

Reflect on the Ancients' Health and Cares in the Dunhuang Murals

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ABSTRACT

Dunhuang murals are artworks painted according to local customs in the process of spreading Buddhist culture, and have a lot of mural content, showing the scientific methods and concepts of ancient ancestors in epidemic prevention, health care and hygiene. The ideas of "Cure a disease before its onset" and "the thought of man's imitation of nature" reflected in the lives of the ancients. Embodied in the characteristics of building, environmental protection, epidemic prevention and management of personal hygiene, funeral hygiene and so on. By sorting out and summarizing these contents and learning the wisdom of the ancients, it can provide reference for epidemic prevention and health care of ordinary people under the background of normal epidemic.

Keywords: Health cares, Epidemic Prevention, Murals, Traditional Chinese Medicine.

1. INTRODUCTION

The word "Hygiene" originated from the Spring and Autumn Period the *Zhuangzi • Geng Sang Chu*, in this article, the author record "Chu wish to hear the scripture of hygiene." [1] Hygiene refers to a method of preventing or treating disease before they occur. The concept of "treating diseases before they occur" can be traced back to the time of the pre-Qin Dynasty, and future generations of doctors have continuously summarized, developed and refined the idea of "treating diseases before they occur", forming a more systematic theoretical basis and treatment process, and also forming a series of living habits that attach importance to epidemic prevention and health care.

In the process of spreading Buddhism to the east, the teachings were propagated using the easy-to-understand scriptures, paintings, and scriptures combined with speech and singing. [2] In the process of transforming scripture into painting, the concept of health care and medical forms close to real life were fully utilized, and the relevant scriptures were expressed, so the social landscape of the time was greatly recorded. Dunhuang is the pearl on the Silk Road. The murals of the Mogao Grottoes contain a wealth of hygiene customs and health and epidemic prevention content. Through the discussion of traditional hygiene customs such as medicine and

hygiene, it provides a reference for the daily protection of ordinary people under the epidemic.

2. ENVIRONMENTAL HYGIENE

A city is an area where people live in a concentrated way. The administrators use various measures and laws to ensure the health of the residents and the normal operation of the city.

2.1 Environmental Cleanliness and Protection

The *Tian Lv* formulated by the Qin Dynasty is the world's earliest environmental protection law. For example, in spring, you can't cut down trees and block canals; during the fishing moratorium, fishing is prohibited. The scope of protection ranges from hunting in rivers and lakes, logging in mountains and rivers, and wildlife conservation. [3] The official also set up Yu Heng, whose duty is to protect the mountains, forests and rivers. The Han Dynasty followed the laws of Qin, and its concept of environmental protection was also continued in the Han Dynasty.

Song dynasties, its authority was expanded, but its main responsibility still was to manage the planting of the streets and alleys of the capital city, the mountains are confined, and the grass and trees are charcoal for food

and field hunting. Whoever catches fish and hunts, it will be timely. But four of the responsibilities still belong to the scope of environmental protection.

2.2 Public health security

On Dragon Boat Festival, folklore commonly uses mugwort bundling to be placed in the corner of the front of the house and behind the house, or hung near the door, which not only has the effect of preventing insects and repelling evil spirits, but also smells fragrant and has bacteriostatic effect. The Song Dynasty poet Lu You also recorded this custom in the A Method to Prevent Mr. Wanling's Smoked Mosquitoes. He wrote fan mosquitoes with fans are not effective, the most effective way is to burn mugwort to expel mosquitoes.

