

My Dream of Apprenticing with Zhang Zhongjing

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Whenever I read *Shang Han Za Bing Lun (Treatise on Cold Damage and Acute/Miscellaneous Diseases)*, I like to dream. In my dream, I would travel back in time to the waning years of the Eastern Han Dynasty and apprenticed with Zhang Zhongjing.

The late Eastern Han Dynasty was one of the most turbulent eras in Chinese history, with relentless civil wars. Where Zhang was at the time, the Central Plain of China, was the main battlefield amidst the chaotic fighting of the warlords. Naturally, in time of warfare, all resources of the state would be first drawn to support the army. In my dream, I saw Zhang being drafted into military service to organize the field hospital of his time “An Lu.” Thus, the chapters of *Shang Han Za Bing Lun* unfolded in my dream, where each formula and each pattern became each living and breathing patient.

It was a group of soldiers who just retired from the battle. The day’s fighting was a bloodbath. Risking their lives, they charged into the carnage. They killed and they ran all day. They were completely exhausted. Their uniforms became soaked, then dry, and then soaked again. There were the flashes of swords, the clashes of weapons, the spill of blood and mutilation of flesh... these soldiers were extremely frightened with recurring heart palpitation. As they pulled out from the fighting, they starved, rested without cover, suffered from cold and hunger; and then they forced march tens of miles... By the time these soldiers finally returned to the base, they all looked languished with extreme fatigue, with intolerable thirst and hunger... At this time, Zhang had the medics preparing heartwarming, fragrant Gui Zhi Tang. After the decoction was consumed, Zhang had the soldiers sipping on warm congee, and told them to lay down and cover themselves with blanket. The soldiers quickly fell into sound sleep and had slight sweat throughout the body... The next day, their fatigue was gone, the soldiers were re-energized and threw themselves back to the battlefield.

At the sunset, the day’s fighting ended. In front of Zhang’s tent, there were many in critical conditions. Some were crushed by boulders and logs, some fell down from their galloping horses, some had broken bones, some suffered concussion, some lost consciousness, some were screaming in agony, some had obstructed lower discharges... If it were to happen today, they would need emergency surgeries. Zhang, incredibly, also prescribed them with herbal decoctions. Some were prescribed Tao He Cheng Qi Tang, some were prescribed Da Cheng Qi Tang, some were prescribed Xia Yu Xue Tang... etc. Usually when the stool was unblocked, urine became unobstructed and the person’s condition would generally improve.

That Zhi Gan Cao Tang! The source text mentions that it treats “*intermittent pulse with heart palpitation.*” Originally, I had absolutely no idea what this meant. But then in my dream, I finally realized that Zhang used this formula to stop bleeding!! It was a young hero who suffered serious wounds in the heavy melee fighting. His bleeding could not be stopped. By the time he was carried to the base, his complexion seemed as white as a piece of paper. His breathing was shallow and weak. His pulse was present for a moment but was gone the next. Zhang immediately rushed to decoct “Fu Mai Tang” (*Return the Pulse Decoction*), which was better known as this Zhi Gan Cao Tang. The Sheng Di Huang (raw rehmannia) used in the decoction was fresh, which he used up to 1 *jin*¹ (~240g)! He also used the authentic E Jiao. The decoction was thick, sweet, and fragrant. As soon the injured man took it, his bleeding miraculously stopped! And his pulse returned back to normal.

At the time, Zhang not only had to deal with soldiers who were wounded from battles, he also had to face the challenge of the epidemics. Epidemic outbreaks usually occurred after each major battle and campaign. It was a major cause for the significant casualty in the army. It was said that the outbreak of schistosomiasis was the main cause for the crushing defeat of Cao Cao’s grand army at the Battle of Red Cliff.

