# Heo Jun: physician of the people

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#### ABSTRACT

Heo Jun was a Korean physician during the Joseon Dynasty in the early seventeenth century. Among his many works is the Dongui Bogam which was a compendium of Eastern medicine up until that time. The encyclopedia was also one of the first attempts to improve accessibility to medicine and emphasize preventative care in Korean Medicine. Although he is not well-known outside of Asia, Heo can potentially serve as a role model to Western medical students.

# 1. Introduction

The recent focus of America on issues of race in the backdrop of a pandemic has allowed me to contemplate my own heritage. Although my Korean name appears on official documents, it has been more than 20 years since I have adopted an American name. This adoption is one of the many ways I have chosen to integrate into a new culture. And, like many other immigrants, there exists an inner struggle between the preservation of my heritage and assimilation. In the past few years in medical school, something that has brought this conflict to my consciousness is learning about the works of many great, white physicians that came before me. To my dismay, I was unable to identify a single physician of my culture. This paper is an attempt to rectify this void and reconnect with my history.

While names like Hippocrates, Avicenna, Nightingale, and Osler may be familiar to most clinicians and medical students trained in western civilization; the name, Heo Jun, may be one that is not widely recognizable. However, he certainly is one of the most celebrated physicians in Korean history. His most notable work was the 'Dongui Bogam' (Mirror of Eastern Medicine) which he wrote during his tenure as a royal court physician of the Joseon Dynasty in the early seventeenth century. The book is an encyclopedia of Eastern medicine up until that time and represented the field of Korean Medicine. Included in this treasure trove of information is the first introduction of preventative medicine and statesponsored public healthcare in Korea. The work was translated and reprinted in many Asian countries such as Japan, China, and Vietnam. As a testament to Dongui Bogam's cultural and historical importance, it was included in UNESCO's Memory of the

World Register list in 2009[1]. It is through Heo's magnum opus that we can examine his philosophy of medicine and the evolution of Eastern medicine through the years.

# 2. Background

Scant records exist today about the early life Dr. Heo Jun. He is believed to have been born in 1546 in the Gangseo District of Seoul. Although he was born into the nobility as a member of the *Yangcheon Heo* clan, his mother was a concubine, and thus Heo Jun did not receive his father's *yangban* or noble status. Instead, he was considered *chungin*, or 'middle class'. In a Confucian society where hierarchical status determined every aspect of life, this would play an important role in the discrimination that he would later face from other aristocrats. His status as *chungin* would have prevented him from holding high-level offices like his father. Nevertheless, it can be assumed that he lived a life of relative comfort and received education typically befitting a son born to a noble.

It is also unclear how Dr. Heo received his medical education and what his early practice consisted of. However, there is a folk tale that illustrates his training and medical prowess in a mythical light.

Heo meets an old, wise healer while working at the market and asks to become his apprentice. The old man agrees to teach him medicine on the condition that he trains for 10 years. Eight years into his training, Heo saves the life of a critically ill child. However, astonishingly he is rebuked by his mentor for saving the life of someone who was destined to die. Their differing views on life and responsibilities of a physician leads to a falling out between the two men, and Heo Jun leaves the apprenticeship. Heo returns to his hometown and eventually gains

CONTACT Hyuk Joon Kwon Algorithms Hyuk Joon.Kwon@som.umaryland.edu Diversity of Maryland School of Medicine © 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group on behalf of Greater Baltimore Medical Center. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (http://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

#### ARTICLE HISTORY Received 27 September 2020 Accepted 2 October 2020

KEYWORDS Heo Jun; Dongui Bogam; mirror of eastern medicine; Korean medicine; traditional medicine; eastern medicine; medical students a reputation as an excellent healer. His exploits result in an invitation from the emperor of China to treat the princess. On his journey to China, he treats a tiger and in return receives a whetstone, acupuncture needles, and a cloth that can bring the dead back to life. After Dr. Heo finally reaches the palace, he unsuccessfully treats the princess whose lower body had taken the form of a snake. His mentor later appears in his dream and provides instructions on how to properly treat the affliction[2].

Different variations of this condensed legend exist. However, they all are meant to depict themes that represent the real life of Heo: his thorough education, humanism, and expertise. In reality, it is most likely that he was trained by government-established institutes or private clinics, and eventually became certified after passing a grueling national examination[3].

# 3. Career

Records show that at age 33, Dr. Heo entered the Royal Infirmary of the Joseon Dynasty. Here, Heo rose continuously through the ranks with unprecedented speed while successfully treating King Seonjo of an unknown ailment in 1575 and Crown Prince Gwanghaegun's smallpox in 1590. His care was not limited to the royal family as he also treated thousands of common folks suffering from smallpox. He continuously put himself at risk while treating the sick and even disregarded a religious law which forbade treatment of patients with smallpox; Heo could not idly stand by as people died without care. He would write a medical textbook titled 'Compilation of Essentials on Smallpox with Korean Translation' to end the restriction and help other physicians properly treat such patients[4].

As a prolific writer, Heo made additional contributions to medicine in Korea with works such as: Formulas for Emergencies with Korean Translations, Compilation of the Essentials on Obstetrics with Korean Translations, Newly Compiled Formulas to Ward off Epidemics, and Divine Formulas to Ward off Epidemics.

