

# Historical evolution of the role of on-board Doctor on passenger ships

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## **Abstract**

In this editorial, the authors examine the evolution of the role of on-board doctors on cruise ships from ancient history, dating back to the Roman and Byzantine empires, passing to middle ages and the role of the “barber-surgeon”, when surgery was rarely performed by doctors, but by barbers, who, with their razor skills, did everything from haircuts to amputations, until more recent times such as the last century when the first royal decrees were issued, pillar by pillar, forming the regulatory basis governing health care on board Italian or foreign ships travelling to and from national ports.

## **Keywords**

On-board Doctor, Passenger ships, Royal Decrees, Barber Surgeon

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## **Introduction**

The role of the ship's doctor was born to meet a need that arose during ocean voyages in the first half of the last century, when he was called upon to deal with various medical emergencies, often with few instruments and medicines available: accidents at work,

fractures, various infectious diseases, sudden births and other emergencies. The ship's doctor earned the rank of 'medical officer' and became a figure that was not only crucial, but irreplaceable when facing a long sea voyage on board, especially by an emigrant population in the Americas and often clinically defected and ill (1,2). Indeed, let's remember that emigrants to the United States of America were not accepted and therefore sent back if they were not in perfect health.

It was the daily duty of the ship's doctor to visit patients at least twice a day and to keep accurate records of every patient admitted under his care (3). Every morning, the doctor stood under the mast with his assistants, waiting for the sick to arrive, treating the sick sailors (whom he administered directly); in the most serious cases, he put them to rest until they recovered. In naval battles, the doctor's job was to set up an 'operating table' on deck and operate on the wounded as much as possible (3).

In addition to treating the sick, the doctor was soon in charge of regulating sanitary conditions on board by burning sulphur to fumigate the rooms regularly. He was also responsible for maintaining hygienic conditions by checking the efficiency of the ventilation machinery that supplied fresh air to the lower decks to keep them dry.

However, the presence of this professional figure was also present on ships many centuries before, even in Roman times (4, 5).

## **Ancient history**

The presence of the ship's doctor in fact has very remote origins, from Alcibiades' expedition to Athens in Sicily in 415 BC where the Supreme Council ordered a 'Doctor of the Navy' on board. According to Augustus' order, each trireme is assigned a doctor, a 'medicus duplicarius', i.e. a soldier who must also perform medical duties and receives double rations and double pay (6).

Naval physicians are also mentioned in the Byzantine fleet in the 7th century A.D. by Paul of Aegina, the last great physician of the Eastern Roman Empire, and, in the 14th century, in the histories of the maritime republics, particularly Venice and Genoa (7).

The Republic of Genoa promised Philip of Valois, in 1337, 40 armed galleys, including a medical doctor, and Cristoforo Colombo also brought two doctors with him on his first voyage (8): the masters Alonzo and Juan. Between the 16th and 17th centuries, the most important

navies in Europe included the obligation of a ship's doctor in their statutes. Indeed, Marcantonio Colonna in the battle of Lepanto ordered two doctors per ship.

The presence of these professionals, especially on long voyages, contributed greatly to the development of specificity in on-board pathology (think of scurvy) and medical knowledge of exotic and tropical diseases, as well as issues related to sanitation (such as the preservation of food and water supplies) and the problem of alcoholism among sailors, in addition to important naturalistic studies carried out by "Ship's doctors" on expeditions to the other side of the world (East Indies, etc.) (9).

These experiences led to the establishment of naval hospitals and special schools for naval doctors in Italy from the 17th century onwards, such as the one in Livorno in 1619 (10, 11).

### **Middle age and the role of "Barber-Surgeons"**

From the 14th century onwards, the Royal Navy employed physicians, often called "surgeons", who were enlisted after passing professional examinations at the Barber-Surgeons' Company, and then qualified by the Naval Council.

It may sound strange, but since the Middle Ages, barber-surgeons have generally been tasked with caring for soldiers during and after battle. At that time, surgery was rarely performed by doctors, but by barbers, who, with their razor skills, did everything from haircuts to amputations.

The training of the future surgeon lasted seven years and took place through an apprenticeship with a specialist 'barber surgeon'; the future surgeon thus gained practical experience in 'repairing bones' and suturing wounds.

Once completed, the new member had to prove his or her skills to examiners appointed by the company and was then hired, upon payment of a membership fee, and employed.

In the 18th century, a committee was formed by the Royal Navy, the 'Sick and Hurt Board', a separate (but subsidiary) body of the Naval Board, to be responsible for medical services on board. In practice, the committee recruits surgeons, supplies equipment and medicines, and runs land and naval hospitals. However, the training of doctors remains private. Board records show that many of the medical staff attended medical schools in London, Edinburgh and Dublin, and briefly at the Royal College of Surgeons, before joining the ship's service.

After 1806, the Royal Navy established its own official medical corps, which by 1814 consisted of 14 doctors, 850 surgeons and 500 surgical assistants, caring for 130,000

soldiers ashore and at sea. Their salaries, always on the edge of survival, also rose to acceptable levels (surgeons with less than 6 years' experience earned around £14 per month in 1815 and over £25 20 years later). However, life was always hard for them and their recruitment, then as now, was not always easy. There were many deserters, but there were also cases of desertion for spiritual reasons.

## **Recent history**

In 1861, the Royal Italian Naval Sanitary Corps (forerunner of today's Navy) numbered as many as 110 doctors and these doctors were literally 'lent' to merchant ships performing transatlantic service, in the sense that their destination on board was not a battleship or torpedo boat but a passenger ship performing emigration service (10, 11).

Moreover, in Italy the first model of hygienic-sanitary facility for ships, with Doctors who were qualified or authorised following specific five-year examinations carried out by the Ministry of the Interior (now Ministry of Health) or limited to the service of ships within the Mediterranean on the basis of their professional curriculum, was ratified by means of a special Royal Decree that is still in force, a law that also established the equipment capable of functioning as an "EMERGENCY MEDICAL SERVICE CENTRE", as well as an infirmary with single beds, (a real point of reference for medical, surgical and obstetrical emergencies that often occur far from land), was passed on 29 September 1895 (Royal Decree, no. 636) and later on 20 May 1897 (Royal Decree, No. 178) with the approval of the Maritime Sanitary Regulations. Even today the Royal Decrees still form the regulatory basis, albeit outdated and partly updated, governing health care on board Italian or foreign ships travelling to and from national ports (12, 13).

Previously, only 'domestic or foreign steamships used to transport passengers on long voyages where the number of persons on board (including crew and passengers) exceeded 150 had to "have a doctor on board" (No. 178 of RD 20.5.1897) (14).

With the entry into force of the Ministerial Decree of 13 June 1986, on-board medical care also became mandatory for Italian merchant ships sailing in the Mediterranean Sea, i.e. all ferries to and from the major islands, which are:

- a) major ships intended for public cruise service
- b) ferries, licensed to carry 500 or more passengers, on scheduled public service whose duration, between calls, is 6 hours or more (15, 16).

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