Influenza outbreak usually occurred in autumn and winter. When it occurred, many became infected and disabled. Zhang saw this type of disease frequently and had great experience of dealing with it. Though, not only one formula was utilized to treat this disease. For strong men, he frequently utilized formulas in the Ma Huang family, such as Da Qing Long Tang, Ma Huang Fu Zi Xi Xin Tang, Da Chai Hu Tang... etc. For weak and thin people, he utilized Xiao Chai Hu Tang, Gui Zhi Tang and others. Among them, Xiao Chai Hu Tang was utilized very frequently. Whenever there was a fever, he would use more than half a *jin* of Chai Hu, which could be up to 120g in today’s scale! Influenza usually occurred with a complication of pneumonia. When a person was prescribed Ma Xing Shi Gan Tang, he usually had shortness of breaths and sweat.

¹ Shang Han Lun dosages were given in units of “*jin*” and “*liang.*” There has been a continuous debate on what’s the actual dosage of them in Han dynasty since the weighing system changed throughout history.

- Most people followed after Li Shizhen’s comment that each Han dynasty’s *liang* = Ming dynasty’s *qian* (3.69g), thus each Han dynasty’s *jin* (= 16 *liang*) should be about 59g.
- In the US, each Han dynasty’s *liang* is commonly calculated as 3g, so each *jin* would be 48g.
- Recent archeological findings, however, suggest otherwise, each Han *liang* should be about 13.8-15.5g, and each *jin* subsequently should be about 220-250g, which is a dosage about 4-5 times higher than today’s regular dosage for Shang Han Lun formulas.
- E.g. In Gui Zhi Tang:
 - Those who follow Li Shi Zhen’s comment would use 11g Gui Zhi
 - In the US, we commonly use 9g
 - Those who strictly follow the archeology findings would use 41.4-46.5g
 - Dr. Huang Huang uses 15g
 - Wu Jutong, the Wen Bing (Warm Disease) School founder, tested on himself with a dosage up to 120g (!!!). He suggested using about 20g in his work Wen Bing Tiao Bian.

Some people were prescribed Xiao Xian Xiong Tang, and they usually had yellow sticky phlegm with chest pain. Some had no sweat and simply had shortness of breaths, and they were prescribed with Ma Huang Tang.

Tuberculosis was an ancient contagious disease. In Zhang's time, it was also a disease seen frequently. Those who suffered tuberculosis were usually young soldiers, who were thin, lacking appetite, with recurring fevers. Some practitioners did not recognize this disease and mistakenly utilized treatment strategy of sweating, vomiting, and purging. Not only was this unhelpful for the disease, it also weakened the constitution of the patients. Zhang discovered that Xiao Chai Hu Tang was most effective to treat this illness, and named this formula "San Jin Tang" (*"Three Contraindications Decoction"*). Whenever a febrile illness went into a transition stage (or into latency) and the patient could not be treated by sweating, purging or vomiting, this would be the formula. Tuberculosis manifested differently on each patient. So some were treated with Chai Hu Gui Zhi Tang, some were treated with Chai Hu Jia Long Gu Mu Li Tang, some were treated with Chai Hu Gui Zhi Gan Jiang Tang... etc.

Malaria was a difficult disease to treat. The patient would have intermittent chill and fever that manifest every other day. Zhang frequently used Bai Hu Jia Gui Zhi Tang, Chai Hu Gui Zhi Gan Jiang Tang, and Chai Hu Qu Ban Xia Jia Gua Lou Gen Tang. If the chronic malaria caused the swelling of Spleen, Zhang called it "Nue Mu" (*"mother of malaria"*), there was this formula called Bie Jia Jian Wan.

Cholera was a major disease that caused many losses in the army. Patients would vomit violently, had diarrhea that looked like milky rice wash. They would lose body fluid rapidly. Their limbs became extremely cold. They would lose consciousness and died. At this time, Zhang would frequently prescribe Si Ni Tang: it was one whole piece raw Fu Zi with its skin removed and cut into 8 pieces, Gan Jiang 1.5 *liang* and Gan Cao 2 *liang*. Decoct it urgently to rescue the patient.

