NOVATEUR PUBLICATIONS
JournalNX- A Multidisciplinary Peer Reviewed Journal
ISSN No: 2581 - 4230
VOLUME 6, ISSUE 7, July -2020

ON THE DISSEMINATION OF ACUPUNCTURE TO EUROPE

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ABSTRACT:

Acupuncture, in conjunction with moxibustion and the use of medicinal herbs, was developed in Ancient China, and is part of the Traditional Chinese Medicine. These practices were subsequently disseminated in Japan, and their further development gave rise to the Traditional Japanese Medicine. After the 17th century AD, these medical practices were disseminated in the West, mainly through the groundbreaking work of scientists and doctors, Willem Ten Rhijne and Engelbert Kaempfer. Central to this process was the existence of the Dutch Trading Post in Deshima Island, in the Bay of Nagasaki, which constituted the sole point of contact between Japan and the West for centuries. Owing to individual initiative and an established tradition of cultural and scientific exchange, at Deshima, acupuncture and Japanese medicine became known in Europe, providing the impetus for further cultural and scientific exchange.

KEYWORDS: acupuncture; cross-cultural contacts; Deshima; Willem Ten Rhijne; Engelbert Kaempfer.

INTRODUCTION:

Acupuncture is a cardinal component of Traditional Chinese Medicine, and is currently widespread both in China and Japan, and in the West, as a form of complementary and alternative therapy. It is believed that acupuncture was developed in China, though the exact period of its emergence cannot be pinpointed beyond reasonable doubt. Much later, it also became known in Japan, being disseminated gradually during the 5th century AD.

The current consensus attributes the dissemination of acupuncture to Europe, during the 1930s and the 1940s to George Soulié de Morant, who wrote extensively on the subject. His books, «Précis de la Vraie Acuponcture Chinoise» [1] and «L' Acuponcture Chinoise» in two volumes [2] [3], provided the medical community of France, with the first glimpse of the full extent of Chinese medical thought. What is largely forgotten today, although mentioned by Soulié de Morant himself [1], is that, in fact, acupuncture was known to Europe as early as the 17th century AD. It was even tried in France, in the beginning of the 19th century AD, and a few years later also in Great Britain. Despite meeting with initial success, it was subsequently discarded as a healing method and consigned to the backstage of medicine, only to emerge anew, owing to the aforementioned works.

It our purpose to delineate when and how Chinese medicine was originally spread, initially within China and later to Japan, and finally to the scientific and medical community of Europe, in the 17th and 18th centuries, and to explain summarily what circumstances lead to the cultural contact between the Europeans and the Japanese. Thus, we adopt a two-pronged approach, in order to evaluate how the exchange of medical knowledge was made possible by already established contacts, and how in itself became the impetus for cultural exchange.

METHOD:

This is partly a historical review and partly a novel presentation of the historical facts, within their historical context. Accordingly, we delve

into methods of realistic history, which give the best opportunity of elucidating motives and intentions [4]. We also utilise partly a factual history method, in order to describe the sequence of events, during different time frames, thus highlighting the interconnection of events [5]. We avoid however to apply a critical history approach [6], as we are not concerned with the value of ideas and notions but rather with explaining the historical chain of events.

To achieve the purposes outlined in the introduction, we present a brief summary of the development of Chinese and Japanese Traditional Medicine up until the 17th century AD, as well as the context of the Dutch presence in Japan. Subsequently, we present the cultural contact between the Japanese and the Europeans and then the dissemination of the knowledge of Japanese Medicine in Europe.

HISTORICAL OVERVIEW:

A. The Development of Acupuncture in China:

Although the earliest evidence of human habitation in China date back to 1.7 mya [7], it is not precisely known when acupuncture was first conceived in Ancient China and how it came to be that the Ancient Chinese noticed that the puncturing or stimulation of specific points in the human body had healing properties. However, it is believed that the first such therapies took place between 10000 and 4000 BC [8]. Initially, the instruments used, were the Bian stones [9], which can be viewed as the precursors of the modern-day needles, in both shape and function. The mineralogical composition of some such stone implements has been analysed fairly recently, offering insights in their provenance [10]. It is most probable, that before acupuncture, moxibustion had already been developed as a healing method.

