospital	.16	**.32**	-.15	.47	-.29	**.15**	-.68	.10
Rural hospital	.10	**.68**	-.38	.58	-.53	**.08**	-1.14	.07
Chinese medicine hospital	0[a]	.	.	.	0[a]	.	.	.
North of Taiwan	.14	**.19**	-.07	.34	.27	**.04***	.01	.53
Centre of Taiwan	.05	**.65**	-.18	.28	.41	**.01***	.13	.70
South of Taiwan	0[a]	.	.	.	0[a]	.	.	.
Cities areas	.01	**.89**	-.1	.19	-.24	**.04***	-.47	-.01
Districts areas	0[a]	.	.	.	0[a]	.	.	.

Data were analysed through Multiple Linear Model analysis and we chose to represent only the factors that attained statistical evidences.
The factors didn't showed a difference with the following diagnosis tools: tongue diagnosis, vitality, complexion, posture, X ray, MRI, location of pain, quality and intensity of the pain, factor that make the pain better and worse, medical history of the patient, laboratory data, palpation of the pain area, physical examination and neurological examination.

[a]. This parameter is set to zero because it is redundant

* P<.05

**P<.001

Treatment of low back pain

In Chinese Medicine the treatment used is closely correlated to the diagnosis. Therefore the treatment of chronic and acute low back pain often differ whatsoever in the choice of acupuncture points, needle technique, retention time of the needles, frequency of the treatment and complementary therapeutic techniques used.

Choice of acupuncture points

In the data obtained through the questionnaire, we discovered that the four most used point used to treat low back pain were Weizhong BL40 (委中), Shenshu BL23 (腎俞), Yanglingquan GB34 (陽陵泉) and Danchangshu BL25 (大腸俞), with a pattern of use than favored Weizhong BL40 (委中), Shenshu BL23 (腎俞) and Yanglingquan GB34 (陽陵泉) for acute low back pain. For chronic low back pain the most usual set of points was Shenshu BL23 (腎俞), Weizhong BL40 (委中), and Dachangshu BL25 (大腸俞).

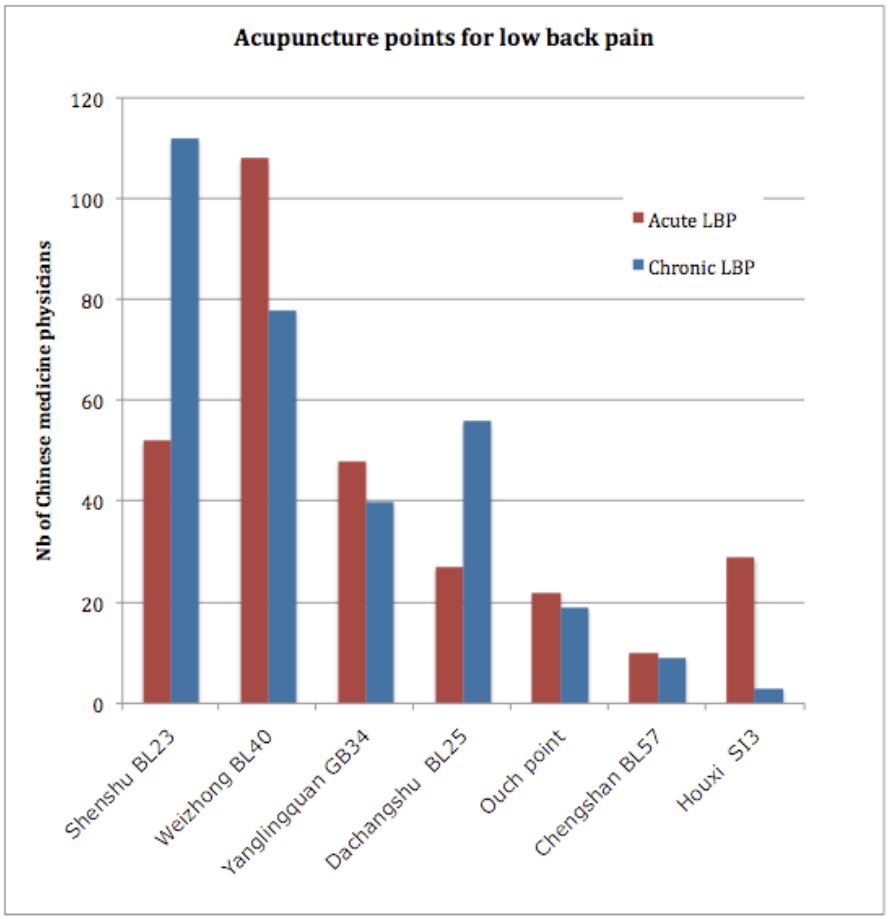


Figure 4.4.6 Most frequent acupuncture points used to treat low back pain

In both case we saw a combination of local and distal points. The most used points[40] for the treatment of acute low back pain, showed the same mixture of local points (Ouch point, Yaotuidian, Yaotongdian) and distal points (Houxi SI3 後溪, Yanglao SI6 養老 and Chengshan BL57 承山). We can point out that the local points are mostly not related to a meridian (Ouch point, Yaotuidian, Yaotongdian with an exception for Shenshu BL23 腎俞). The second observation is that almost all the distal points are on the one the hand or foot Taiyang meridians (Weizhong BL40 委中, Chengshan BL57 承山, Houxi SI3 後溪, Yanglao SI6 養老 with an exception for Yanglingquan GB34 陽陵泉).

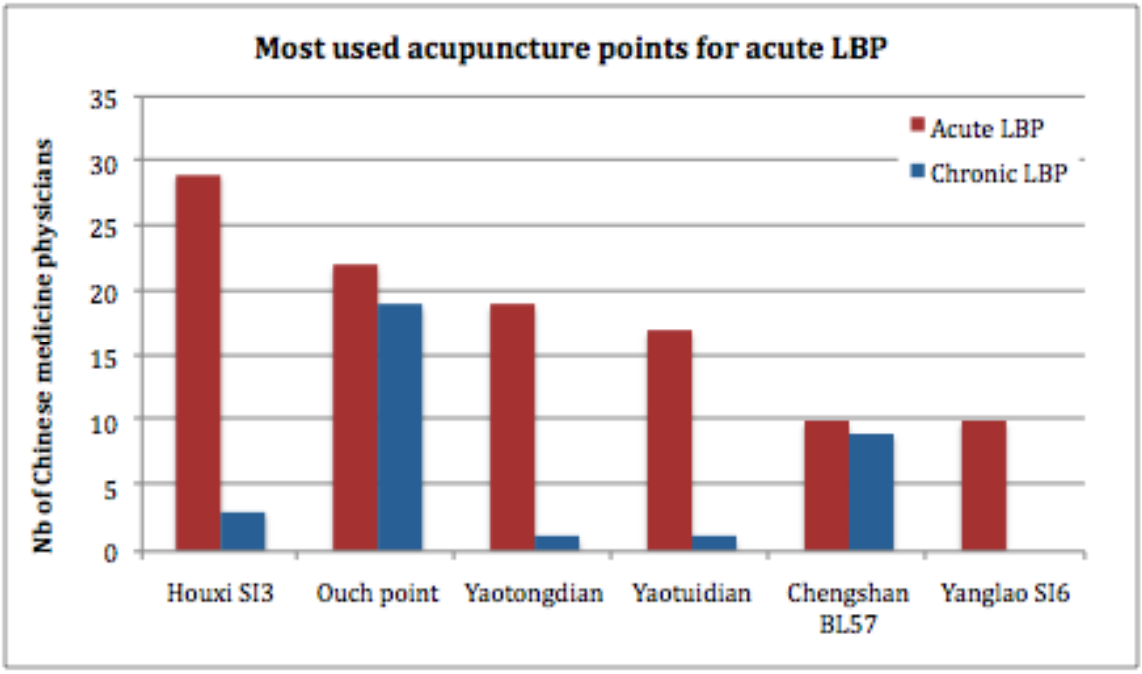


Figure 4.4.7 Most used acupuncture points for the treatment of acute low back pain

The most used points for the treatment of chronic low back pain were also characterized by a mixture of local points (Shenshu BL23 腎俞, Dachangshu BL25 大腸俞 and Huatuojiaji points 華佗夾脊) and distal points (Weizhong BL40 委中, Kunlun BL60 昆侖, Taixi KI3 太溪 and Zusanli ST36 足三里). We can point out that the local points are both non meridian related points (Ouch points, Huatuojiaji points) and meridian related (Shenshu BL23 and Dachangshu BL25). The distal points are on one hand related to the foot Taiyang meridian (Kunlun BL60 昆侖 and Weizhong BL40 委中) and on the other hand related to other meridians. The use of Zusanli ST36 (足三里) and Taixi KI3(太溪) are more aimed to regulate the whole body, that is to say, strengthening the Spleen and the Stomach in the case of Zusanli ST36 or strengthen the Kidney's Yang in the case of Taixi KI3.

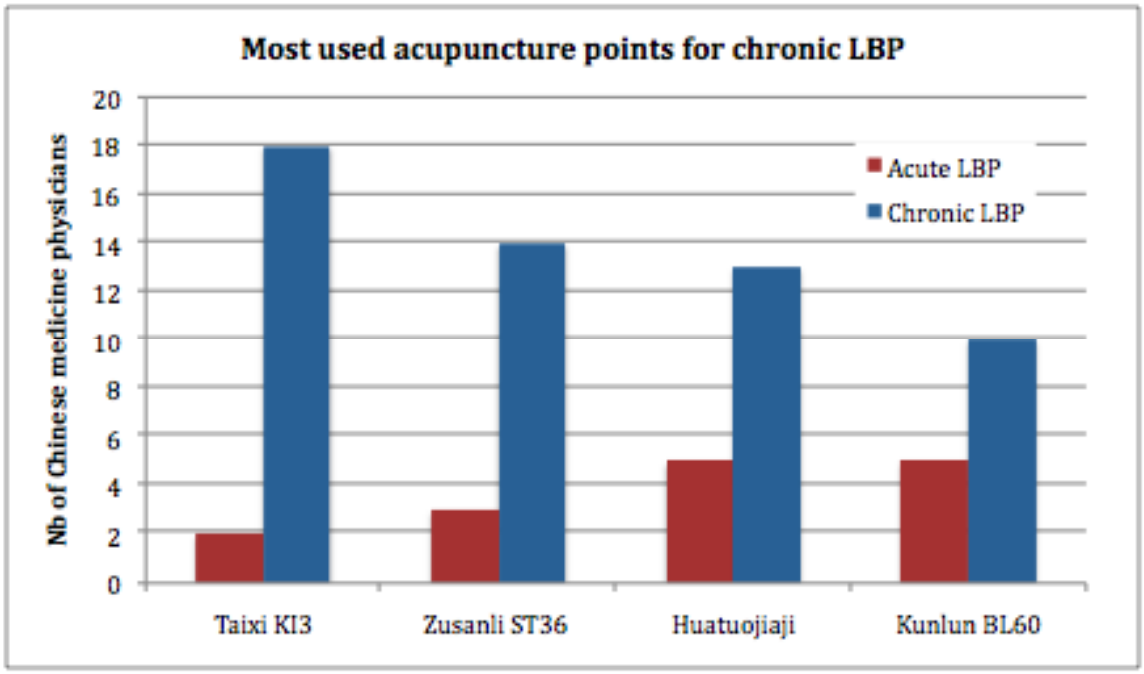


Figure 4.4.8 Most used acupuncture points for the treatment of chronic low back pain

Through the questionnaire, we asked the physician to give their opinion about the importance of some factors involved in their rational for choosing points when treating low back pain. Almost 40% of them considered “very important” to choose the acupuncture point regarding the meridian it belongs to. The patient constitution was also an important factor for choosing point. 20% of the physicians founded “very important” to use a set block of acupuncture points. On the contrary, the seasons and the hours of the day weren’t considered as important factors.