The following spring, there was an outbreak of jaundice. Many people's eyes and skin turned yellow. They lost their appetite. This could be Hepatitis A in today's term. Zhang generally utilized Yin Chen Hao Tang and Zhi Zi Bai Pi Tang, which quickly cleared up the jaundice. But for some, their jaundice did not subside and they further developed edema and diarrhea. For them, Zhang frequently prescribed Yin Chen Wu Ling San. For those who did not even respond to this treatment, with jaundice in the color of dark smoky yellow, he would use Yin Chen Si Ni Tang.

In summer, it was the season for bacterial dysentery. It was mostly caused by soldiers consuming unclean food and drinks. They suffered abdomen pain, diarrhea, bloody discharge. For some people, they had diarrhea 20-30 times each night, and they felt severe vexation and

restlessness that they wanted to kill themselves. Huang Lian E Jiao Tang and Huang Qin Tang were the formulas Zhang frequently utilized.

Various types of contagious and infectious diseases manifested with fever. In Zhang's time, they were collectively called "Han Re" (*cold-hot, or cold-fever*). Zhang was most adept at treating febrile disease. He did not have an one-for-all formula. Most of the time, he treated basing on the patient's formula-pattern². Some were treated with Gui Zhi family of formulas, some with Chai Hu family, some with Ma Huang family, some with Da Huang or Shi Gao families. For some, he even used Fu Zi family of formulas, such as Zhen Wu Tang that was frequently utilized for febrile disease.

In the military, crude and irregular meals were common, thus it was very frequent that soldiers suffered from digestive disorder. Intestinal obstruction was very common, where the person had abdominal pain, bloating, hardness by palpation, smelly and watery diarrhea. In this case, Da Cheng Qi Tang or Da Xian Xiong Tang would be prescribed. Acute pancreatitis often occurred after victory celebrations. Late at night that evening, when Zhang just barely fell asleep, there was suddenly a messenger. Zhang was summoned to see the general, who suffered an acute grave illness. When Zhang arrived, he saw the obese general clearly in pain, tossing, turning, and moaning. As soon Zhang palpated the general's upper abdomen, he turned and told his apprentice, "*when palpating the epigastrium and there is fullness and pain, this is the fullness pattern. We need to purge, Da Chai Hu Tang is most suitable.*" After the general consumed the decoction, he had multiple bowel movements, and the pain was gone.

Alcohol was the treasure of the soldiers. Whether it was the assembly before or celebration after the battle, there could never be without alcohol. Especially on the victory celebration, many would get completely intoxicated. Zhang would often have to deal with those drunkards. Among them, they behaved differently. Some kept throwing up, some had stiff neck and back, some were so drunk that they were not able to move their body, some had diarrhea, some became more thirsty and drank in madness, some had Pi-obstructions in their epigastrium... thus, Ge Gen Tang, Ge Gen Tang with Ban Xia, Ge Gen Huang Qin Huang Lian Tang and Huang Lian Tang were formulas Zhang often utilized to treat intoxication.

Wars were cruel. Soldiers frequently suffered from mental illness. Some suffered from PTSD, often talking to themselves with fullness and vexation in chest; some suffered from fright, when they heard the battle drum beating, they would be petrified and even peed themselves. Some were even more extreme. They would rip off their clothes, went to sing at a high place, suffered

² "Formula Patterns" – these are patterns based on the clinical indications for each single formula, rather than today's TCM substance and zang-fu pattern.

from schizophrenia.... Chai Hu Long Gu Mu Li Tang, Tao He Cheng Qi Tang, Zhi Zi Hou Po Tang, Xiao Ban Xia Jia Fu Ling Tang were formulas Zhang repeatedly utilized.