Initially, acupuncture had strong ties to religion, and the first healers were also shamans, while sacrifices were also employed in ritual healing practises. The sacrificial component of the healing art waned with social and cultural advancement [11]. Shortly after, the basic concepts of Yin-Yang and the Five Elements must have been developed. These theories form the backbone of Traditional Chinese Medicine. As acupuncture is correlated to energy flow, and the body is considered as an analogue to nature, it is not implausible to propose that in mirroring the flow of water upon the natural landscape, the Chinese conceived the concept of the energy flow in the human body. In effect, the importance of natural flow paths is evident in early landscape maps from China. Such examples are reproduced in more modern maps [12]. At any rate, the determination of basic acupuncture points is thought to have predated the mapping of the meridians of the human body.

Amongst the earliest texts on Chinese Medicine are the Mawangdui scrolls, uncovered in the Mawangdui III tomb, in the Hunan Province of China [13]. The first complete book on Chinese Medicine, Huangdi Neijing, is believed to have been compiled between the 5th and 3rd century BC, while modern scholars have also proposed that it was either written during the 2nd or 1st centuries BC [14], or that even it was written by numerous authors during an extensive time span [15]. If the latter statements are true, then the Mawangdui scrolls, which are roughly dated to the 2nd century BC, may be the earliest known written sources on acupuncture.

Regardless of these still remaining questions, the Huangdi Neijing signalled the rapid development of acupuncture and moxibustion and its formalisation into an integrated healing art [16]. The next very important book is the Nan Jing, which incorporates the first concepts of pharmacology into the Chinese medical thought. This was written in the 2nd century AD. Numerous books were written subsequently and new traditional healers emerged, such as the famous Hua Tao [17]. The development of a financially robust and militarily powerful Chinese Empire, was beneficial for the

development of the Chinese civilization in all aspects. Chinese Medicine also flourishes, and in the 7th century AD, the legendary doctor, Sun Simiao, who has been called the 'Father of Chinese Medicine' emerged. He was the first to compile the medical knowledge for the treatment of different diseases, during the different stages of life of an individual. His monumental works, Beiji Qian Jin Yao Fang and Qian Jin Yi Fang have still not been translated into English. The first book alone consists of 35 volumes [18]. After him, during the Tang dynasty, acupuncture progressively develops, both under the auspices of the State and according to the teachings of charismatic healers. Notably, bronze human models depicting meridians and acupuncture points appear during the 11th century AD [19]. During the 16th century AD this progressive trend continues, although after the 18th century AD acupuncture fades into relative obscurity for a multitude of factors. It will only again see widespread usage after 1945 and the emergence of Mao Zedong and the Communist rule of China.

B. The Dissemination and Development of Acupuncture in Japan:

Traditional Chinese Medicine in general and acupuncture in particular, became known in Japan, in the 6th century AD, when the Chinese Buddhist monk Chiso is said to have arrived in the country, carrying over 160 books on the subject. It is plausible, that basic notions of acupuncture were known for a slightly earlier date in Japan, carried over by refugees from the Korean Peninsula [20]. In the 8th century AD, the Japanese Emperor founds the Imperial Medical University, were both acupuncture and herbal therapy are taught at a state level. Medicine in Japan remains under direct state supervision even after the transfer of power from the Emperor to the Shoguns. Although initially beneficial to the development and dissemination of acupuncture in Japan, the dependence of the medical establishment upon the state, was detrimental during later years, when Japan suffered from two Mongol invasions and a series of civil wars, between the 12th and the 15th century AD [21]. Only after the end of the Onin War in 1477 AD, and the establishment of a relative internal tranquillity will acupuncture once again flourish.

The invasion of the Korean Peninsula by Japan in the 16th century AD brought Japan in contact with new technologies and especially typography, which predictably enabled the easier dissemination of knowledge. At the same time, civil unrest in China lead to a massive immigration wave from China towards Japan, which embraced the chance to assimilate yet more of the Chinese cultural and medical advances. The dispersion of the Chinese doctors in different areas of Japan lead to the development of distinct different healing traditions, which characterise Traditional Japanese Medicine to this day [20]. The 16th century is however pivotal for the development of acupuncture in Japan for yet another reason. It is the era of the famous healer Isai Mishono, who developed his own distinct style of acupuncture and abdominal palpation [22]. He can be considered as the forerunner of modern Japanese Acupuncture, paving the way for the more famous Waichi Sugiyama. Even if the two books which he wrote were lost, his legacy lives to this day [23].

