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**Review Article** 

# **PHARMACY & SYMBOLS**

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#### ABSTRACT

The snake and snake venoms have stimulated the mind and imagination of humankind since the beginning of records about society. No animal has been more worshipped yet more cast out, more loved yet more despised than the snake. The essence of the fascination with fear of the snake lies within the creature's venom. Snakes have been used for worship, magic potions and, medicine, and they have been the symbol of love, health, disease, medicine, pharmacy, immortality, death and even wisdom. In the Sumer civilization (B.C. 2350-2150), designs with 2 snakes appeared. In Greek mythology (B.C. 2000-400), statues of Asclepius (God of Medicine), with "Caduceus" (made of two snakes and a staff), and his daughter Hygeia (God of Health), holding a snake and bowl, were created as symbols for medicine and health, respectively. A kind of Caduceus (1 snake and 1 staff) has been used as a symbol by the World Health Organization (WHO) and a snake and bowl as a symbol of pharmacies in Europe. Snakes have also been worshipped by old Indian peoples involved in Hinduism since 6-4th century B.C. In ancient Egypt, snake designs were used in hieroglyphs. In China, dried bodies of about 30 species of snakes are still using as Chinese medicines. In Japan, a painting of the symbol of "Genbu" (snake with tortoise) was found recently on the north wall of the Takamatsuzuka ancient tomb (7-8th century A.D.), however it is a symbol of a compass direction, and has probably less relation to medicine and pharmacy.

KEYWORDS: Pharmacy, Drugs, Prescription, Bowl of Hygieia, Asclepius, Caduceus, Rx.

#### **OVERVIEW**

In Greek mythology (B.C. 2000-400), statues of Asclepius (God of Medicine), with "Caduceus" (made of

two snakes and a staff), and his daughter Hygeia (God of Health), holding a snake and bowl, were created as symbols for medicine and health, respectively.<sup>[1-3]</sup>



Figure-1: Pharmacy & Medicines.

The Bowl of Hygieia is one of the symbols of pharmacology, and along with the Rod of Asclepius it is one of the most ancient and important symbols related to medicine in western countries. Hygieia is a goddess from Greek, as well as Roman, mythology.<sup>[4]</sup>



Figure-2: Bowl of Hygieia.

Hygieia is a goddess of health, cleanliness and hygiene. Her name is the source for the word "hygiene". Hygieia is related to the Greek god of medicine, Asclepius, who is the son of the Olympian god Apollo. Hygieia is most commonly referred to as a daughter of Asclepius and his wife Epione. Hygieia and her four sisters each performed a facet of Apollo's art: Hygieia (health, cleanliness, and sanitation); Panacea (universal remedy); Iaso (recuperation from illness); Aceso (the healing process); and Aglaïa (beauty, splendor, glory, magnificence, and adornment).<sup>[5]</sup>



Figure-3: Asclepius.

The Bowl of Hygieia is one of the symbols of pharmacology, and along with the Rod of Asclepius it is one of the most ancient and important symbols related to medicine in western countries. Hygieia was the Greek goddess of health, hygiene, and the associate, wife, or daughter of Asclepius. Asclepius' symbol is his rod, with a snake twined around it; correspondingly, Hygieia's symbol is a cup or chalice with a snake twined around its stem. Hygieia was also invoked, along with her father Asclepius, and Panacea in the original Hippocratic Oath.



Figure-4: Caduceus.

Caduceus is a symbol with a short staff entwined by two serpents, sometimes surmounted by wings while the Rod of Asclepius is the one with a single snake. The similarity between both these symbols is the snake. The green cross as symbol of the Conseil National de l'Ordre des Pharmaciens was registered in 1984. Although owners of pharmacies are not obliged to use this symbol, the registering of the green cross meant that no-one else working in a similar profession could use it. The Rod of Asclepius is an ancient Greek symbol associated with medicine, consisting of a serpent coiled around a rod. In ancient Greek religion and mythology, Asclepius was the god of medicine and healing. The caduceus is the traditional symbol of Hermes and features two snakes winding around an often-winged staff. It is often used as a symbol of medicine, especially in the United States, despite its ancient and consistent associations with trade, liars, thieves, eloquence, negotiation, alchemy, and wisdom.[6-8]