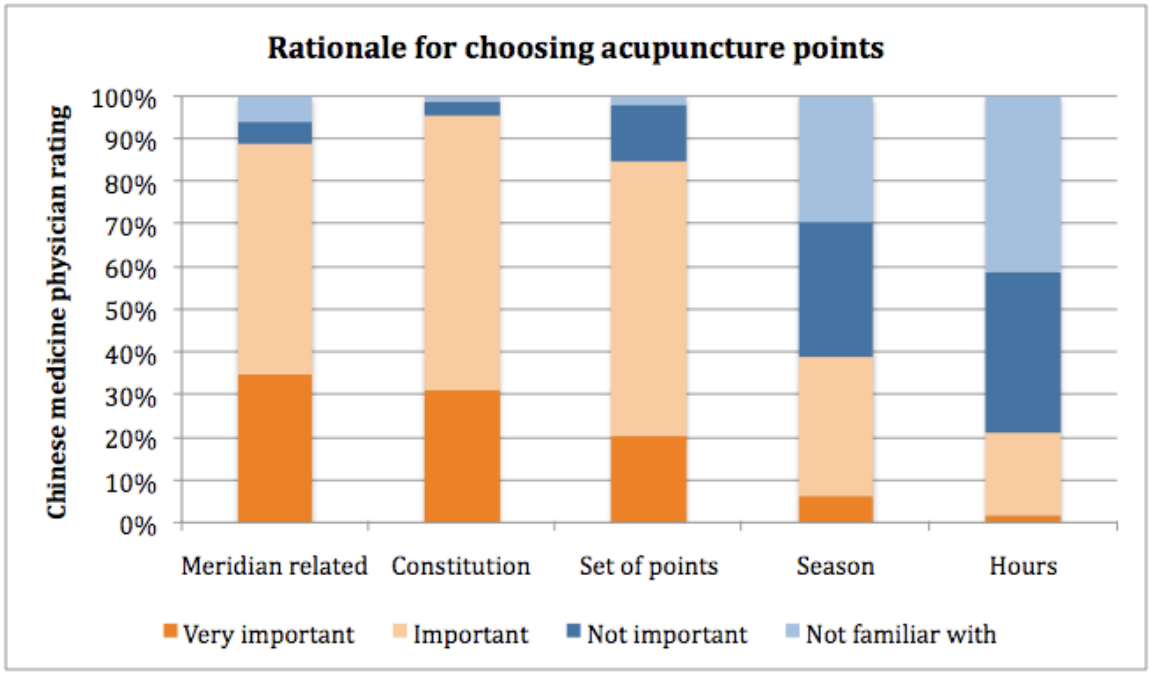


Figure 4.4.9 Rationale for choosing acupuncture points

Regarding the different categories of acupuncture points, the most popular category was without doubt the Ouch points. Then, the physicians also considered the Five transport points, followed by the Source points, the Clefs points, the Confluence points of the eight vessels, and finally the extra points.

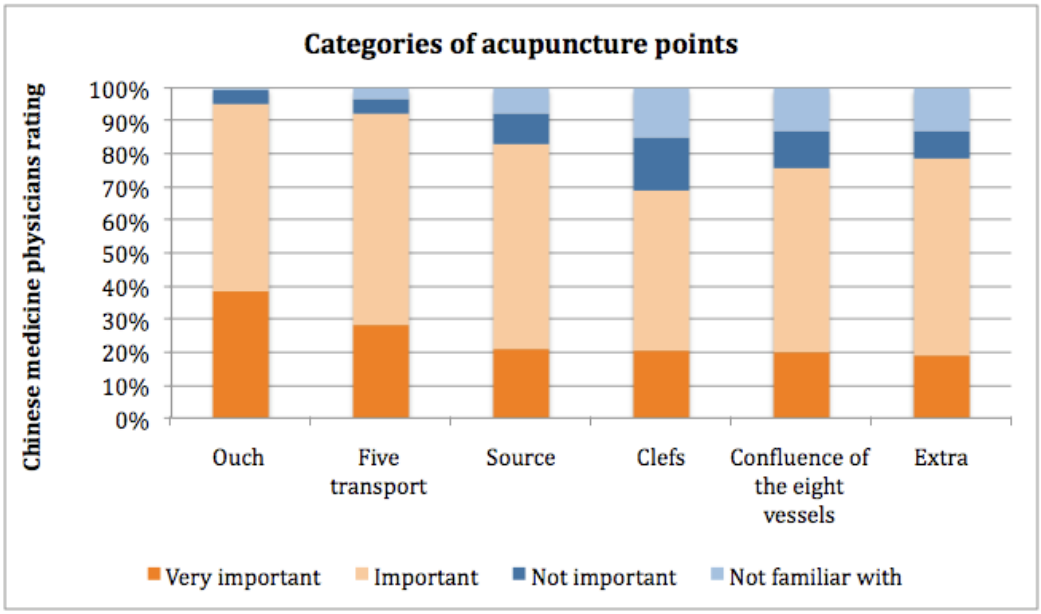


Figure 4.4.10 Categories of acupuncture points

Comparative statistics didn't show any statistical evidence for any factors related to the choice of acupuncture points.

However, regarding the education course the special license qualified physicians were distinct of the two other groups. In their rational of choosing acupuncture points, they considered less important to use a set block of points, to look at the patient's constitution and particularly didn't take the hour of the day into account (66.6% considered this factor as "not important and 33.3% were "not familiar with" it). On the contrary, they found important to choose acupuncture point with regard to the seasons. Concerning the acupuncture points categories, we noted that special license qualified physicians considered less important to use Ouch points and Extra points than the two other groups. In general, physicians graduated from the school of Chinese medicine and those graduated from the school of Post baccalaureate Chinese medicine were more likely to be "not familiar with" with many of the items whatsoever in their rational of choosing acupuncture points or the different acupuncture points categories.

The fact of being "not familiar with" many of the items was also related to the physician's age. Often the physician under 30 years to 39 years cumulated a higher rate of "not familiar with" than the group age of 40 and more years.

This tendency was less apparent when comparing the years of clinical practice. In general, the fact to be "not familiar with" was not related to the years of clinical experience.

The geographical situation didn't show very relevant tendencies related to the choice of acupuncture points. Though, in the centre of the island, the physician tended to find more important to take into account the constitution of the patient as well as the season than in the North or in the South. In the use of different acupuncture points categories, the physicians practicing in the south part of the country founded slightly less important to use the Five

transport points, the Source points, the Clefs points and the Confluence of the eight vessels points. By contrast, the use of Ouch point was approximately the same for each areas.

There were no special feature differenciating cities and districts areas, nor related to the different type of hospitals.

The multiple linear regression analysis showed that the rational for choosing acupuncture points was mainly associated with the geographical area (for the importance accorded to use a set block of acupuncture points and the importance regarding the patient's constitution) and secondarily with the years of practice of the physicians (for the importance accorded to use a set block of acupuncture points). The importance accorded with the different categories of acupuncture points was associated with the age and the years of practice of the physicians. The age of the physician was associated with five items (Five transport, Source, Clefs, Confluence of the eight vessels and Extra points) as the years of practice of the physicians were associated with four items (Five transport, Confluence of the eight vessels, Ouch and Extra points).

Table 4.4.6 Factors associated with the rational for choosing acupuncture points

Factors	Set block of acupuncture points				Constitution			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	.32	**.28**	-.27	.92	.08	**.76**	-.43	.59
School of PB of CM	.40	**.18**	-.18	.98	.15	**.54**	-.35	.66
Special licence	0[a]	**.**	.	.	0[a]	**.**	.	.
Under 30 years old	.17	**.63**	-.54	.80	-.44	**.19**	-1.10	.22
30 to 39 years old	.11	**.70**	-.43	.65	-.35	**.17**	-.84	.15
40 to 49 years old	.27	**.27**	-.21	.76	-.29	**.21**	-.73	.16
More than 50 years old	0[a]	**.**	.	.	0[a]	**.**	.	.
1 to 5 years of practice	-1.05	**.00****	-1.75	-.35	.25	**.44**	-.39	.90
6 to 10 years of practice	-.85	**.02***	-1.55	-.14	.25	**.45**	-.40	.89
11 to 20 years of practice	-.93	**.00****	-1.54	-.32	.11	**.71**	-.45	.66
More than 20 years of practice	0[a]	**.**	.	.	0[a]	**.**	.	.
Teaching hospital	.02	**.91**	-.35	.40	-.15	**.40**	-.49	.20
Regional hospital	.24	**.26**	-.17	.65	-.19	**.33**	-.57	.19
Rural hospital	.28	**.38**	-.35	.91	-.31	**.29**	-.89	.27
Chinese medicine hospital	0[a]	**.**	.	.	0[a]	**.**	.	.
North of Taiwan	-.29	**.04***	-.57	-.01	.18	**.16**	-.07	.44
Centre of Taiwan	-.21	**.18**	-.52	.10	.38	**.01***	.10	.67
South of Taiwan	0[a]	**.**	.	.	0[a]	**.**	.	.
Cities areas	.09	**.48**	-.16	.33	-.10	**.40**	-.32	.13
Districts areas	0[a]	**.**	.	.	0[a]	**.**	.	.

