MEDICAL AND TOXICOLOGICAL ASPECTS IN ARTHUR CONAN DOYLE’S WRITINGS

O. MUREŞAN¹, L. SAFTA¹

Abstract:
Several medical doctors turned their hand to writing at some point in their career, thus embedding their medical knowledge and expertise in valuable works of fiction. One of the most renowned of these practitioners remains Sir Arthur Conan Doyle (1859-1930), well-known as the creator of the most famous fictional detective, Sherlock Holmes. The paper presents aspects of Conan Doyle’s writings which pertain to his medical background, with a focus on drugs and poisons featuring in several of his stories.

Key words: medicine and literature, detective fiction, drugs, poisons.

After graduating from the Edinburgh University in 1881 with degrees of Bachelor of Medicine and Master of Surgery, Arthur Conan Doyle practised medicine for about ten years before giving up his first occupation to become a full-time writer. He turned to medicine again only during the Boer War in South Africa where he volunteered as a surgeon. His public support of the British policy in this war led to his being knighted in 1902.

Conan Doyle’s experience as a physician started with two sea voyages as a ship’s surgeon (to the Arctic on a whaling boat in 1880 and to the west coast of Africa in 1881).

After that he practised medicine shortly in Plymouth and then opened his own practice in Southsea resort, where he gained reputation as a good practitioner. In 1885 he was awarded an MD degree by the University of Edinburgh.

Conan Doyle obtained a diploma in ophthalmology in Vienna in 1890 and then opened a practice in London. In the meantime, he also dedicated himself to writing, an activity he had always felt drawn to. While in Southsea, he created the famous sleuth Sherlock Holmes, who first appeared in the novel A Scarlet in Red (1887). The author acknowledged that the celebrated detective was actually inspired by Dr. Joseph Bell, a professor at the University of Edinburgh whom Conan Doyle admired for his remarkable skills of observation, logic and deduction in making a diagnosis, which helped him identify not only the disease, but also the patient’s occupation and character.

Besides the detective stories which made him famous, Conan Doyle’s vast literary work includes historical novels, science-fiction stories, plays, romance novels, poetry and reality-based texts, revealing a complex versatile writer with various interests and concerns. Later in his life, the author became interested in spiritism and travelled the world to deliver lectures on this topic.

Critics have often presented Conan

¹ “Iuliu Hațieganu” University of Medicine and Pharmacy, Cluj-Napoca
Doyle as an unsuccessful physician, in spite of evidence which shows the contrary. Rodin and Key argue that in fact “he left the practice of medicine not because he was a failure, but because he was so successful that it interfered with his writings.” [11]

Although Conan Doyle’s scientific medical writings are few in comparison with his literary work, they reveal both his keen interest in the medical research of the time and his potential for becoming a renowned medical professional.

Publications related to infectious diseases indicate Doyle as a supporter of compulsory vaccination to prevent smallpox, which at the time aroused public opposition, and of inoculation for the prevention of typhoid fever. On the other hand, he was the first to draw attention to the hasty world-wide use of tuberculin as a cure for tuberculosis in 1890, after analyzing its effects and the pathological changes in lung tissue. [6, 7, 11]

Medical bacteriology, a science that was just emerging at the time, was another field where Conan Doyle’s insights into the pathology of infectious diseases were remarkable. Thus, for example, he predicted the eradication of bacterial diseases several generations in the future and in 1883, as a general practitioner, wrote that many human diseases were caused by bacteria, whereas at the time only a few were identified to be so.

