



Ge Hong and *Zhou Hou Jiu Zu Fang* (A Handbook of Formulas for Emergencies)

Min Li, Yongxuan Liang*

School of Basic Medical Science, Beijing University of Chinese Medicine, Beijing, 100029, China

Ge Hong (283–363), also known as Ge Yachuan and Bao Po Zi from Danyang (present Jurong, Jiangsu Province) was a famous Taoism theorist, herbalist and alchemist. He was of good stock, clever and keen to learn. But later he suffered a fall in his family fortune. Then he had to cut firewood as a career and bought pen, ink and paper after the firewood was sold. In the evening, he threw himself into readings and copying out books. He was well-read because he could even travel thousands of miles to look for ancient books and records.¹ Since his youth, he began to be interested in eternal life, so he started to learn alchemy from Zheng Yin, a diviner. In 303, he was appointed a general with the title of marquis by the imperial court because he had successfully put down a peasant uprising. The emperor wanted to favor him with high position and salary for several times which was turned down by him. For the sake of easy study of alchemy, he finally volunteered to be a county magistrate in Guangdong Province abounded in raw materials for alchemy. When he was proceeding to his post, he formerly took Bao Liang, Prefecture Chief of Nanhai as his master and learned skills of health preservation and medicine. Bao highly appreciated his talent and character. He decided to betroth his daughter Bao Gu to him.

Soon afterwards, Ge spent latter half of his life in seclusion in Luofu Mountain, Guangdong Province, where he engaged in alchemy, gathering herbs and writing books. Later, Bao Gu, his wife, became the first female acupuncturist in China.

Ge was a prolific writer, but most of his books are lost. After widely collection of predecessors' medical formulas, folk and secret recipes, he eventually wrote *Jin Gui Yao Fang* (*Prescriptions of Golden Chamber*), a large-scale medical book with 100 volumes. In consideration of easy reading and carrying, on the basis of the book he compiled a new book known as *Zhou Hou Jiu Zu Fang* (*A Handbook of Formulas for Emergencies*). This is a medical book dealing with emergencies² and most of the medicinal herbs listed in it are those easily to get in countryside. Indications are narrated in verses for easy memorization and the acupuncture techniques are simply described for easy practice and study.

Stroke, coma, acute abdomen, etc. are firstly discussed in this book. In the treatment of coma, it is recommended to heavily press GV 26 (Renzhong) with fingernail or do moxibustion on CV 24 (Chengjiang) under the lips. Other first-aid for coma includes blowing pinellia tuber powder into the nose, or putting a calamus pill as large as a jujube pit under the tongue. These simple emergency treatments are still used today. The book records a lot of diseases, covering acute infectious disease, parasitic disease, and therapies for internal medicine, gynecology, pediatrics and ENT. It's worth noting that it made a profound statement about cause, symptoms and treatment of some diseases which had not been clearly expounded previously. For example, in the part of treatment of malaria, the book records an anti-malarial herb. It says: "Have a handful of herb of sweet wormwood and soak it in two *sheng* (200 mL) of water. Squeeze it to get the juice and drink."³ Such short remarks not only tell us about its efficacy but also lay the reliable foundation for the development of new anti-malarial agents. Prof. Tu Youyou was inspired by what Ge said and extracted artemisinin from it. Artemisinin is a new

* Corresponding author.

E-mail address: lyx999111999@126.com (Y. Liang).

Peer review under responsibility of Beijing University of Chinese Medicine.

anti-malarial drug with high and quick effect and low toxicity. But in experiments it was found that artemisinin lost its anti-malarial effect after heating. Prof. Tu remembered Ge's words, and got artemisinin without heating. In 2015, Prof. Tu was the first Chinese scientist to win the Nobel Prize in Physiology or Medicine for discovering artemisinin.

Ge Hong was a celebrated medical expert in ancient China. His *A Handbook of Formulas for Emergencies* is regarded as the great achievement in traditional Chinese medicine. Disease diagnosis, therapeutical theory and treating methods proposed by him still have clinical value today. It will promote innovation and development of emergency medicine, infectious diseases, pharmacy and immunology. His great contributions to medicine are a praiseworthy achievement and his *A Handbook of Formulas*

for Emergencies is a shining example in the process of human development.

Translated by Tingyu Fang

References

1. Fang XL. *The Book of Jin*. Book I, vols. 1–18. Beijing, China: Zhonghua Book Company; 1974:1911 [Chinese].
2. Zhen XY, Wang LM, Liang YX. *Secret in Sleeves – A Handbook of Formulas for Emergencies*, vol. 10. Beijing, China: China Human Resources; 2013;10:88–89 [Chinese].
3. Ge H. *A Handbook of Formulas for Emergencies*. Beijing, China: People Medical Publishing House; 1956:57 [Chinese].