Data were analysed through Multiple Linear Model analysis and we chose to represent only the factors that attained statistical evidences.
The factors didn't showed a difference with the following items: the choice of acupuncture points regarding the seasons, the hours of the days and meridian related points.
[a]. This parameter is set to zero because it is redundant
* P<.05
**P<.001

Table 4.4.7 Factors associated with the importance accorded to the categories of acupuncture points (1st Page)

Factors	Five transport points				Source points				Clefs points				Confluence of the eight vessels points			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	.03	**.92**	-.55	.61	.00	**1.0**	-.67	.67	.12	**.78**	-.73	.97	.20	**.60**	-.55	.95
School of PB of CM	.26	**.36**	-.31	.83	.34	**.31**	-.32	.10	.28	**.51**	-.55	1.11	.41	**.27**	-.32	1.13
Special licence	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Under 30 years old	-.63	**.10**	-1.38	.12	-.38	**.39**	-1.25	.49	-.69	**.22**	-1.80	.42	-.88	**.07**	-1.86	.09
30 to 39 years old	-.81	**.01***	-1.37	-.25	-1.08	**.00****	-1.73	-.42	-1.10	**.01***	-1.94	-.24	-1.10	**.01***	-1.80	-.32
40 to 49 years old	-.51	**.05***	-1.01	-.00	-.52	**.09**	-1.11	.08	-.59	**.13**	-1.36	.18	-.50	**.14**	-1.17	.17
More than 50 years old	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
1 to 5 years of practice	1.0	**.01***	.27	1.73	.53	**.22**	-.32	1.38	.47	**.40**	-.64	1.58	1.04	**.04***	.08	2.01
6 to 10 years of practice	.88	**.02***	.15	1.60	.33	**.45**	-.52	1.17	.26	**.65**	-.85	1.37	.90	**.07**	-.06	1.87
11 to 20 years of practice	.58	**.07**	-.04	1.21	.29	**.43**	-.44	1.03	.21	**.68**	-.77	1.18	.53	**.22**	-.32	1.38
More than 20 years of practice	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Teaching hospital	.04	**.86**	-.36	43	.19	**.41**	-.26	.64	-.02	**.95**	-.61	.57	.09	**.72**	-.43	.62
Regional hospital	-.02	**.91**	-.45	.40	.12	**.63**	-.37	.62	.12	**.72**	-.53	.76	.22	**.45**	-.35	.80
Rural hospital	-.12	**.73**	-.77	.54	.21	**.59**	-.55	.97	.06	**.90**	-.90	1.03	.31	**.47**	-.53	1.16
Chinese medicine hospital	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
North of Taiwan	.15	**.30**	-.14	.44	.01	**.94**	-.32	.35	.04	**.86**	-.38	.46	.20	**.28**	-.16	.57
Centre of Taiwan	.10	**.55**	-.23	.43	-.15	**.42**	-.52	.22	-.15	**.53**	-.62	.32	.07	**.74**	-.34	.48
South of Taiwan	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Cities areas	.07	**.58**	-.18	.33	-.05	**.75**	-.34	.25	-.04	**.81**	-.42	.33	-.07	**.65**	-.40	.25
Districts areas	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.

Data were analysed through Multiple Linear Model analysis

[a]. This parameter is set to zero because it is redundant

* P<.05

**P<.001

Table 4.4.7 Factors associated with the importance accorded to the categories of acupuncture points (Page 2)

Factors	Extra points				Ouch points			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	.51	**.20**	-.27	1.30	.66	**.01***	.15	1.17
School of PB of CM	.42	**.28**	-.35	1.19	.70	**.01***	.21	1.20
Special licence	0[a]	**.**	.	.	0[a]	**.**	.	.
Under 30 years old	-.57	**.27**	-1.57	44	-.45	**.18**	-1.11	.21
30 to 39 years old	-.91	**.02***	-1.67	-.16	-.45	**.08**	-.95	.05
40 to 49 years old	-.56	**.11**	-1.23	.12	-.39	**.09**	-.84	.07
More than 50 years old	0[a]	**.**	.	.	0[a]	**.**	.	.
1 to 5 years of practice	.91	**.07**	-.08	1.90	.55	**.09**	-.10	1.20
6 to 10 years of practice	1.02	**.04***	.03	2.01	.44	**.18**	-.21	1.09
11 to 20 years of practice	.66	**.13**	-.20	1.51	.60	**.04***	.03	1.16
More than 20 years of practice	0[a]	**.**	.	.	0[a]	**.**	.	.
Teaching hospital	.12	**.66**	-.43	.67	.11	**.52**	-.23	.45
Regional hospital	.29	**.34**	-.31	.89	.08	**.66**	-.29	.46
Rural hospital	.02	**.97**	-.88	.91	-.12	**.67**	-.70	.45
Chinese medicine hospital	0[a]	**.**	.	.	0[a]	**.**	.	.
North of Taiwan	.13	**.50**	-.26	.53	.03	**.81**	-.22	.28
Centre of Taiwan	.24	**.27**	-.19	.68	.13	**.37**	-.15	.41
South of Taiwan	0[a]	**.**	.	.	0[a]	**.**	.	.
Cities areas	.16	**.36**	-.18	.50	-.06	**.62**	-.28	.17
Districts areas	0[a]	**.**	.	.	0[a]	**.**	.	.

Data were analysed through Multiple Linear Model analysis

[a]. This parameter is set to zero because it is redundant

* P<.05

**P<.001

Needles and needle technique

In Taiwan, almost every Chinese Medicine physician will use disposable needle. As these needle are fit out with a tube, most of the physicians used this tube to insert the needle.

The data obtained by the questionnaire showed that 75.5% of the physicians used tube needle for insertion, 17% used only their hand to insert the needle. Finally, 8.5% of the physicians used the both methods.

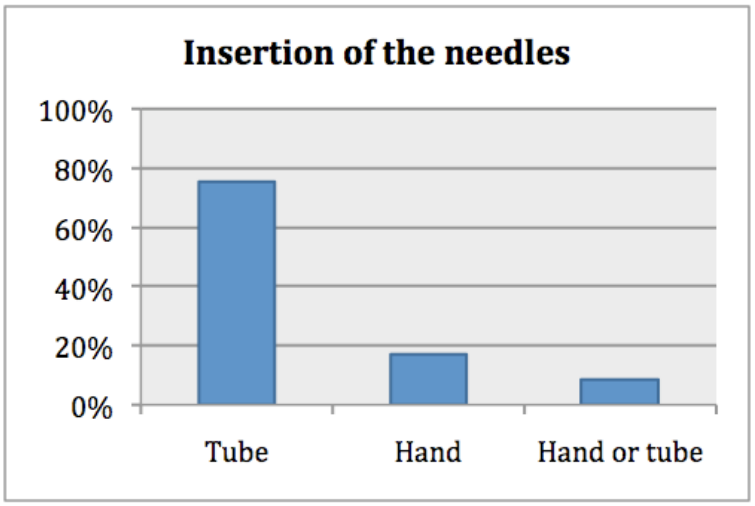


Figure 4.4.11 Method of needle's insertion

The order of insertion was considered as "very important" by 16% of the physicians. In contrast 22% considered it as "not important". 51% rated it as "important and 11% were "not familiar with".

The importance of obtaining the Qi, or Deqi, after the insertion of the needle was specially underlined by the results of the questionnaire. It was considered as "very important" (54%) and "important" (44%) by almost all the physicians (only 2% considered it as "not important").

The use of hand stimulation was considered as more important than

electric stimulation.

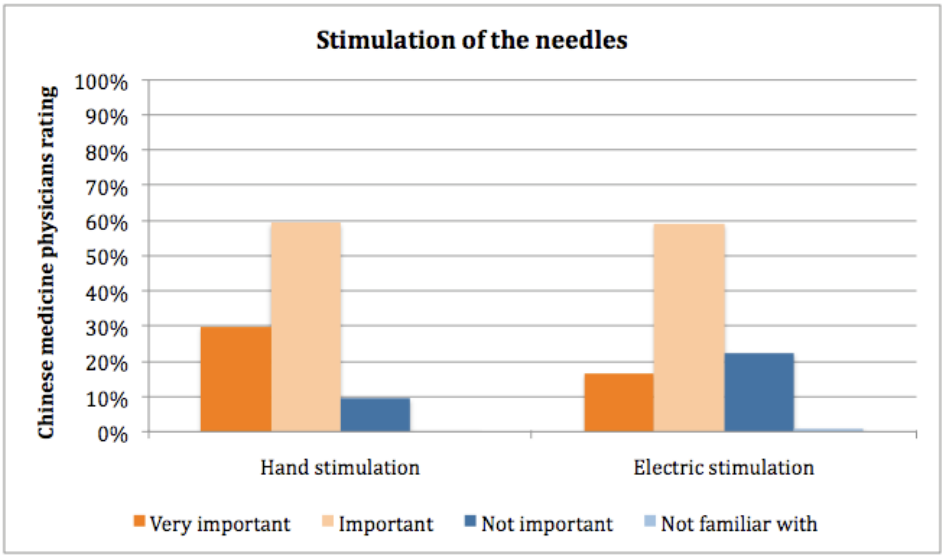


Figure 4.4.12 Stimulation of the needles

Comparative statistics showed an evidence between the use of electrical stimulation and geographical location. The results showed than electrical acupuncture was less used in the north part of the country especially if compared to the South were electrical stimulation is more used.

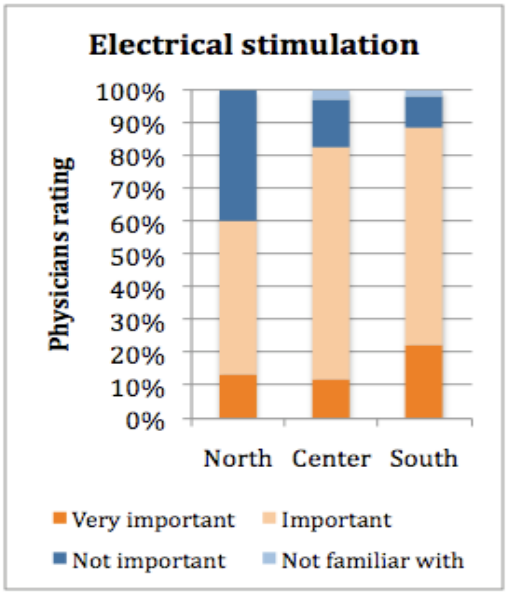


Figure 4.4.13 Electrical stimulation of the needles regarding geographical situation

The results also showed that electrical stimulation was more important

in districts areas than on cities areas. Furthermore, the electrical stimulation was also less used by special license qualified physicians. Though the two last observations didn't reach statistical evidence.

The multiple linear regression analysis showed that the strongest association with the needle stimulation was related to the education background (the special licence qualified physicians founded less important to have Deqi, or to use hand or electro stimulation). Secondarily, the age of the physician played a role especially in regards to the importance accorded to the electro-stimulation

Table 4.4.8 Factors associated with the importance accorded to the needles stimulation

Factors	Obtention of the Qi				Hand stimulation				Electro stimulation			
	B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval		B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound			Lower Bound	Upper Bound
School of CM	.59	**.01***	.12	1.06	.79	**.01***	.24	1.34	.37	**.26**	-.27	1.00
School of PB of CM	.49	**.04***	.03	.95	.83	**.00****	.29	1.37	.57	**.07**	-.05	1.18
Special licence	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Under 30 years old	.06	**.83**	-.54	.66	-.46	**.21**	-1.17	.25	-.57	**.12**	-1.29	.16
30 to 39 years old	-.04	**.87**	-.49	.41	-.14	**.59**	-.67	.36	-.67	**.02***	-1.22	-.11
40 to 49 years old	.00	**.99**	-.40	.41	-.05	**.83**	-.53	.42	-.47	**.07**	-.98	.03
More than 50 years old	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
1 to 5 years of practice	-.13	**.67**	-.71	.46	-.18	**.62**	-.89	.53	.05	**.89**	-.66	.76
6 to 10 years of practice	-.25	**.41**	-.83	.34	.02	**.95**	-.68	.73	-.13	**.71**	-.83	.57
11 to 20 years of practice	-.09	**.73**	-.59	.42	-.03	**.93**	-.64	.59	-.10	**.75**	-.72	.52
More than 20 years of practice	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Teaching hospital	.04	**.78**	-.27	.36	.21	**.28**	-.17	.59	.15	**.44**	-.24	.54
Regional hospital	-.05	**.80**	-.39	.30	.39	**.06**	-.02	.80	.16	**.45**	-.26	.58
Rural hospital	-.14	**.60**	-.67	.39	-.13	**.69**	-.75	.50	.11	**.73**	-.52	.74
Chinese medicine hospital	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
North of Taiwan	.06	**.63**	-.18	.29	-.25	**.08**	-.52	.03	.07	**.60**	-.21	.35
Centre of Taiwan	-.07	**.58**	-.33	.19	-.09	**.56**	-.40	.22	.04	**.82**	-.27	.34
South of Taiwan	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.
Cities areas	-.15	**.14**	-.36	.05	-.23	**.07**	-.47	.01	-.20	**.10**	-.45	.04
Districts areas	0[a]	**.**	.	.	0[a]	**.**	.	.	0[a]	**.**	.	.

