Medicine
and literature,
unofficial bedfellows

Inaugural Lecture given by
Dr. Amàlia Lafuente Flo
Full Professor of Pharmacology at the School of Medicine and Health Sciences
Of the University of Barcelona

Barcelona, September 7th, 2016
Medicine and Literature,
unofficial bedfellows
The pleasure of writing is only comparable to the pleasure of healing.

Julio Cruz Hermida
Doctor, Professor at the Universidad Complutense de Madrid and Correspondent Member of the National Royal Academy of Medicine
Honourable President of the Generalitat de Cataluña, Distinguished Rector of the Universidad de Barcelona, Honourable Councillor of Business and Expertise, Distinguished Rectors of the Catalan Universities, Mr President of the Board of Directors, Academic and Civil Dignitaries, professors, students, administration and service staff, ladies and gentlemen:

First of all, I would like to thank the Universidad de Barcelona, my university, for doing me the honour of inviting me to give this inaugural class, particularly this year when we are sharing the event with all the universities in the country in our beautiful auditorium.

Addressing the relationship between medicine and literature is both an exciting challenge and a pleasure, especially for me: a doctor, a professor at the Faculty of Medicine and Health Sciences, and a dedicated writer of novels with medical themes. It is also an excellent opportunity to explore our experience as readers.

Human contact, emotional intimacy and especially extreme situations such as illness, pain and death are undoubtedly periods in life that require both medical and literary attention. In ancient times, the poet Homer described the mortal wounds suffered by his heroes with remarkable precision and throughout history we have seen how it is these critical moments that have truly interested writers ranging from Pliny to Ian McEwan, Thomas Mann to Flaubert. In fact, at the end of *Madame Bovary*, the latter author conveys the horror of death by arsenic poisoning in some of the most celebrated pages of world literature that also double up as a remarkable toxicological description of the symptoms of the poison.

Gustave Flaubert, the son and grandson of doctors, spent his childhood in the hospital where his father worked. Once he had become a writer, he argued that writing had to establish the same degree of intimacy with people as doctors. He described this as ‘the clinical gaze’. Flaubert used this expression in a letter in which he criticized the novel *Graziella* by Alphonse de Lamartine:
The author does not have a clinical perspective on life, the perspective of what really matters, which is the only way to achieve the greatest emotional effect.

In short: he doesn’t judge a book by its characters, plot or style but for the presence, or lack of, a human perspective on living creatures, events and feelings: the basis of all literature.

Do medicine and literature need each other? This is precisely the question I propose to address in this class. Over the next few minutes I will seek to show that they do and that the relationship benefits both disciplines even though the archaic separation between literature and the sciences has forced them to co-exist as strange, unofficial bedfellows, not because they don’t want to formalize their relationship but because in the current academic environment they can’t. They need each other, are attracted to one another and live a stable life together, but only outside of official circles.

As I was writing these lines I remembered the sensation during my early years as a writer that I was doing something wrong; something irregular, almost illicit. I felt guilty for having gone off course, for abandoning medicine, wasting time on ‘frivolous’ activities and for enjoying it so much. In fact, you might say that I had started to live a double life, hiding from my family, friends and colleagues the fact that I was spending my afternoons on courses at the Ateneo Barcelonés, writing a novel.

It cannot be denied, however, that many doctors have been tempted to write, and it is thrilling to find among their number such extraordinary luminaries as Arthur Conan Doyle, Anton Chekhov, Sigmund Freud, Frank Gill Slaughter, William Somerset Maugham, Louis-Ferdinand Céline, Archibald Joseph Cronin, Michael Crichton, Robin Cook, Michael Palmer and Oliver Sacks, not to mention the long list of Spanish doctor-writers such as Pío Baroja, Gregorio Marañón, Pedro Laín Entralgo Salom and Lluís Daufi, all of whom were healthcare professionals who decided to apply their talents to literature.

I would like to start by examining the paradigmatic case of Arthur Conan Doyle, the creator of Sherlock Holmes. As Doctor Josep Eladi Baños, a professor at the Universidad Pompeu Fabra, explains in his articles, which analyze crime literature from a medical perspective, Conan Doyle was an observant doctor with great powers of deductive reasoning that often led him to correctly
diagnose his patients’ ailments. But at the end of the 19th Century, these skills weren’t as useful as they might have been: medicine was very rudimentary, pathological processes were poorly understood and the necessary evidence to confirm diagnoses was unavailable. In contrast, during that period, the forensic sciences were booming, the basic tenets of ballistics had been established, and photography and fingerprints had begun to be used as methods of identification. That is most likely why Conan Doyle, bored and frustrated by the limits of clinical science, transferred his interest in observation and deduction to the realms of criminal science. He swapped the white coat and the recently invented stethoscope for a deer stalker and magnifying glass and thus the detective novel, the forefather of the modern crime novel, was born.