Nowadays, the north of China still keep this custom. In the Tang Dynasty, Sun Simiao's mosquito repellent formula was widely use: In May, duckweed is taken to dry the shade, and burning it. The smoking can repel mosquitoes. Later generations of doctors added corresponding medicinal materials according to actual needs, such as *Rough Talk on Grid Things and Sanitary and Simple Formula*, adding Xionghuang and Qianghuo, etc., combined with duckweed to take smoke, improve the efficiency of mosquito repellency, and purify the air. The ancients were very good at using fire to prevent the spread of diseases. The archaeological excavation of Hamminmangha site and Miaozigou site shows that some tribes, in the New Period, had a sense of prevention and disposal of plague, they used fire to sanitize for some places where the patients lived, and burn the items used before their lives to prevent the spread of the epidemic.[4]To prevent the spread of the epidemic, burn the living places and used items of the deceased due to the epidemic. [4]

Proper disposal of daily garbage is related to the health of all people, The Song Dynasty Agricultural Books said: "Where the soil is swept away; the ashes are burned; the chaff, the broken grass, and the fallen leaves are piled up and then burned, all of them and the dung juice were made into fertilizer by fermenting of nature. Then farmers used it to plant. In Lin'an, the capital of the Southern Song Dynasty (now Hangzhou City, Zhejiang Province), there were professionals who cleaned up the garbage to ensure public health.

2.3 Water Sanitation

The use of Wells has enabled people's living places to be more widely distributed, no longer limited to water sources, and well water comes from underground, so it is cleaner than river water. Archeologically unearthed pottery Wells and Wells painted in murals are equipped with dustproof eaves, derricks, and platforms to protect the well body, as well as special buckets to ensure water safety and avoid the spread of disease. Medical experts in

all dynasties also attached great importance to water safety. Both Qimin Yaoshu of the Northern Wei Dynasty (Essential techniques for the welfare of the people) and Qianjin Yaofang(Valuable Prescriptions for Emergency) of the Tang Dynasty have recorded that sanitize well water to prevent the spread of disease.

Digging Wells and ploughing fields in agricultural society is the portrayal of farmers' life, and them have also become important symbols in ancient culture. *Xunzi's Outlook for Honor and Disgrace* said *short string cannot fetch the spring of a deep well*; *Buddha said Fukuda Sutra* translated by buddhist monk Fali in Western Jin Dynasty, The Buddha explained the *seven Fukuda*, the six method is drilling Wells to provide drinking water. Therefore, it can be seen that the "well" health is one of the guarantees to ensure the health of the masses. [5]

2.4 Advanced Drainage System and Scientific architectural design

The underground pipe network of the Xianyang Palace building in the Qin Dynasty was arranged quite scientifically and reasonably, and archaeological discoveries such as Shangdu, Warring States Xiadu, Qishan Zhouyuan Ruins, etc., all had a complete underground waterway system. [6]The Tang Dynasty poet Du Mu's *On the Ah Fang Palace* said that The Wei River swelling with grease -it was made by the waste of ointment. "*The ditches are dredged, there is no filth, and there is no plague.*"

The design of "high platform" and "foundation" plays an important role in the safety and comfort of ancient buildings. Lofts, pedestals and high platforms above the ground can play a good role in stability, shockproof, moisture-proof and water avoidance, while ensuring sufficient light in the living environment, improving ventilation rates, making the interior of the building dry and hygienic, and keeping the occupants physically and mentally healthy. And also have defensive functions to ensure the safety of the city. The roof was covered with eaves tiles, and at the end of the tile is designed to drip water, which could effectively avoid the accumulation of rainwater and discharge it in time. This design was not only beautify, but also prevented the foundation from being eroded by rain, so as to ensure the interior of the building is dry.[7] *Shuo Wen Jie Zi* explained that the meaning of Tai is high , it has the same meaning with Room.[8][8]:247 Ancient buildings basically follow this rule. It reflects the concept of preventing dampness from harming the body in traditional medicine.

2.5 Public Toilet Facilities

The earliest reference to toilets in ancient China is the Rites of Zhou. The article recorded the content of toilets sanitation, the palace people were specifically

responsible for cleaning the room of the King of Zhou, building toilets, removing unclean things and eliminating odors. *Jingyan* refers to lavatories in tunnel. *Zuo Zhuan-Cheng Gong tenth year* recorded the incident of the king Ji Ru of Jin Dynasty cause accidentally falling into the toilet death. [9]It can be seen that it is deep. In addition, public toilets are provided on the roadside for the convenience of passers-by. In the Yili literature, digging the ground for the toilet, and when the pit is full, slaves were ordered by people to cover it by soil and then digging a new one.