Data were analysed through Multiple Linear Model analysis

[a]. This parameter is set to zero because it is redundant

* P<.05

**P<.001

Concerning the supplementation and draining methods, the data obtained trough the questionnaire showed that the lifting-thrusting and the twirling supplementation and draining methods were the most important techniques used. On the contrary quick-slow and respiratory supplementation and draining techniques were less used.

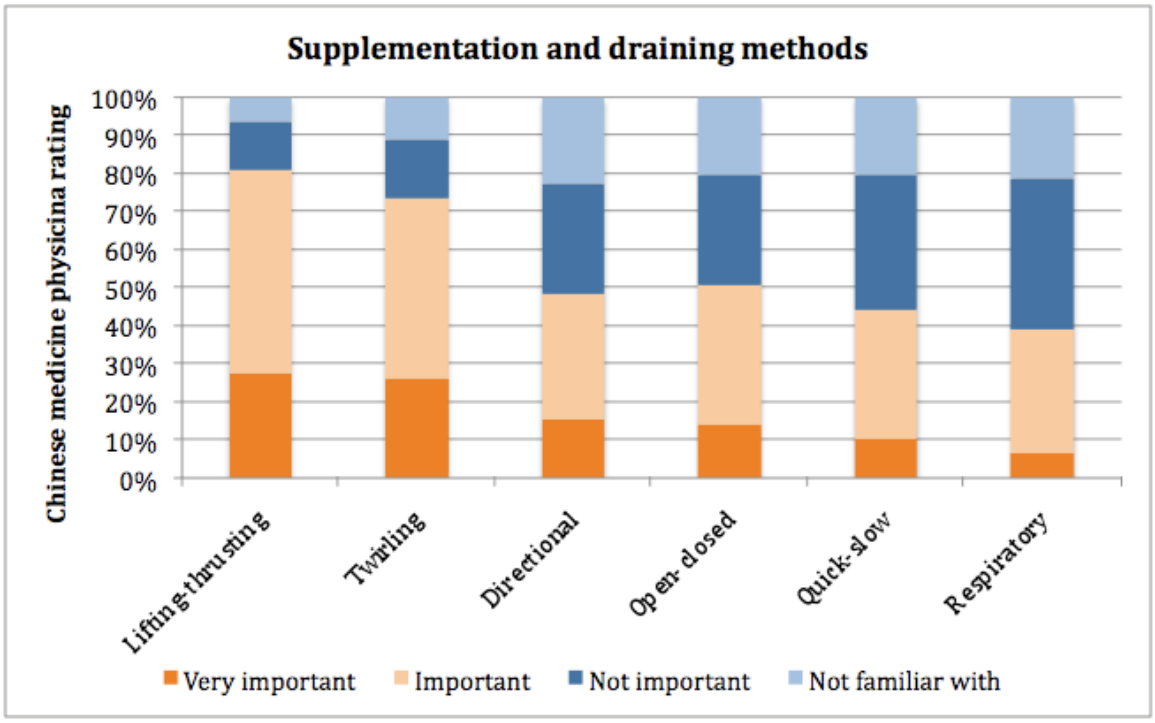


Figure 4.4.14 Supplementation and draining methods

Comparing the different factors that influenced the supplementation and draining methods, we found one statistical evidence that was related with the physician's age. The same tendency was also found in relation to the years of practice. In both cases, the more old the physician was or the longer clinical experience he has, the more he found important the respiratory supplementation and draining technique. This tendency was found in general for all the supplementation and draining methods.

Apart this relation we didn't found any others conclusive factors that influenced the supplementation and draining methods.

The multiple linear regression analysis showed only one evidence of association related to the type of hospital (concerning the respiratory supplementation and draining technique).

Table 4.3.9 Factors associated with the respiratory supplementation and draining method

Factors	Respiratory supplementation and draining method			
	B	Sig.	95% Confidence interval	
			Lower Bound	Upper Bound
School of CM	.37	**.33**	-.37	1.11
School of PB of CM	.26	**.47**	-.46	.98
Special licence	0[a]	**.**	.	.
Under 30 years old	-.90	**.07**	-1.86	.06
30 to 39 years old	-.41	**.27**	-1.13	.32
40 to 49 years old	-.24	**.46**	-.89	.41
More than 50 years old	0[a]	**.**	.	.
1 to 5 years of practice	-.41	**.39**	-1.34	.53
6 to 10 years of practice	-.38	**.42**	-1.31	.54
11 to 20 years of practice	-.11	**.79**	-.91	.70
More than 20 years of practice	0[a]	**.**	.	.
Teaching hospital	.25	**.33**	-.26	.76
Regional hospital	.57	**.04***	.02	1.13
Rural hospital	.41	**.34**	-.43	1.25
Chinese medicine hospital	0[a]	**.**	.	.
North of Taiwan	-.03	**.89**	-.39	.34
Centre of Taiwan	.17	**.41**	-.24	.58
South of Taiwan	0[a]	**.**	.	.
Cities areas	.05	**.76**	-.27	.37
Districts areas	0[a]	**.**	.	.

Data were analysed through Multiple Linear Model analysis and we chose to represent only the factors that attained statistical evidences.
The factors didn't showed a difference with the following supplementation and draining methods: lifting-thrusting, twirling, quick-slow, open-closed and directional methods.
[a]. This parameter is set to zero because it is redundant
* P<.05
**P<.001

Retention time of the needles

In Taiwan, the usual retention time of the needle was 20 minutes[41]. The results obtained by questionnaire showed that the average time of needle retention was 15 to 20 minutes for the two third of the physicians (72%). If we compare the retention time of the needle for acute and chronic low back pain, we cane note a slight augmentation of the retention time in the case of chronic low back pain.

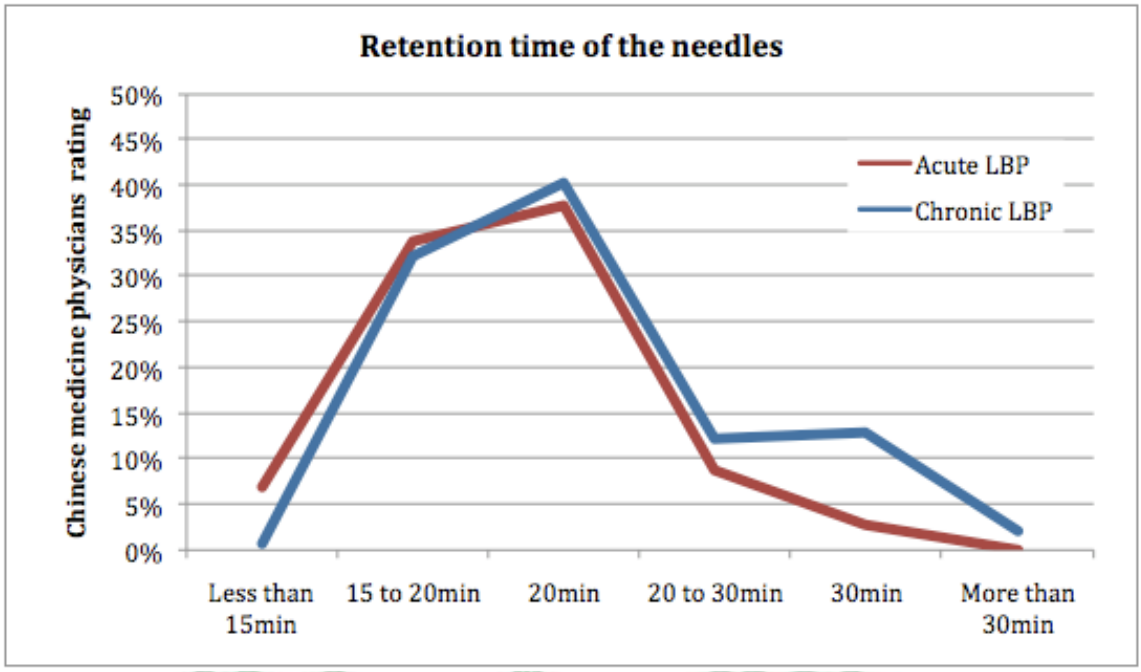


Figure 4.4.15 Retention time of the needles for acute and chronic low back pain

In comparative statistics the same tendency was noted. For each different group of factors we noted an augmentation of the retention time of the needles for chronic low back pain.

There was no statistical evidence showing the predominance of one factor particularly influencing the retention time of the needles. However there were some tendencies. The special license qualified physicians used to retain the needle a shorter time than the two others groups. The age group between “under 30 years” and “30 to 39years” were used to retain the needle a bit longer than older physicians. The same trends was also visible in the

years of practice, where the group of “1 to 5 years” of clinical experience used to retain the needle longer than the others groups, especially for acute low back pain. The geographical location also played a role. The physicians working in the north of the country used to have a longer retention time of the needle than in the South. In districts areas too, the physicians retained the needle for a longer time. Finally, in the different hospital there were no notable variations.

Frequency of the treatment

The results obtained through the questionnaire showed that the majority of the physicians used to see a patient two to three times a week: this concerned 71% of the physicians in case of acute low back pain and 63% of the physicians in case of chronic low back pain. We noted an evident augmentation of the visit per week for acute states compared to chronic states of low back pain.