The king's trust in Heo increased further during the invasion of Korea by Japan during the Imjin War of 1592–1598: while other court physicians fled to safety, Heo accompanied the King throughout the war. During the war, thousands of innocent civilians were slaughtered; famine and epidemics swept through the countryside. Intellectual and cultural treasures were destroyed; thousands of books including medical textbooks were either burned or plundered by the Japanese forces. In an effort to mitigate such losses, King Seonjo ordered Heo to spearhead the creation of a medical textbook to replace the lost knowledge[5].

In 1600, Dr. Heo Jun was granted the title of Chief Royal Physician after the death of his predecessor. Even with the additional responsibilities of this new position, Heo continued to diligently work on his book with other court physicians. However, in 1608 he suffered a great setback with the death of King Seonjo. He was blamed for the death of the king by the nobles in court, the same nobles who throughout his career detested the fact that a man of chungin status was amongst them. Subsequently, Heo was banished from court and sent in exile to Uiju where he continued to work on his book. It is unknown what motivated the disgraced physician to continue the enormous task alone. But one can speculate that it was his duty to the king and the people he saw suffering in the aftermath of the war. In 1609, King Gwanghaegun, who Heo had previously treated, restored Heo to court to the dismay of his royal detractors. Finally, after almost 15 years of work, Heo finished the Dongui Bogam[4].

### 4. Dongui Bogam

The massive project was a review of almost all known Eastern medical knowledge up until that point. It references hundreds of texts with original interpretations and commentary from various fields including medicine, Buddhism, and Taoism. The compendium catalogues thousands of symptoms, diseases, prescriptions, and medical techniques. There are 25 volumes divided into separate sections devoted to Internal Medicine, External Medicine, Miscellaneous Diseases. Pharmacotherapy, and Acupuncture. The first section describes the interdependence of the organs and their diseases. The next details how the bones, muscles, tendons, and skin facilitate movement and their diseases. The third describes diseases concerned with fields such as psychiatry, gynecology, and pediatrics; diagnostic methods, symptoms, and treatment and prevention strategies are also discussed. The fourth provides meticulous instructions on how to properly extract, maintain, and administer medicinal herbs and plants. The final section is on acupuncture [5,6].

Assembling the many lessons of this massive work was facilitated by an innovative format in which material is organized according to specific organs[6]. This allowed physicians, students, and laypeople to organize in a coherent manner the many concepts presented.

# 5. Impact of Dongui Bogam

The goal of this paper is not to evaluate the book's accuracy and effectiveness on the various diseaseprocesses and treatments, respectively. Rather, its goal is to examine the impact the compendium had on the evolution of medicine in Korea. Indeed, in 2009 the Korean Medical Association warned the public '[Dongui Bogam] shouldn't be taken as anything more than a recognition of the book's value as a historical relic. It should not be taken as an acknowledgement of traditional medicine for its superior effectiveness.'[7] However, it is important to understand that the concepts presented were the prevailing medical theories of time. Whether or not the remedies inscribed in the encyclopedia truly saved lives, the people of 17th century Korea viewed it as a national treasure. An apocryphal story attesting to this tells of a Korean delegate to Japan falling ill while abroad. He is terrified that he has fallen ill in a foreign country but is rushed to a Japanese physician. However, he was elated upon discovering that the doctor was still using a copy of Dongui Bogam 138 years after it was first printed.

When the Dongui Bogam was submitted to UNESCO for inclusion in the Memory of the World Register, the proposal explained its significance, 'The book successfully synthesized competing contemporary theories of medicine that had accumulated in East Asia for two millennia and went on to integrate medical knowledge and clinical experience together in a single collection.'[8] It is debatable whether its author ever speculated on its eventual historical impact. However, we know his intentions were to replace the knowledge that was lost and to help his people who were suffering in a war-torn country.

Heo placed an emphasis on making treatment and prevention easily understandable and accessible. He used simple Korean words to identify herbs and plants; Chinese characters were only understood by the upper class akin to how Latin was the language of the literati in the West. Heo's use of common language allowed the uneducated public to better understand the book[5].

To make medicine more accessible to commoners, he broke from the traditional practice of placing greater medical value on rare and expensive ingredients. To understand why this was unique at the time, we must first understand that Korean medicine up until then was heavily influenced by Chinese medicine. The medicines which Chinese practitioners used were, as expected, commonly found in China. However, Korean physicians would have to import such ingredients which was costly. Therefore, the general impression was that rare, expensive, and imported ingredients were more efficacious. Heo thought to remedy this flawed notion and instead included herbs and plants which he determined to be effective through his extensive clinical experience and could be easily found in Korea [4,6]. Thus, medicine became cheaper and accessible to the common people. Some argue that it was at this point that Korean

Medicine split from Chinese Medicine to become its own entity[6]. The accessibility, comprehension, and emphasis on preventive medicine that the book provided greatly improved the lives of the Korean people. The book marks the first time the Korean government took a substantial effort in public healthcare.

## 6. Lessons

When we examine the life of Dr. Heo Jun, there are many qualities that we can strive to emulate. We can endeavor to tirelessly dedicate our lives to helping others even in the face of adversity. We may not have to put ourselves in harm's way by personally treating thousands of abandoned smallpox patients, but we should not hesitate to care for those that are especially vulnerable and fight to relieve social injustice; our creed calls for us to treat all. We can impact both individual lives and communities. Our moral obligations as healers do not stop when we exit our hospitals or clinics, and we can fight to make healthcare more accessible. Dr. Heo Jun truly embodied the original founding philosophy of Korea, which says 'To live and work for the benefit of all mankind.'

#### **Disclosure statement**

No potential conflict of interest was reported by the author.

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