As the city expanded, pit toilets were no longer suitable for use and evolved into toilets that were more suitable for family use. In the Southern Song Dynasty, Wu Zimu recorded the scenery of Lin 'an city in the Dream Liang Lu, he wrote that Hangzhou has a large population, and most people use toilets instead of pit toilets at home. The "Mazi" is the toilet, which has become a commodity in daily transactions.

3. LIVING ENVIRONMENT AND PERSONAL HYGIENE

3.1 Daily Sprinkling and Ventilation

Brooms are made of wooden poles and branches bundled and are specially used to clean up dust and debris. A bronze ware has been unearthed in Shaanxi, on which is engraved the inscription. The inscriptions depict a man sweeping the floor with a broom. Archaeological excavations have also unearthed many pottery figurines from the Han Dynasty. The ancient people cleaned the road to show their sincerity to guests and showed their respect to guests by holding an inverted broom in his hand. In *Maxims on Managing a Household*, the author wrote get up at dawn, sweep the courtyard and steps, and keep the inside and outside tidy. Sprinkle water lightly before sweeping the dust to prevent secondary pollution caused by the dust. At the *Spring Festival Nursery Rhymes* sings "Twenty-four, sweeping the house." That is, before the New Year, sprinkle the courtyard, and completely sweep the outside of the house, in order to have a "new atmosphere" in the new year. The Spring Festival is the time when winter and spring intersect, and taking advantage of this opportunity to sweep away the filthy things is in line with the laws of people's lives in agricultural society. The preservation of this custom is the embodiment of the important role of hygiene and cleanliness in the prevention of diseases in the process of long-term resistance to diseases.

Depending on the season, the residence should take appropriate measures to prevent the occurrence of diseases. Such as, install bamboo curtains in summer to prevent mosquito infestation. It can also ensure indoor ventilation and lighting, reduce indoor temperature. In winter, the window facing the north was blocked, so that the indoor temperature was stable and the ancients could

be safely spent in the winter; more bedding and clothes were dried, and sufficient light could be effectively sterilized.

3.2 Disease Prevention in Livestock

The eradication of rats and dogs carrying the source of the disease has achieved the purpose of early prevention. In the Book of Songs, there are records of methods of exterminating insects and rats, such as plastering walls, blocking holes, fuming with medicine sprinkling ashes and so on. The *Zuo Zhuan-Ai Gong twelfth year* has recorded rabid dogs, *if rabid dog become berserk and bite man, people can kill it.* [9]

Livestock farms should be kept away from rooms to avoid polluting the environment and affect human health. The Dunhuang murals show that the place where livestock are raised is separate from the place where people live and are cleaned and maintained by special personnel.

3.3 Personal Hygiene

In the Mogao Grottoes Paintings, there are hair washing, shaving, toothbrushing, gargling and other cleaning behavior. The rules of personal hygiene are detailed in the Liji. It recorded that people took a bath every five days, and washed their heads every three days, during which time they washed their faces if their faces were dirty, and washed their feet when they were dirty. These guidelines are already relatively common. The daily cleaning practices performed by the figures in the Dunhuang murals includes This includes bathing, shampooing, shaving, cleaning teeth, gargling, washing feet, and more. Early tooth cleaning is to break one end of the willow branch and dip it into medicine to brush the teeth, so that the teeth are fragrant and smooth. The ancients used "spit pots" to collect sputum so as not to cause public environmental pollution. The "spit pot" evolved into the spittoon, which is still in use today.

4. EPIDEMIC PREVENTION AND FUNERAL CUSTOMS

4.1 Epidemic Prevention Measures

The ancients realized that some diseases were contagious, and they adopted measures in preventing the spread of epidemic diseases, such as strengthening the body, isolating the patients, providing medical treatment and so on.