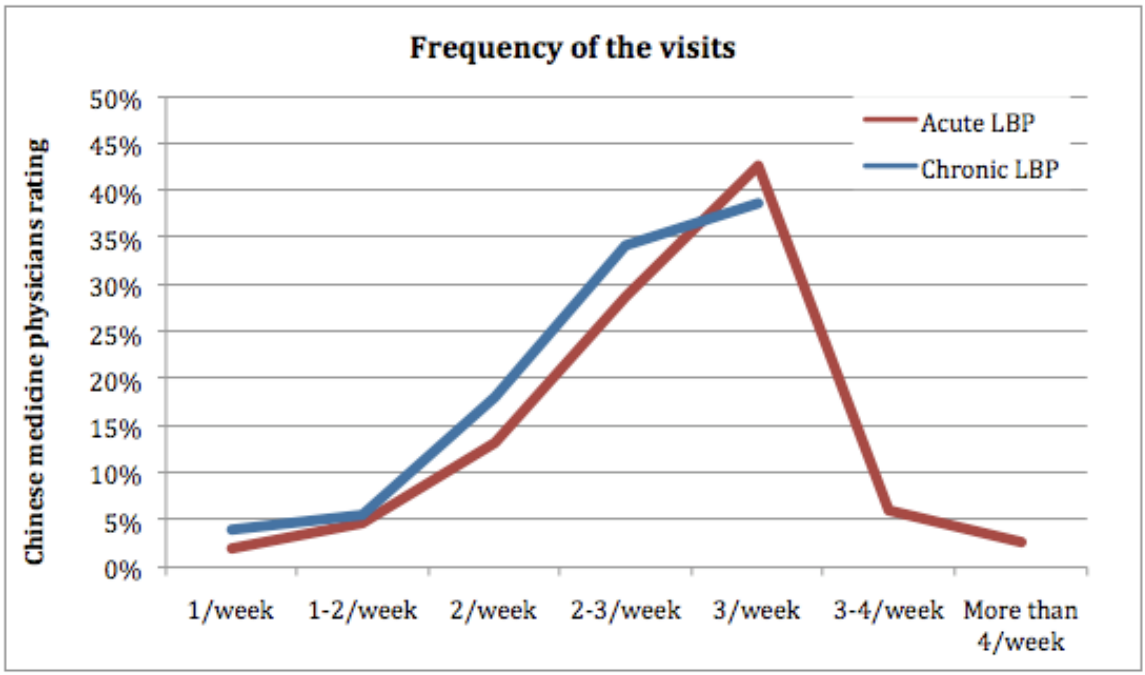


Figure 4.4.16 Frequency of the visits for acute and chronic low back pain

In comparative statistics, even there were no statistical evidence, we

also found an higher number of visits per week for acute state than for chronic state of low back pain.

There were no significant trends in relation to education background, age and years of practice of the physician nor related to the geographical areas or the different type of hospitals that influenced the frequencies of the visits.

Co treatment

Besides acupuncture, the physicians used a large variety of other therapeutic techniques. Acupuncture is seldom the only method employed to cure low back pain.

In the questionnaire, we asked the physicians to mention the first three therapeutic methods they will use in addition of acupuncture in the treatment of low back pain. The most used one was the use of powdered Chinese medicinal, then came the life style advices[42], the utilization of red lamp, the moxibustion and the use of plasters.

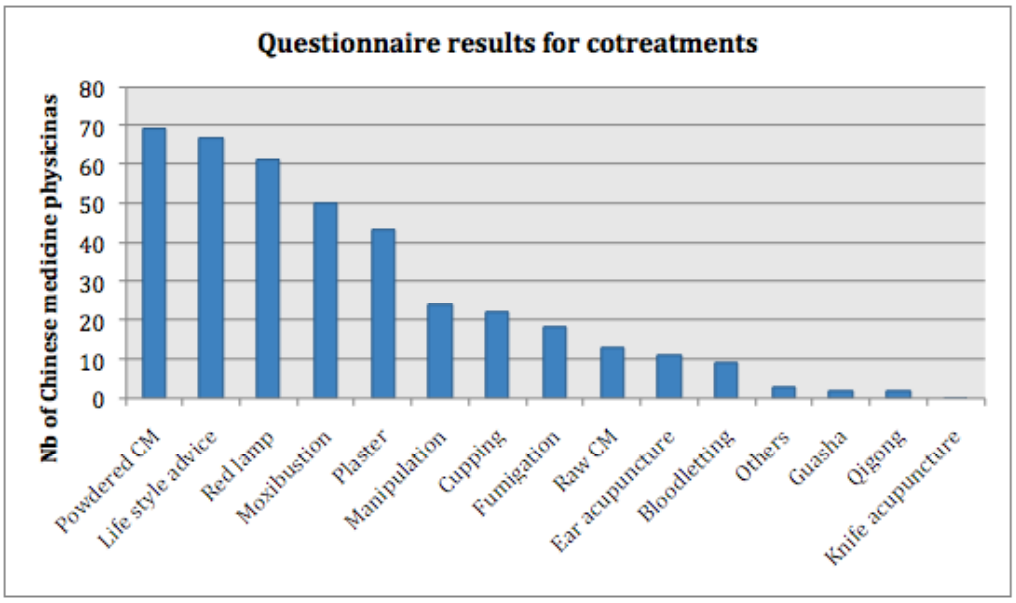


Figure 4.4.17 Questionnaire results for co treatments used in the treatment of low back pain

Even there were no statistical evidences, we noted also some tendencies related to the different comparison groups. The special license qualified physicians used more raw Chinese medicinal as a co treatment than the two others groups. The physicians graduated from the school of Chinese medicine used more manipulation techniques than the two others groups.

The age was not obviously related to the co treatment. However, we found a slight difference of the group age “under 30 years” with the others groups. The younger physicians used more powdered Chinese medicinal, bloodletting and moxibustion than the older physicians. On the opposite, they used less raw Chinese medicinal, fumigations and recommendations about exercises and diet than the older physicians. We didn’t found any particular tendencies related to the years of clinical practice.

Some therapeutics methods were related to the geographical situation. The use of raw Chinese medicinal was more popular in the north of the country. In the South, physicians were more using fumigations and moxibustion.

The differentiation between cities and districts areas showed than in the districts areas, the physicians used more moxibustion than in the cities. On the contrary, physicians practicing in cities areas relied more on exercises and diet recommendations.

Finally, the different type of hospitals didn’t show many variations except for the physicians practicing in rural hospitals. This group often diverged from the others especially because the physicians used more manipulations techniques, cupping and knife acupuncture than the physicians working in the others kind of hospitals.

5. Discussion

Our aim was to understand how different factors influenced the acupuncture practice. Was it mainly the physician's personal experience, interests, readings or encounters? Was it more a question of education background? Was it related to his environment of practice, to it's geographical situation? Even we chose to exclude of our research the influence of political and economical factors as well as social influence, the question is still complex.

5.1 Limitations of the research

The questionnaire was an useful tool to explore a part of the current acupuncture practice in Taiwan but it was not enough to cover all the aspects of this question. There are several limitations in our study.

First, the questionnaire was addressed to Chinese medicine physicians practicing in hospitals. 90% of them practiced in the Chinese medicine section of Western medicine hospitals and only 10% in a Chinese medicine hospitals. Through the questionnaire we have seen that there were some tendencies related to different kind of hospitals, notably between Chinese medicine hospitals and Western medicine hospitals. As a large proportion of Chinese medicine physicians also practice in private clinics, we can assume that there are also some variations of practice related to. In private clinic, the physician can choose to be reimbursed or not by the health insurance but for physicians working in hospitals acupuncture is almost always reimbursed by the health insurance. Therefore, we will not be able to talk about the influence of the insurance coverage upon acupuncture practice. The current research is thus limited to the acupuncture practice within Western and Chinese medicine hospitals.

The second limitation of our study is the small sample size of special license qualified physicians and their particular features. This group of physician was older than the other groups, they were practicing exclusively in teaching and regional hospitals and they were practicing in the north and in the south of the island. Therefore, the results issued form the questionnaire regarding this question must be verified on a larger sample.

Despite these limitations, this research provides an account on acupuncture practice in Taiwan based on a questionnaire survey. This study may help us to understand how different factors interact and shape the plurality found in acupuncture practice.

5.2 Research method

The use of questionnaire was a convenient method to address a large population of physicians and obtain information that can be translated by numbers and graphs. This allowed us to see some tendencies. Nevertheless, we found that the answers obtained trough the questionnaire were useful to a certain extent. It was a good tool for general questions about the kind of therapeutic methods used or the scope of acupuncture use (second part of the questionnaire). But it was less consistent to address questions about the treatment of low back pain (third part of the questionnaire), where the questions were too detailed to see differences between different groups of factors. The answers of the physicians didn't show clear variations[43]. On these cases, the lecture of the results was done on focusing in the differences between "very important", "not important" and "not familiar with" because we founded that the most general answer ("important ") was not helpful to draw conclusion of the results. In one hand we found that the use of questionnaire was a very impersonal tool and we never knew with which degree of honesty the physician filled out the documents, but in the other

hand it facilitated an access to a larger sample size and still give us a chance to see some interesting tendencies.

5.3 Questionnaire analysis

The descriptive analysis of the questionnaire gave us the main trend and a general view of how acupuncture is used in Taiwan. But the aim of collecting this questionnaire was to compare different group of factors and study if and how they influenced the practice of acupuncture.

Comparison of the factors

In the questionnaire we chosen the six groups of factors for making a comparative analysis. The six groups were the age of the physician, his years of clinical practice, his education course, the type of hospital he works in, the geographical situation of the hospital and the density of urbanisation. The results showed that the education background and the geographical situation played a more evident influence than the others factors. The age of the physician and his years of practice also had some impact on the practice. Then the differences between cities and counties districts and the various hospitals showed less influence than the previous mentioned group of factors. We can see that all the factors influenced some parts of the acupuncture practice but not as the same levels.

The difference observed among the three education courses was that the group of the special licence qualified physicians were distinct in many aspects of their practice from the physicians that graduated from the school of Chinese medicine or school of Post baccalaureate Chinese medicine. It was particularly obvious than special licence qualified physicians used acupuncture for a larger scope of diseases than the others groups. Concerning therapeutic methods used, special licence qualified physicians

used more bloodletting technique as well as raw Chinese medicinal than the two others groups. This last observation was also correlated with the age and years of practice of the physicians. Knowing than our sample of special licence qualified physicians were older than the physicians of the other group further enquiries would be desirable to confirm this observation. To a lesser extent special licence qualified physicians differed by their use of some diagnosis tools and their rationale of choosing acupuncture points. The fact that special licence qualified physicians were in many aspect different than the physicians graduated from the school of Chinese medicine or school of Post baccalaureate Chinese medicine could due in part to the fact that the sample size was smaller than the two other groups. Furthermore special licence qualified physicians were older, they were working principally in teaching and regional hospitals and practicing almost exclusively in the North.

The geographical factor showed some interesting differences concerning the therapeutic methods used and the scope of acupuncture practice. Statistics showed that some therapeutics methods were more used in some area of the country. In the same manner some categories of diseases were more to be treated by acupuncture according to geographical situation. It seems that acupuncture is more popular in the north of the island to treat a large categories of diseases than in the centre of the island. It is difficult to give an explanation of these results and we just wanted to point out that the geographical location is a considerable factor influencing acupuncture practice.

The age and the years of practice were two factors evidently correlated, younger physicians had less years of clinical practice and vice versa. When the two factors showed the same trends, we obtained sometimes evidences only for one of them. In general, the group age of the physicians offered

clearer evidences[44]. If the two factors showed most of the time the same kind of trends, those sometimes also differed. For example in the importance accorded to the different type of acupuncture points, we saw a larger number of practitioners “not familiar with” the questionnaire items in the age categories “under 30 years” and “30 to 39 years”, but we could not find the same tendency in the years of practice. The age and the years of practice showed some influence in acupuncture practice principally in the categories of diseases treated by acupuncture. The general tendency was that older physicians and physicians with a longer clinical experience were treating a larger scope of diseases with acupuncture. We also found that older physicians and physicians with a longer clinical experience used more raw Chinese medicinal and bloodletting technique than younger physicians.