Given his humanistic formation, Conan Doyle sustained causes related to the need for physical and psychological well being. Thus, for instance, he supported vivisection as an important means to alleviate human suffering. [9, 11]

Conan Doyle was described as being “ethical and compassionate” in all aspects of his life: as a doctor and writer, in his private life and public activities, and a true “Renaissance Man” with vast knowledge and active interest in various areas of life. [8, 11]

Significant for Doyle’s scientific curiosity is the publication in the British Medical Journal (1879) of a letter presenting his self-experimentation with gelsemium. “Gelseminum as a Poison” contains a detailed description of the experiment in which he tried to find out “how far one might go in taking the drug, and what the primary symptoms of an overdose might be”. One of his conclusions was that “the system may learn to tolerate gelseminum, as it may opium, if it be gradually inured to it.” [11]

At the end of the 19th century, when Conan Doyle practised medicine, old methods of treatment were still in use, whereas new, more scientific and rational ones emerged. The most dramatic improvement occurred in the field of drug therapy, with a strong reaction against overdosing, a practice that had been in use for centuries. An analysis of Conan Doyle’s work, concepts and knowledge of diseases suggests that he was familiar with and followed the new trends in medicine. Thus, an examination of the drugs referred to in the canon of Sherlock Holmes (fifty-six short stories and four novels) would be conclusive.

The drugs and chemicals mentioned in the Canon include alkaloids, ammonia, amyl nitrate, belladonna, chloroform, cocaine, curare, ether, hormones, morphine, opium, prussic acid, snake venom, and strychnine. This is the highest number of drugs that has appeared in a series of detective stories [11]. Several poisons are mentioned as well, but in most cases their nature is not specified.

According to Rodin [10], drugs are used for several purposes in the Canon: for treatment (e.g. ammonia and brandy to revive someone who has fainted, amyl nitrate for catalepsy, morphine for pain); for simulating disease (e.g. in “The Dying Detective” Holmes placed belladonna in
his eyes to produce dilated pupils, as are those of a dying person); for poisoning (e.g. curare in “The Sussex Vampire”, strychnine in The Sign of Four); to induce anaesthesia (e.g. ether and chloroform); for addiction (cocaine, morphine, opium).

The most medical story in the Canon is considered to be “The Resident Patient”, where both Holmes and Watson demonstrate an understanding of the medical practice. Alcohol is presented not as an addictive drug but as a favorite medicament in the Canon. For instance, in “The Engineer’s Thumb”, Watson uses brandy and water as a painkiller, and in “Blue Carbuncle”, brandy is given to the hotel attendant as a stimulant. Holmes also makes use of his knowledge of chemistry to solve crimes, such as in “The Naval Treaty”. The most fanciful use of poisons in the Canon appears in “The Devil’s Foot.” The hallucinatory and lethal effects of “devil’s-foot root” described in this story seem to have no correspondence in the pharmacopoeia or in the literature of toxicology. [5] “Radix pedis diaboli”... has strange properties ... it stimulates those brain centres which control the emotion of fear and ... either madness or death is the fate of the unhappy native who is subjected to the ordeal by the priest of his tribe.” [1] Billings believes that in this way Conan Doyle might have deliberately attempted to ‘divert prospective users of poisons by switching the type of one lethal alkaloid for another.” [3]

Conan Doyle’s heavily annotated Pharmacopoeia [3] (containing, in the margins, brief summaries of detailed topics, directions for preparing medication and descriptions of effects of drugs on the human body) appears to have contributed to the accurate presentation of drugs mentioned in the Canon and other literary works. This evidence accounts for the professionalism the physician writer employed in approaching the interdisciplinary attempt to write stories combining his literary talent and imagination with knowledge and good research skills in the field of medicine and other related sciences.

To conclude, although Sir Arthur Conan Doyle changed his first profession as a physician to that of full-time writer, he continued to show interest in medicine. Moreover, the influence of his medical training and experience on his work and activities also contributed to the recognition he received as an author even during his lifetime. Although his second profession was the one that brought him fame and fortune, he was always proud of being a physician: “The title I value most is that of ‘Doctor’, which was conferred by your self-sacrifice and determination”, he wrote in a letter to his mother. [2]

In the article The Romance of Medicine, he also stated that “a medical training is a most valuable possession for a man, even if he did not afterwards engage in practice” [4], a belief that has been shared by other renowned writers and artists throughout the time.

References