Oracle Bones is an ancient script carved on tortoise shells or animal bones. Having emerged during the Shang Dynasty, is considered the oldest script in China. Recording epidemic diseases may lead to death. During ancient times, people lacked understanding of the pathogenesis of epidemics, and out of their simple

cognition and understanding of natural phenomena, they used "witchcraft" to dispel diseases and prevent epidemics, and many different forms of epidemic exorcism behaviors were derived.[10]

With the advancement of history, this awareness has gradually penetrated into the hearts of the people. The government and the people have reminded people of the importance of epidemic prevention and control through folk music and dance. Book of the Later Han etiquette fifth set: on the seventh day of the first lunar month, people hold a ceremony to dance Nuo opera, expel the plague, beat the drums and whistle. The purpose of Nuo opera is to drive away devils, disease and evil influences, and also to petition for blessings from the gods. [11]During the Lapa Festival, people ate nutritious and delicious Porridge to nourish the body and improve immunity. Whether performing Nuo opera or eating Laba porridge, it is people's long-cherished wish to get rid of epidemic diseases and maintain good health.

4.2 Isolation

Epidemic disease was a great disaster for ancient people's. In the process of resisting various epidemic diseases, people gradually explored and summarized the prevention measures of epidemic diseases, including the isolation of the patients, environmental sanitize interruption of transmission, drug treatment, and vaccination, etc.

The Yunmeng, Hubei province unearthed Shuihudi bamboo slips of Qin the Answers to Questions concerning Qin Statutes, on the inscribed slips written "Question: If a person has broken law, but he had an infectious disease, how to deal with him? Answer: firstly, he should be treated in isolation." [12]Undoubtedly, this method is very scientific. The Han Shu Ping Emperor Period recorded: In event of a serious public epidemic, the government will set up an isolation hospital in the residence for them whose had epidemic. Besides, if there is an epidemic in the military, the government will set up an "An Lu" to treat patients. [13]

4.3 Funeral custom

First of all, the formation of funeral customs is necessary for human safety and health. The historical experience of the development of countries around the world has proved that proper disposal of the dead can prevent the emergence and spread of malaria, and reduced case fatality rate. The cemetery location needs to be away from residential areas, and makes sure the cemetery sewage works, and has reasonable spacing. So that nearby residents are not affected by pollution. [14]In ancient times, corpses were placed in the wilderness, without soil as graves and without markings. As the population increases and life expectancy increased, this

method of disposing of corpses was neither civilized nor met the needs of hygiene and epidemic prevention.[15]

Since ancient times, China has been an agricultural country with special feelings and dependence on land. The concept of deciduous leaves returning to their roots and entering the soil is deeply rooted in the hearts of the people. And the choice of burial sites is mostly away from crowded areas, people often choice family farmland as graveyard, it is a established by usage idea.

China is a multi-ethnic country, and the influence of Chinese civilization on ethnic minorities is also reflected in funeral. *Dajianlu* is located in the southwest region of China, in present-day Ganzi Tibetan Autonomous Prefecture, Kangding City, Sichuan Province, and its old water burial and cremation. Water burial is a burial method that places the body of the deceased in a nearby river, and it is also applied to people who die of illness. This burial method may carries a significant risk of disease transmission. Due to the consideration of the people's health and epidemic prevention needs, it was later changed to a burial under the influence of Han culture. The *Da Jianlu's* World Geography written that There used to be a custom of water burial and cremation here.....*Tusi* was the first man that bury deceased parents using the burial method, and learn the Han Shu.[16]

From the abandonment of bodies in the wilderness to the "tomb" covered with soil, embodies not only the new height of civilization development, but also people's attention to health and a higher pursuit.

5. CONCLUSION

Comb through the relevant contents of health care and other related contents in the Dunhuang murals, understand and explore the medical theory content followed by the ancients in the process of fighting against diseases, and the health care methods formed from them. These experiences accumulated over thousands of years and the achievements made in ensuring physical health, preventing and responding to epidemic diseases can provide a reference for the daily protection of ordinary people in the context of normalized epidemic prevention.

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