The division between cities and counties areas was aimed to see differences between more urbanized areas compared to country side. However, the political division between cities and counties areas cannot completely match the degree of urbanization. Even we found some evidences showing differences between cities and counties in terms of therapeutic methods used it is still a fragile distinction. We just can say that this factor didn’t play an important role influencing acupuncture practice.

The distinction between the different type of hospitals was also a factor difficult to interpret regarding the statistical evidences found. The major finding regarding the tendencies was that rural hospital showed some differences with the other type of hospitals, but that could also be due to the smaller sample size. However, we found an interesting tendency concerning the physicians practicing in Chinese medicine hospitals regarding the scope of disease treated by acupuncture and the diagnosis tools used. On one hand, physicians practicing in Chinese medicine hospitals used acupuncture to treat a larger type of diseases in another hand they founded more important

to use diagnosis tools specific to Chinese medicine than the others physicians working in Western medicine hospitals. In the same manner, physicians practicing in Western medicine hospitals founded more important to use diagnosis tools specific to Western medicine than the others. Because we only founded this tendency for diagnosis tools it is difficult to conclude that Chinese medicine physicians practicing in Chinese medicine hospitals practice a more “traditional” Chinese medicine. But what we can see it’s that the environment of practice can influence the diagnosis tools chosen by the physicians and in some ways influence their practice of acupuncture.

After this summary of the trends we observed, we wanted to underline an aspect related to our questionnaire outcomes. It concern the statistical evidences obtained. Most of the evidences observed concerned two general questions about acupuncture practice (the first one was the question 2.1 about the therapeutic methods used by the physicians and the second one was the question 2.2 about the categories of diseases treated by acupuncture). On the contrary, with the questions about diagnosis and treatment of low back pain (third part of the questionnaire), we hardly attained some evidence. This could be due to the type of questions asked. When the questions were general we got more clearer answers and saw variable trends, but when we came to detailed questions, we observed a larger diversity of answers which were then difficult to interpret or to classify into distinct tendencies.

Correlation of the factors

In order to get an answer regarding the strength of association of the different groups of factors, we performed a multiple linear model analysis. The results of these analysis also showed that the different factors acted at different levels. For questions concerning the general use of acupuncture as the treatment methods (question 2.1) and the categories of diseases treated

by acupuncture (question 2.2), many factors showed an evidence of correlation. The predominant factors that showed an association were the education background, the geographical situation and the age of the physicians. For questions more detailed about diagnosis and treatment of low back pain, the association was correlated with only one or two factors.

The three factors that most often intervene or showed evidence of a correlation with different use of acupuncture practice were the geographical situation, the age and the education background of the physician[45]. The years of practice of the physician, the type of hospitals and the cities/districts areas distinction were secondarily related with the differences of acupuncture practice[46].

Concerning the general use of acupuncture, the treatment methods used were influenced by many factors, but the most correlated were those related to the environment. The geographical situation, the cities/districts areas and the type of hospital played a major role in the choice of the therapeutics methods chose by the Chinese medicine physicians. On the other hand, the categories of diseases treated by acupuncture showed a strong correlation with the education background of the physician. The influence of the age and the environment related factors were less marked.

Concerning the diagnosis and treatment of low back pain, the importance accorded to the diagnosis tools were related to the education background and the geographical situation. The diagnosis theories or the importance accorded to the identifications patterns were related to the age of the physician and the geographical area of practice. The needles techniques were correlated with educational background principally and secondarily to the age of the physician. The rational of choosing acupuncture points was related to the years of practice and the geographical area. And finally, the choice accorded to the different acupuncture point categories was associated with age and the years of practice of the physicians.

From this brief summary of the findings, we can see how different factors act at different level in their influence of acupuncture practice.

Example of the influence of the factors

The results obtained through the questionnaire regarding the diagnosis tools used for diagnose low back pain is a good example to show how different factors influence acupuncture practice at different levels. We didn't obtain any statistical evidence but we've seen that the education background, the age and years of clinical practice of the physician along with the hospital he practice in influenced the preference for one or another diagnosis tools. Examining the results of "not familiar with" and "very important", we found that the physician graduated from the school of Post baccalaureate Chinese medicine were less familiar with Western medicine related methods of diagnosis (X ray, MRI/CT, laboratory data, physical examination and neurological examination). This can be due to the fact that even the physicians from the school of Post baccalaureate Chinese medicine received a training in Western medicine they were less be likely to use it. From our observations, we found that the students from the school of Post baccalaureate Chinese medicine were more diligent in their studies attitude than those of the school of Chinese medicine but they were in general more focused in their studies of Chinese medicine more than those on Western medicine. That could be one explanation of this observation. The second factor influencing the use of diagnosis tools was the years of practice. Younger physicians were less able to use Western medicine diagnosis tools. From this observation we can suppose that even all the physicians received a training in Western medicine it is through the accumulation of clinical experience that the physician gained understanding of some diagnosis tools. Finally the third factor playing a role was the environment of practice. As we explained, physicians practicing in Chinese medicine hospitals founded less

important to use Western medicine related tools. We can suppose that it is partly due to the fact that those kind of tools are more available in Western medicine hospital and not in Chinese medicine hospitals. This example illustrate how the education along with the physicians interests influence in some ways the importance they accorded to the different diagnosis tools. In the same time the clinical experience built upon a time process play a part in the habit to use these diagnosis tools. And finally, the environment of practice, by giving access or not to some diagnosis tools, conditioned also the importance accorded to them. By this example, we wanted to point out that different factors act at different levels and therefore influence the acupuncture practice at different levels.

5.4 Integration in acupuncture practice

Acupuncture practice is already embed in a system that integrate the concepts of both Western and Chinese medicine. From the integration of Xray, MRI and lab data in the diagnosis process to the frequent use of red lamp in the treatment of low back pain, all are evident indications of the integration of the both systems in the current acupuncture practice. Our point is not to discuss if this integration of the two systems is advantageous or not. From a clinical point of view this question has no sense at all, knowing that the only things that matters is to cure the patient. Nevertheless, from our questionnaire results we can point some outcomes out that suggest that some aspects of Chinese medicine are waning or disappearing[47]. For example in the choice of diagnosis tools, the questionnaire results showed that the physicians didn't consider the diagnosis tools specifically related to Chinese medicine like the pulse, the observation of the tongue, complexion or vitality as important[48]. In the importance accorded to different categories of acupuncture points, we found that Ouch points were more popular than the

other type of acupuncture points. This is also a result of the simplification of the theories about acupuncture. The needle techniques have also changed. Along with the recent emphasis on sterilization, the needles are now by a majority inserted with guiding tube. This facilitates also the insertion of the needle and asked less skillful training from the part of the physicians. This is a good example to show how the environment can influence the practice. By using a guiding tube, it is an entire part of needle technique insertion skills that disappear. Along with the disappearance of a large variety of insertion techniques also comes the simplification of the needle techniques which is commonly very poor in the actual practice. Apart the lifting-thrusting and twirling methods generally used, the supplementation and draining techniques were not regarded as important by the physicians. More than half of them founded “not important” or were “not familiar with” directional, open-closed, quick-slow and respiratory techniques. And finally, the time related theories, like the seasons or the time of the days, that are central in the *Inner Canon of the Yellow Emperor*, were the less considered items of our questionnaire (more than 60% of “not important” or “not familiar with” for the seasons and almost 80% for the hours of days). This illustrate clearly how some fundamental theories that, embedded in a global vision of the world, were at the heart of acupuncture practice during a certain period of time and are now disappearing. New explanations are growing, relying on tools and explanations borrowed to biomedicine[49].

6. Conclusion

We have seen that different factors interact and shape the plurality found in acupuncture practice. The questionnaire outcomes suggested that the two main factors influencing acupuncture practice were related to the geographical situation and the education background. The age of the physician also played an important role. The years of practice, the type of hospitals and the cities/districts areas distinction were factor that influenced secondarily the practice. Concerning the general use of acupuncture almost all the factors were involved but concerning the diagnosis and treatment of low back pain only the influence of one or two factor were involved. From those analysis we can see how different factors influenced acupuncture practice at different levels.

Appendix: Questionnaire

台灣針灸使用現況

/調查問卷/

中國醫藥大學 & 中華針灸醫學會

台灣針灸使用現況調查問卷

敬啓者：

首先感謝您的參與，使本研究計畫得以順利進行！本計畫由中華針灸醫學會及中國醫藥大學合作執行，目的在瞭解台灣地區針灸使用現況，以提供未來國內及國際上規劃針灸教育及臨床發展之參考。

本問卷共分爲三部份：第一部份填寫「醫師基本資料」，第二部分調查您對於「針灸使用範圍」之意見，第三部分則以「腰痛」爲例，請教您診治之思維與經驗。所有調查資料僅限學術研究分析之用，不作其他用途。

爲感謝各位醫師於百忙中撥空完成本問卷之填寫，請您將完整填答之問卷於**4月23日（週五）前**以回郵信封寄回，**中華針灸醫學會將認證「中華針灸醫學會點數2點」**，再次感謝您的參與！

前中華針灸醫學會 理事長　林昭庚
中華針灸醫學會 理事長　陳必誠
中國醫藥大學 中醫學系系主任　蘇奕彰　敬上
日期：2010.4.12

若您平日診療業務並未使用針灸療法，
請您直接將問卷放入回郵信封寄回即可！謝謝您的協助！

聯絡人：張詩梅　聯絡電話：04-2205-3366 #3105

第一部份　醫師基本資料

1. 生日：民國_____年_____月

2. 性別：□男　　□女

3. 目前執業：□中醫師 □西醫師

4. 請問您現在執業的醫療機構爲：
□西醫教學醫院中醫科部 □西醫區域醫院中醫科部
□西醫地區醫院中醫科部 □中醫醫院

5. 您目前在那一個縣/市執業？（可複選）
□台北市 □基隆市 □新竹市 □台中市 □嘉義市 □台南市 □高雄市
□台北縣 □桃園縣 □新竹縣 □苗栗縣 □台中縣 □彰化縣 □南投縣
□雲林縣 □嘉義縣 □台南縣 □高雄縣 □屏東縣 □台東縣 □花蓮縣
□宜蘭縣 □澎湖縣 □連江縣 □金門縣

6. 針灸執業年資：_____年

7. 最高學歷：（請在下列勾選）

台灣	□高中 □大學 □碩士 □博士
中國	□高中 □大學 □碩士 □博士
其它國家（　　）	□高中 □大學 □碩士 □博士

8. 教育背景

台灣	□中醫學系 □學士後中醫學系 □醫學系
	□中醫師特考
中國	□大學5年課程（完整課程之學系）
	□大學7年課程（完整課程之學系）
□其他國家，請說明：	

9. 學習針灸過程：

9.1 請問您在正規大學針灸課程外學習針灸的機構或方式？（可複選）
□大學中醫研究所或針灸研究所　□教學醫院（如台北榮總）之推廣教育
□大學針灸中心/推廣教育　□中醫或針灸相關醫學會
□大學中醫社團或針灸社團　□傳統的師徒傳承及家傳
□其它中醫或針灸相關之民間社團
□其他，請說明：_____