The caduceus is the traditional symbol of Hermes and features two snakes winding around an often-winged staff. It is often used as a symbol of medicine, especially in the United States, despite its ancient and consistent associations with trade, liars, thieves, eloquence, negotiation, alchemy, and wisdom. The modern use of the caduceus as a symbol of medicine became established in the United States in the late 19th and early 20th century as a result of well-documented mistakes, misunderstandings of symbology and classical culture. The correct symbol for medicine is the Rod of Asclepius, which has only one snake and no wings.<sup>[9]</sup>

The bowl of Hygieia has been used as a symbol of the pharmacy profession at least as far back as 1796, when it was used on a coin minted for the Parisian Society of Pharmacy. It has since been adopted by many more pharmaceutical associations worldwide, such as the American Pharmacists Association, the Canadian Pharmacists Association, the Pharmaceutical Society of Australia, and the Doctor of pharmacy Association, Conseil de l'Ordre des Pharmaciens in France (where is written in law with another symbol, the green Greek cross). The bowl of Hygieia is a common symbol on signs outside of pharmacies in Europe. A mortar and pestle is a more common symbol in the United States. The staff with the snake has long been a symbol of medicine and the medical profession. It originates from the story of Asclepius, who was revered by the ancient Greeks as a god of healing and whose cult involved the use of snakes. The caduceus, a staff with two snakes coiled around it, is the official insignia of the United States Medical Corps, Navy Pharmacy Division, and the Public Health Service. The caduceus is also the magic wand carried by Hermes (the Romans knew him as Mercury), the messenger of the gods.<sup>[10-13]</sup>



Figure-5: Prescription symbol.

Rx is commonly known to most as the symbol for a medical prescription. However, the symbol is derived from the Latin word recipe or "recipere," which means to take. The word was later abbreviated and became Rx as we know it today. Promptly consult your physician or call 911 if you believe you have a medical emergency.<sup>[14-16]</sup>

### CONCLUSION

Pharmacy is the clinical health science that links medical science with chemistry and it is charged with the discovery, production, disposal, safe and effective use, and control of medications and drugs. The practice of pharmacy requires excellent knowledge of drugs, their mechanism of action, side effects, interactions, mobility and toxicity. At the same time, it requires knowledge of treatment and understanding of the pathological process. Some specialties of pharmacists, such as that of clinical

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pharmacists, require other skills, e.g. knowledge about the acquisition and evaluation of physical and laboratory data. The scope of pharmacy practice includes more traditional roles such as compounding and dispensing of medications, and it also includes more modern services related to health care, including clinical services, reviewing medications for safety and efficacy, and providing drug information. Pharmacists, therefore, are the experts on drug therapy and are the primary health professionals who optimize the use of medication for the benefit of the patients. An establishment in which pharmacy (in the first sense) is practiced is called a pharmacy (this term is more common in the United States) or a chemist's (which is more common in Great Britain, though pharmacy is also used). In the United States and Canada, drugstores commonly sell medicines, as well as miscellaneous items such as confectionery, cosmetics, office supplies, toys, hair care products and

magazines, and occasionally refreshments and groceries. In its investigation of herbal and chemical ingredients, the work of the apothecary may be regarded as a precursor of the modern sciences of chemistry and pharmacology, prior to the formulation of the scientific method. The symbols most commonly associated with pharmacy are the mortar and pestle (North America) and the  $\mathbb{R}$  (medical prescription) character, which is often written as "Rx" in typed text; the green Greek cross in France, Argentina, the United Kingdom, Belgium, Ireland, Italy, Spain, and India; the Bowl of Hygieia (only) often used in the Netherlands but may be seen combined with other symbols elsewhere. Other common symbols include conical measures, and (in the US) caduceuses, in their logos. A red stylized letter A in used Germany and Austria (from Apotheke, the German word for pharmacy, from the same Greek root as the English word "apothecary"). The show globe was used in the US until the early 20th century; the Gaper in the Netherlands is increasingly rare.

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