In the first decade of the 17th century, Sugiyama, the 'Father of Japanese Acupuncture' is born. Though a large part of his life is shrouded in legend, it is known that it was he who invented the shinkan, the small tube used to facilitate the easier and more painless needling during acupuncture therapies. Being blind, he also simplified the existing theoretical framework of the Chinese Medicine, formulating the basis for the theory of Traditional Japanese Medicine [24]. It is his method which defined the medical concepts later disseminated in Europe,

through the doctors of the Dutch East Indies Company.

C. Japanese Contacts with the West:

During the 14th and the 15th century AD, China was comparable in most aspects to European powers of the period, and in fact was more advanced in certain technological fields. However, the Chinese officials, regarding China as superior in every respect to other nations, and fearing external cultural influences, restricted severely the contact with the outside world, gradually isolating their country, and making it a technological backwater [25].

Japan also closed its borders to foreigners in 1639 AD, because the influx of European missionaries was perceived as a threat to the religious and social integrity of the nation. In addition, the import of European technology and arms, enabled rival factions to challenge the Shogun's authority, increasing the potential of yet another civil war (Toby, 1977; Hidetoshi, 1981). However, unlike Chinese authorities, the Shogun and his officials realised the importance of maintaining a modicum of trade relations, and thus allowed the creation of a small isolated trading post at the artificial island of Deshima, in the Bay of Nagasaki, to be run by the Dutch East Indies Company. Even if the employees of the Company lived in virtual seclusion, it was their presence, which would suffice to give rise in an extensive cross-cultural contact.

CROSS-CULTURAL CONTACT AND THE DISSEMINATION OF TRADITIONAL JAPANESE MEDICINE:

Most of the staff at Deshima were not allowed to leave the island, and nobody was allowed to learn Japanese. Instead any and all foreigners were obliged to use interpreters. Only the doctor was allowed to search for herbs and medicinal plants in the hinterland, but always under guard. Once a year, the governor of Deshima and the doctor, left their small island, to visit the Japanese Emperor in Edo [28]. It was one of the rare chances for a select few to see a glimpse of the Japanese society.

The first European to describe acupuncture, and indeed he coined the term itself, was Willem Ten Rhijne, a Dutch doctor, who stayed at Deshima for two years. He was born in Deventer in 1647 AD and arrived at Deshima in 1674 AD. With the aid of his interpreter, he recorded various aspects of the life in Japan, and also elaborated on the therapeutic use of moxa, already mentioned some years prior by Busschof [29]. His descriptions about the use of needles and the theoretical framework of Japanese and Oriental medicine [30] are practically the first ever made by a European [31]. Ten Rhijne is also well known today for his treatise on Asiatic leprosy, and he subsequently became the head of the leprosarium in Java, until his death in 1700 AD [32].

After Ten Rhijne, Engelbert Kaempfer arrived at Deshima, in 1690 AD. He had been born in Lemgo, Westphalia, in 1651 AD, and by the time he became a doctor, he had also studied philosophy and natural sciences [33]. After travelling in Sweden and Persia, and then Siam and Java, he was employed by the Dutch East Indies Company. In Deshima, he stayed for ten years, studying the local customs, folkore and civilisation, as well as the local medical practises. He had by then already made the first detailed observations on asafoetida [34], a medicinal plant, used extensively in India and Persia. Today asafoetida is being studied for its antiviral properties, and is considered for use against the H1N1 virus [35][36]. While Kaempfer's description of Japanese Medicine was far more detailed than Ten Rhijne's, he chose to study it mainly in conjunction to a sort of colic, seemingly endemic in Japan, which however was not of much interest in a European audience. Kaempfer would go on to return to this homeland, where he would die in 1716 AD [33].

Regardless, the book of Kaempfer would be published posthumously, in 1727 AD [37], and would meet with a wide acclaim. Along with the other two aforementioned books, it stirred an intense debate in the medical and scientific circles of Europe. While moxibustion was tried, in the late 17th and early 18th centuries AD, acupuncture would only be performed for the first time in the early 19th century, in France [38], by the French doctor Louis Berlioz [37]. Subsequently, it would spread rapidly in the hospitals of Paris, as a novel and effective therapy [39] [40], while shortly after would also be supported by many prominent doctors [38], initially in Great Britain and then in the US [41][42] [43].

However, after 1840 AD acupuncture would decline gradually and then disappear, as a valid medical method. There are many reasons why this happened, and they are related to medical advances in the West, as well as to social and cultural factors. The lack of understanding of basic Japanese and Chinese medical principles, by the British and French doctors was also crucial in reducing the effectiveness of acupuncture therapies, and gradually discrediting the method [37].