9.2 請問您在那裡開始實際操作針灸？（可複選）

□學校課堂　□校外特定老師教授　□社團
□在家自學　□醫院／診所
□其他，請說明：_____

9.3 請問您如何精通針灸的理論與手法？（可複選）

□學校教育　□校外特定老師教授　□醫院／診所執業歷練
□在家自學　□參與針灸相關醫學會研習　□閱讀經典
□其他，請說明：_____

10. 除加入「中華針灸醫學會」外，請問您是否還加入國內其他針灸相關之醫學會？

□無　□有：_____醫學會

11. 請問您有沒有參加過國際性針灸相關之醫學會之學術活動？

□無　□有：_____醫學會所舉辦之活動

12. 請問您是否曾經發表學術性論文？

□無　□有：發表於國內或大陸中文期刊
□有：發表於國際SCI期刊

13. 請問您是否有教授中醫理論或針灸的經驗？（若「有」，請勾選教學地點並註明教學年資）

□無
□有：□大學中醫與針灸相關系所（含推廣教育）_____年
□教學醫院／醫學會_____年　□縣市醫師公會_____年
□學生或民間社團_____年　□自行開班授課_____年

14. 請問您執業時使用針灸治療是否有申請健保給付？

□無。未申請健保給付，您是否會另外收費？□是　□否
□有

15. 請問您認爲健保對於針灸治療的給付費用是否合理？

□合理
□不合理，那麼您認爲針灸治療一次的合理費用爲_____元。

16. 您是否知道在歐美國家每次針灸治療之收費金額爲多少？

□知道，每次收費約新台幣_____元。
□不知道

第二部分　針灸使用範圍

1. 請根據您臨床經驗勾選出在執業中使用下列治療方法的頻率：

治療方法	（每100人次患者使用頻率） 0 25 50 75 100 從未使用	很少	偶爾	經常	頻繁
(1) 毫針					
(2) 灸					
(3) 耳針					
(4) 頭皮針					
(5) 小針刀					
(6) 水煎藥					
(7) 科學中藥					
(8) 傷科手法					
(9) 敷貼藥膏					
(10) 中藥薰蒸					
(11) 拔罐					
(12) 紅外線					
(13) 刮痧					
(14) 放血					
(15) 氣功療法					
(16) 生活建議 （食療、運動）					
其他，請說明：					

2. 請根據您臨床經驗勾選出使用針灸治療下列各系統疾病的頻率：

疾病種類	（每100人次患者使用頻率） 0 25 50 75 100 從未使用	很少	偶爾	經常	頻繁
(1) 骨骼肌肉系統疾病					
(2) 腦神經血管疾病					
(3) 風濕免疫疾病					
(4) 腫瘤疾病					
(5) 精神疾病					
(6) 內分泌及新陳代謝疾病					
(7) 心臟血管疾病					
(8) 胸腔疾病					
(9) 消化系統疾病					
(10) 耳鼻喉疾病					
(11) 泌尿生殖系統疾病					
(12) 婦產疾病					
(13) 皮膚疾病					
(14) 血液疾病					
(15) 中毒					
(16) 診斷欠明之各種病態					

3. 以下是世界衛生組織（WHO）所認可的針灸適應症，請您依照您的臨床經驗，勾選出療效最好的「**前十名**」疾病：

■神經內科系統疾病	■泌尿系統疾病	■呼吸系統疾病
□ 頭痛	□ 腎絞痛	□ 支氣管哮喘
□ 偏頭痛	□ 泌尿道結石	■腸胃系統疾病
□ 緊張性頭痛	□ 小兒遺尿	□ 噁心嘔吐
□ 三叉神經痛	□ 尿失禁	□ 腸道激躁症候群
□ 面癱	□ 尿瀦留	□ 便秘
□ 腰痛	■婦科系統疾病	□ 泄瀉
□ 神經根症候群	□ 經前緊張症候群	□ 胃下垂
□ 偏癱和其他腦病後遺症	□ 痛經	□ 呃逆
□ 失眠	□ 引產	■肝膽系統疾病
□ 原發性低血壓	□ 妊娠反應	□ 膽囊絞痛
□ 高血壓	□ 胎位不正	□ 膽結石
□ 手術後疼痛	□ 缺乳	□ 膽道蛔蟲症
□ 坐骨神經痛	□ 無痛分娩	■皮膚系統疾病
□	□ 女性不孕	□ 帶狀疱疹
■運動系統疾病	■五官科系統疾病	■其他
□ 顳頁關節功能紊亂症	□ 過敏性鼻炎（花粉症）	□ 假性心絞痛
□ 頸椎病	□ 兒童近視	□ 類風濕性關節炎
□ 肩周炎	□ 急性扁桃腺炎和急性咽喉炎	□ 憂鬱症
□ 運動系統慢性疼（頸，肩，脊柱，膝等）	□ 耳性眩暈（梅尼爾氏症候群）	□ 男性不育（精子缺乏，精子活動力缺乏）
□ 競技症候群	□ 扁桃腺切除後疼痛	□ 戒煙
□ 扭傷和勞損	□ 鼻竇炎	□ 戒酒
□ 網球肘	□ 慢性咽炎	□ 戒毒
□ 背痛	□	□ 白血球減少症
□ 肌筋膜炎	□	□ 陽痿（不能射精）
□	□	□ 單純性肥胖
□	□	□ 精神分裂症

第三部分　針灸診治思維：以「腰痛」爲例

請勾選您對腰痛診斷及治療的看法及臨床經驗：

A.診斷

1. 在診察腰痛時，您是否採用下列診察方式？及其重要性如何？（請逐項勾選）

項目	診察方式	未採用		採用	
		不熟悉	不重要	重要	非常重要
望診	舌診				
	精神				
	面色				
	體態、四肢				
	X光片報告				
	MRI／CT 影像檢查報告				
問診	疼痛病史				
	疼痛部位				
	疼痛的性質與發作頻率				
	加重或減輕疼痛的因素				
	過去病史				
	生化檢查報告				
切診	脈象				
	疼痛的部位／範圍				
	西醫理學檢查				
	西醫神經學檢查				
其他，請說明：					

2. 在診察腰痛時，您是否採取下列辨證論治方法？及其重要性如何？

（請逐項勾選）

使用之辨證方法		未採用		採用	
		不熟悉	不重要	重要	非常重要
使用臟腑辨證					
使用經絡辨證	（例：足太陽膀胱經、足少陰腎經、足少陽膽經、足厥陰肝經、督脈）				
使用六淫辨證	（例：風寒、風熱、寒濕、濕熱）				
使用氣血辨證	（例：氣虛、氣滯、血虛、血瘀）				
其他，請說明：					

B.治療　※若您臨床並不使用針灸治療腰痛，則以下問題不需填寫。※

1. 請問您治療「急性」腰痛最常使用的三個穴位爲何？

(1)_____ (2)_____ (3)_____

留針時間有多長？_____

安排病患每星期的針灸治療次數？_____

2. 請問您治療「慢性」腰痛最常使用的三個穴位爲何？

(1)_____ (2)_____ (3)_____

留針時間有多長？_____

安排病患每星期的針灸治療次數？_____

3. 請問您針灸治療腰痛時的進針手法？　□徒手進針　□管針／拍針

4. 在針刺治療腰痛時，您是否考量並採用以下幾點？及其重要性如何？

（請逐項勾選）

項目		未採用		採用	
		不熟悉	不重要	重要	非常重要
得氣	要求得氣				
順序	按照特別的順序下針				
留針過程	電針刺激				
	手法刺激				

5. 在針刺治療腰痛時，您是否採用以下補瀉法？及其重要性如何？

（請逐項勾選）

項目		未採用		採用	
		不熟悉	不重要	重要	非常重要
補瀉法	捻轉補瀉				
	提插補瀉				
	疾徐補瀉				
	迎隨補瀉（針芒）				
	呼吸補瀉（按病人的呼吸）				
	開闔補瀉				
其他補瀉法，請說明：					

6. 以針刺治療腰痛，您在選穴時是否考量以下幾點？及其重要性如何？

（請逐項勾選）

項目		未採用		採用	
		不熟悉	不重要	重要	非常重要
用固定配穴方式					
根據病人的體質					
根據季節的規律					
根據時辰					
用歸經理論選穴					
腧穴	五腧穴理論				
	原穴理論				
	郄穴理論				
	奇經八脈交會穴理論				
	八脈八法				
	阿是穴				
	經外奇穴				
其他，請說明：					

7. 請問治療腰痛時，你是否還會配合其他療法及建議，請勾選<u>您最常使用的前三種療法</u>：

□灸法　□紅外線　□中藥薰蒸　□情緒的建議

□耳針　□小針刀　□科學中藥　□氣功鍛鍊

□拔罐　□水煎藥　□食療的建議　□運動、復健方法的建議

□刮痧　□傷科手法　□睡眠的建議　□其他，請說明：

□放血　□敷貼藥膏　□衣著的建議　＿＿＿＿＿＿＿＿

/謝謝您的填答/

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Abstract in Chinese

台灣針灸使用現況調查研究

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摘 要

針灸是中醫常用之治療方法之一，不論是醫學歷史學家、醫學人類學家亦或針灸臨床醫師，均強調了針灸臨床應用上多重的診斷方法與操作方式。雖有學者在報導台灣中醫現況時提到針灸的治療範圍，但至今仍缺乏對於台灣針灸使用現況的調查與深入探討。

本研究目的在瞭解台灣針灸使用現況，並進一步探討中醫師的教育背景、年齡，執業年資與執業環境對其針灸操作方式影響之相關性。研究採用問卷調查方式，問卷內容包括三大主題：（1）醫師基本資料（2）針灸使用概況（3）對於「腰痛」的診斷與治療。調查對象為地區醫院以上中醫科部及中醫醫院之中醫師，共寄出問卷 403 份，回收有效問卷 177 份（回收率 44%）。

結果顯示與中醫師「針灸治療方法之選擇」及「疾病治療範圍」相關性較強的因素為中醫師的「執業地區」與「教育背景」；與「年齡」、「執業年資」與「執業場所」亦有相關性，但強度較弱：（1）在台灣北部地區，針灸之使用頻繁及範圍較其他地區廣。（2）特考中醫師使用針灸治療之系統疾病種類較其他教育背景之中醫師多。（3）年紀較大與執業年資較久之中醫師以針灸治療疾病的種類亦較多樣。（4）在中醫醫院執業的中醫師使用中醫診斷方法的比率較其他中醫師高，而且使用針灸治療之系統疾病種類較在西醫醫院中醫科部執業之中醫師多。

本研究之調查對象侷限於西醫醫院中醫科部與中醫醫院之中醫師，因此對於中醫診所的針灸使用現況及健保制度在針灸使用上的影響則還需更進一步地研究與探討。

關鍵字：台灣、針灸、問卷、西醫醫院、中醫醫院

Notes

[1] For the transcription of the Chinese names, we used the Taiwanese transcription for the proper names of the cities, districts and hospitals names in Taiwan. For the others transcription we used the pinyin transcription.

[2] Through history we still find some schools of Chinese medicine, the most ancient one identified was established during the Southern and Northern Dynasties in 433. But in general the school of Chinese medicine were intended to form elite physicians whose would be at the service of the emperor and his court. Therefore it does not represent the most usual ways Chinese medicine was transmitted trough generations.