That year was hit by a great famine. There was a shortage of food in the army. Soldiers were often starving. Despite that, the military campaign went on. Many became as thin as simply skin and bones, and some had systemic edema. The rescuing formula was Xiao Jian Zhong Tang that was used to treat laborious exhaustion. For those who threw up frequently, unable to take solid food, they needed the addition of Ren Shen. For those who had edema, they needed Huang Qi. As a general purpose formula, Zhang used Shu Yu Wan. Shu Yu was the ancient name for Shan Yao (Chinese yam). The formula contains 100 pieces of Da Zao. Many frail soldiers, after consuming this formula for days, astoundingly recovered their strength and vitality.

After the extended period of turmoil, the entire Chinese population were decimated³. There was a urgent shortage of men in the society. In his later years, Zhang focused into gynecology, especially with regards to fertility. How to get a woman pregnant? How to maintain pregnancy? How to make sure the birthing process was safe? These were the questions Zhang often had to contemplate on. He used Wen Jing Tang to aid with fertility. He used Dang Gui Shao Yao San to settle the fetus (maintain pregnancy). He used Gui Zhi Fu Ling Wan to clear out the dead fetus. These turned out to be quite effective! There are also many other great gynecology formulas in the chapters discussing about women's illnesses.

Zhang was very busy. At the time, most physicians who served with him at "An Lu" (field hospital) were hastily drafted into service. Many of them simply practiced their family medical tradition. They did not spend time to study the medicinal art. Their diagnosis was crude and careless. Their pulse diagnosis was not refined, only taking the Cun position and not bothering the Chi position. They only took hand pulse, did not look at the foot pulses. They did not know how to diagnose by sight or by abdomen palpation. They would only ask a few questions before prescribing medicine. So many practitioners simply treated the illness but did not take consideration of the people. They abused the sweating, vomiting, and purging strategies. So there were many cases of mistreatments⁴. So Zhang spent much of his energy to deal with the illnesses caused by adverse treatments. For example, a patient was wrongly prescribed with Ma Huang, he sweated profusely and had heart palpitation. Zhang gave him Gui Zhi Tang, Gui Zhi Gan Cao Long Gu Mu Li Tang, or even Zhen Wu Tang. Some were wrongly given Mang Xiao and

³ From the waning years of the Han dynasty in 180 AD to the re-unification Jin Dynasty in 280 AD, Chinese population reduced from 65 million to 16 million

⁴ I'd strongly suggest every herbalist to read the preface of Shang Han Lun written by Zhang Zhongjing himself. This paragraph is simply a summary of the preface – *what was the society like at his time, what was the medical profession like, what was his motivation for writing this work (not only to save the people from illnesses, but also from ill-trained practitioners)* – Many motivated Chinese herbalists would recite this preface daily (along with Sun Simiao's "the Devotion and Sincerity of a Great Physician"). I've known a few Classicist herbalists who test their prospective apprentices to recite the entire preface from memory, as an entrance test.

Da Huang and caused severe nonstop diarrhea. They were given Gan Cao Gan Jiang Tang, Li Zhong Tang, or even Si Ni Tang. When faced by the shortage of practitioners and low standard of medical knowledge of his time, Zhang was caught deeply in worry. For this, he decided to author a medical work to first treat the physicians themselves, which would let them know how to determine formula-patterns, how to see the difference in constitutions, how to stimulate a patient's self-healing ability.... Thus, for so many times, when the eastern night sky had already turned into gray dawn, inside Zhang's tent, the candlelight still flickered...

It is easy to dream with the blurry scenes. And when I wake up, I find most of the scenes completely imaginary with no way of verification. Academically speaking, it is extremely difficult, *if not impossible*, to reconstruct the scenes when Zhang Zhongjing was treating with his Classical formulas and writing his *Shang Han Za Bing Lun*. Although, I still wish to dream more about apprenticing with Zhang. In my opinion, this is yet another method to interpret the formula-pattern of the Classical Formulas. This, I cannot forgo.

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