DISCUSSION:

In what extend then, did the dissemination of Chinese and Japanese medicine was determined by and in turn affected, the cultural contacts between East and West? We have analysed how Chinese Medicine was disseminated in Japan, and how it then developed into the related but also quite distinct Japanese Medicine. This happened following an impromptu cultural contact, with the Buddhist monk Chiso, and perhaps due to the wider issue of war-induced immigration, from the Korean Peninsula [20].

The contacts between Japan and the West date back to 1542 AD, when a Portuguese ship was shipwrecked in the Japanese Islands. Subsequently, the first Europeans to arrive in Japan were the Spanish and the Portuguese, who were aiming to both develop trade relations and spread Christianity. It was this insistence on religious dissemination and reform, and the social instability it entailed for Japan, which would be the impetus if not the main cause, for the willing self-isolation of the country [26][27].

It must not be underestimated than this is an era where there is a strong tendency for exploration, not only for trading but also for scientific purposes [25]. However, in many cases, as can be seen from likewise instances in the Cape Town colony in Africa [44] and in the case of South America, during the Spanish colonial period [45], most European states were directly aiming for profit, and were not so much interested in cultural and scientific endeavours.

It is only perhaps because of the Dutch, with their two-pronged drive, towards financial and scientific gains, that there was a marked understanding of many aspects of the oriental civilisations, and at the same time a concerted and thorough scientific cataloguing and analysis of subjects pertaining to health and natural sciences [37].

At the same time, this was also an individualist-oriented procedure, in that in the instances delineated here, and other likewise endeavours, were regulated by the private initiative of erudite and resourceful explorers, scientists and doctors, who employed any means available, to advance the knowledge of the civilisations of the Orient, the Pacific and the Indian regions.

So then, it can be established that the existing semi-formal and individual endeavours, mainly under the auspices of the Dutch East India Company, were the main reason, why Chinese and Japanese Medicine were studied in the first place. From that point onwards however, the acquisition of medical knowledge became and end in itself, and the pursuit of it, mainly by Kaempfer, and of Ten Rhijne before him, lead to

an interesting exchange, which is documented with affection in the primary sources [28][30].

Since the Japanese themselves asked to be taught medicine and surgery by the Western doctors, in exchange for their information on acupuncture and moxibustion [28][30], Western medicine permeated the Japanese medical society, and left its mark, as it would be seen later during the Meiji Restoration.

Certainly, the existence of the Dutch trading post in Deshima, was a focal point of the contact between the East and the West. For even when such major figures as Ten Rhijne and Kaempfer left their post, their legacy remained, not only as a heritage of scientific endeavours bestowed upon their contemporaries, but also in the memories of the Japanese who met them and were taught by them.

CONCLUSIONS:

Through the numerous aeons of history there have been innumerable instances of contacts between different civilisations and cultures. Such contacts are inevitably beset by numerous barriers, for a multitude of reasons [46]. It is only via a proper combination of individual initiative and timing that these barriers may be surmounted.

Scientific exchange has of course been a prevalent theme in the history of mankind, since antiquity (e.g. [47] [48]). Amongst the information disseminated from one culture to another, medical practises were frequently the focal point of cross-cultural exchange. This is natural considering the importance of medicine for human societies [49][50].

In earlier societies, regardless of their cultural and scientific progress, the concept of healing was inevitably tied to the concept of nature (e.g. [51][52][53][54]). This in turn lead to a common conception of medicinal procedures, albeit with minor differences. This was also the case in Europe, broadly until the 17th century, due to the influences of Hippocrates and Galen. Thus, the common notional ancestry of medicinal practises in both the East and the West facilitated the dissemination of ideas.

However, it must be borne in mind that in many cases where the locals were characterised by a superior, at least in some fields, medical practises, these were not adopted by the Europeans. Such is the case during the conquest of South America by the Spanish [55], where the Incas possessed advanced neurosurgery techniques, which were however lost to posterity [56][57].

So, to conclude, it can be deduced from the case of the dissemination of acupuncture and moxibustion to Europe, that for the successful transmission of knowledge between cultures, a degree of personal initiative and of tolerance is required, while a relative uniformity of basic principles on a subject is desirable. Inversely, the striving for the exchange of knowledge on a particular subject, may lead to further indirect cultural exchanges. These concluding remarks can be applied to already explored cases of cross-cultural contact, e.g. in the case of Ancient Greco-Roman cultural contacts [58], for a novel approach on the subject, as well as in future relative research on similar cases.

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