[3] Chi C, Lee JL, Lai JS, Chen CY, Chang SK, Chen SC. The practice of Chinese medicine in Taiwan. Soc Sci Med. 1996; 43: 1330. This school was also the first medical school ever established in Taiwan.

[4] Chen BC. Traditional Medicine in Taiwan. In: Oriental medicine: an illustrated guide to the Asian arts of healing, Serindia publication, London 1995; pp. 203.

[5] 陳立德：台灣中醫師學歷背景之研究 ，博士論文， 指導教授: 陳榮洲 、 賴俊雄 、李采娟、中國醫藥學院，中國醫學研究所 1997

[6] Chi C, 1996; pp. 1330. One can adds that in Taiwan, the trust of the population toward a physician do not come principally from his degree, but more from his authority and his reputation. Actually in Taiwan, there are many practitioners of Chinese medicine without a licence that treat a large number of patients and teach students.

[7] A long pause was observed between 1955 and 1964. After that the examination take place almost every two years, then from 1977 on, the examinations were held every year. In 1984 and 1986 because of an affaire of irregularity in the examination process, the examination was closed until

1989. Until this time, the examination took place every year. 陳立德, 1997; pp.11.

[8] Chi C, 1996; pp. 1331. 陳立德, 1997; pp. 20. After the constitution of the National Health Insurance (NHI), these factors changed. Actually the difference of the income between Western and Chinese medicine practitioners are not so obvious even if the social position of the Western medicine physicians still remain significantly higher.

[9] Chen BC, 1995; pp. 206.

[10] Kleinman A. Patients and healers in the context of culture, an exploration of the borderland between anthropology, medicine and psychiatry. University of California Press, Berkley 1980.

[11] Kleinman A, 1980, pp. 52.

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[15] Unschuld PU. Medicine in China: a history of ideas. University of California Press, California 1985.

[16] Kuriyama S. The expressiveness of the body and the divergence of Greek and Chinese medicine. Zone Books, New York 1999.

[17] “In this examination of clinical encounter, I will try to show why flexibility and responsiveness of knowledge constructs are more valued in Chinese Medicine practice than are explanatory ‘rigor ‘of generalized

predictive power." Farquhar J. Knowing practice: the clinical encounter of Chinese medicine. Westview Press, Boulder 1994; pp. 39.

[18] Hsu E. The transmission of Chinese Medicine. Cambridge University Press, Cambridge 1999.

[19] "Chinese medical terms seems to have some affinity with words like *bobility* and *baraka* which have proven socially eminently functional precisely because they lack a clearly defined referential meaning and their referential meaning changes as the contexts in witch they are uttered changed." Hsu E, 1999; pp. 232.

[20] "(In Western science key concepts) are defined with the aim of being as unambiguous as possible, while in the latter (Chinese Medicine) are often useful for the therapeutic intervention precisely because their vagueness and polysemy." Hsu E, 1999: pp. 233.

[21] Scheid V. Chinese medicine in contemporary China: plurality and synthesis. Duke University Press, Durham 2002.

[22] Scheid V, 2002; pp. 59.

[23] Scheid V. Shaping Chinese medicine: two case studies from contemporary China. In: Innovation in Chinese medicine, Cambridge University Press, New York 2001.

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[28] MacPherson H, Thorpe L, Thomas K, Campbell M. Acupuncture for low back pain: traditional diagnosis and treatment of 148 patients in a clinical trial. Complement Ther Med. 2004; 12: 38–44.

[29] Kalauokalani D, Cherkin DC, Sherman KJ. A comparison of physician and nonphysician acupuncture treatment for chronic low back pain. Clin J Pain. 2005; 21(5): 406-411.

[30] Taiwan national health insurance use to distinguish between Taipei area 台北業務組 (that regrouped Taipei city, Taipei county, Keelung city and Ilan district) ; the northern region 北區 (that regrouped Taoyuan district, Hsinchu city, Hsinchu district and Miaoli district) ; the central region 中區 (that regrouped Taichung city, Taichung district, Changhua district and Nantou district) ; the southern region 南區 (that regrouped Chiayi city, Chiayi district, Yunlin district,Tainan city and Tainan district) ; the Kaoping region 高屏區 (that regrouped Kaohsiung city, Kaohsiung district and Pingtung district) and the eastern region 東區 (that regrouped Taitung district, Hualian district and the Green island and the Orchid island).

[31] The acceptable range of alpha is debatable. According to JL Fleiss, an ICC >= 0.4 to <0.75 represents a fair to good reproducibility. An ICC > 0.75 indicates and excellent reproducibility. Fleiss JL. The design and analysis of clinical experiments. Wiley, New York 1996.

[32] We selected Western medicine hospitals that were not smaller than the rural hospital rank.

[33] This association brings together Chinese medicine physicians but also Western medicine physicians as well as dentists. Almost half of the members are Western medicine physicians.

[34] By manipulations techniques we refer to the techniques of Chinese traumatology including massage or tuina.

[35] In Taiwan, massage or tuina are seldom practiced by Chinese medicine physicians. The massage or tuina are more the speciality of another kind of practitioners that practiced in private clinics. These practitioners knowledge is traditionally related to the practice of martial arts. Practitioners developed a specific knowledge of the body as much for acquiring effective attacks than for treating injuries bring about training. Nowadays the private clinics are still called martial arts institute (國術館) even the martial's arts are not taught anymore. This separation that occurred in Taiwan between the legally recognized Chinese medicine physicians that used mainly Chinese medicinal and acupuncture and in the other side more marginal practitioners that practice tuina and often also acupuncture (which is traditionally a part of Chinese medicine) is interesting. But because we decided to focus only on the legally recognized practitioners, we will no discuss this issue.

[36] "欲以微真針通其經脈調其血氣" 內徑。九針十二原第一.

[37] This was also the conclusion draw by FP Chen "Muskuloskeletal and neurologic disorders and injuries are the diseases categories commonly treated by acupuncture" Chen FP, Kung YY, Chen TJ, Hwang SJ, 2006; pp.385. In this article, the authors chose to use the ICD9 classification of diseases. In this classification, injuries are separated from the diseases of the musculoskeletal system. Therefore in their table of major disease categories for acupuncture visits (table 5, p.382) the second major category of disease treated by acupuncture is "Injury and poisoning". Apart the categories of musculoskeletal and neurologic diseases, their results differed quite a lot of our results.

TABLE 5. THE TOP 11 MAJOR DISEASE CATEGORIES FOR ACUPUNCTURE VISITS FROM 1996 TO 2002 IN TAIWAN

Major disease category	*ICD-9-CM code*	*Number of visits*	*Percent (%)*
Diseases of the musculoskeletal system and connective tissue	710–739	7,588,418	46.2
Injury and poisoning	800–999	6,869,024	41.8
Diseases of the nervous system and sense organs	320–389	572,175	3.5
Symptoms, signs and ill-defined conditions	780–799	443,290	2.7
Diseases of the respiratory system	460–519	413,970	2.5
Diseases of digestive system	520–579	268,440	1.6
Diseases of the circulatory system	390–459	220,431	1.3
Diseases of the genitourinary system	580–629	143,893	0.9
Diseases of the skin and subcutaneous tissue	680–709	68,056	0.4
Mental disorders	290–319	44,072	0.3
Endocrine, nutritional and metabolic disease, and immune disorders	240–279	43,653	0.3

[38] We referred to the table of the *新編彩圖針灸學* for the WHO recommendation on acupuncture use. This version is from 1996 and contain 64 diseases classed in three categories. A new version exist since 2003 in the site of the WHO on the internet, it contain 107 diseases classified in four categories. The latest version was to detailed and less convenient to use in the questionnaire. Therfore we chose the 1996 version.
林昭庚：新編彩圖針灸學 (A new illustrated book of Acupuncture and Moxibustion). 知音 出版社, 台北 2009; pp. 728-730.

[39] This observation was also present in the article written by American physicians in their comparison between diagnosis done by different Chinese medicine physicians “despite agreement at the broadest level, acupuncturist generally differed in the specific diagnoses and treatments they recommended for the same patient.” Hogeboom CJ, Sherman K, Cherkin DC, 2001; pp. 164.

[40] We chose to present only the acupuncture points that were used by at least ten physicians.

[41] In mainland China the standard retention time of the needles is 30 minutes. The general explanation is that the nutrient Qi (營氣) circulate in our body fifty times a day through the fourteen meridians (the twelve meridians and the Conception and Governor vessels), therefore it take 28minutes to the Qi to travel along the fourteen meridians.

[42] In the questionnaire, we divided the life style advices in sub categories. The recommendation were mainly about exercises (57 physicians) then about diet (7 physicians), sleep (2 physicians) and finally about the regulation of the emotions (1 physician).

[43] For the questions about diagnosis tools (3A1), patterns identification (3A2), stimulation methods (3B4), supplementation and draining methods (3B5) and choice of acupuncture points (3B6), we collected questionnaire were all the answers of one question were noted as “important” with no variations at all.

[44] Except in the case of the therapeutic methods used, where the years of clinical practice expressed statistical evidences when the age factor only showed tendencies.

[45] The geographical situation was correlated with the treatment methods, the categories of diseases treated by acupuncture, the diagnosis tools, the diagnosis theory and the rational for choosing acupuncture points. The age of the physician was associated with the treatment methods, the categories of diseases treated by acupuncture, the diagnosis theory, the needle techniques and the categories of acupuncture points chose. The education background of the physician was associated with the treatment methods, the categories of diseases treated by acupuncture, the diagnosis tools and the needle techniques.

[46]The years of practice of the physician were correlated with the rational for choosing acupuncture points and the categories of acupuncture points chose. The type of hospitals was correlated with the treatment methods and the categories of diseases treated by acupuncture. The cities/districts areas distinction was correlated with the treatment methods and the categories of diseases treated by acupuncture.

[47] Through the history of acupuncture many physicians complained about the waning of acupuncture practice, to name but a few Dou Hanqing (1196-1280)

author of the *Biaoyoufu* (*標幽賦*) and Xu Dachun (1693-1771) author of the *Loss in acupuncture transmission* (*針灸失傳論*). Maybe the term of 'disappearance' is more suitable and neutral than 'waning'. We use this term in the sense V. Scheid used it when he defined the synthesis as a concept that can capture the constitution of the field of practice "as a process of simultaneous emergence and disappearance." That is to say that some aspects of the practice can be present or not depending the context, so that disappearing concepts or techniques can also reappear if the context change.

[48] Some would argue that for internal medicine the results wouldn't be the same. It is true that for internal diseases the physicians would put more attention to understand the root of the problem, but whatsoever it is an internal or "external" problem, the feature that characterized Chinese medicine is "to cure the root" (*治本*).

[49] A. Pickering especially analyses the relation between human and machines, he explains "that the regularization of human agency is reciprocally bound up with capture and framings of nonhuman agency, with specific machine and instrument." Pickering A, 1995; pp. 221. This observation can be observed in acupuncture practice in Taiwan in the instruments and machines currently used by the physicians: the needles used (guiding tube needles), the Western medicine diagnosis tools (X-ray, MRI, laboratory data) and treatments tools (red lamp, electro acupuncture and at some extent powdered Chinese medicinal). Those instruments are all integrated in the practice of acupuncture and participate to the transformation of it.