Returning to the relationship metaphor with which I began this class, let us consider it a two-way, strategic, stratified bond, a symbiotic, mutually beneficial relationship that we might describe as ‘d’ dependent – ‘d’ for medical ‘doctor’ but also for the ‘d’s that define each strata.

The first question that must be asked is: Does literature require medicine to create its fictional universes? And the answer is clearly yes. Literature is enriched by medical stories and the reader benefits by reading them.

Why do we so enjoy reading stories about doctors and hospitals? For many diverse reasons.

One of the great attractions of the literary genre is that it allows readers to ‘discover’ the profession (the first ‘d’), shining a light on the world of healthcare. This is a gift that it shares with other novels about professionals, legal thrillers for instance, but the curiosity aroused by doctors is great and occasionally even morbid. The reader enjoys learning the whys and wherefores of diseases but also about the everyday details and dynamics of the profession.

Another attraction of the genre is that the doctor embodies the role of the hero in the sense that their cause is noble and essentially altruistic, they tend to put their work first and make sacrifices, suffering through long shifts and stretching the limits of their endurance day and night so as to save the lives of their patients.

They thus become an admirable figure in whom the reader can place their trust.

The doctor-hero is an ever present of such classic medical novels as *That None*
Should Die by Slaughter; The Citadel by Cronin; Corps et âmes (Bodies and Souls) by Van der Meersch and Magnificent Obsession by Lloyd C. Douglas. All of them feature a young, honest, idealistic, middle class doctor who has just completed his studies with dedication and effort and who is trying to make his way in a professional environment where good doctors are always contrasted favourably with those only interested in their career. The young man generally falls in love with a senator’s daughter, or otherwise a humble patient, and is engaged in a constant struggle against the other doctors who are trying to prevent him from rising to the top. But they get there in the end.

In short, in novels from the past century, the doctor triumphs because he is a good doctor but also because he’s a good person.

However, there are also several classic novels about failed doctors: Tender is the Night by Scott Fitzgerald, is an example. The psychiatrist Dick Diver, fascinated (like the author) by the world of the wealthy marries a schizophrenic patient, an heiress to a great fortune. His lavish social life leads him to neglect his profession and he ends up as a mediocre doctor in a small community in the United States. Of Human Bondage by Somerset Maugham, meanwhile, sees young Philip, a medical student, fall in love with Mildred, a flighty, cruel waitress, and they embark upon a tortuous, self-destructive relationship that sees the young man abandon his studies and give up on his future as a doctor.

To make things more complicated, in recent years, the anti-heroic protagonist has emerged: the superstar doctor. This figure is a highly qualified professional whose excellence is poorly understood. Egoistic, unorthodox, reluctant to interact with patients on a human level, their priorities are publications, congresses and recognition from colleagues. For them, patients are just an obstacle on their path to achieving these objectives. To put it plainly, these very contemporary characters are the products of extreme specialization in medicine and the need to have an excellent CV for professional progress. In his novel Godplayer, Robin Cook portrays a brilliant neurosurgeon who fits this professional profile with the addition of an unsettling variable: he needs to consume pharmacological stimulants to cope with the daily stress. In A Taste of My Own Medicine: When the Doctor is the Patient (the novel by Edward Rosenbaum on which the famous movie The Doctor by
Randa Haines was based), Jack MacKee, a magnificent ear, nose and throat doctor, advises residents to put as much distance as they can between themselves and their patients and to focus on surgical work.

But the paradigmatic medical antihero is Gregory House, the diagnosis expert in the eponymous TV series. The difference between House and the superstar doctors mentioned above is that his priority is not professional advancement but rather a genuine, detective-like satisfaction in solving a case. According to Lisa Sanders, an advisor to the series, the parallels with Sherlock Holmes are not coincidental and its creator David Shore has explicitly acknowledged this. House arrogantly scrutinizes his patient like a predator stalking its prey, hoping to diagnose a strange disease that no-one else would be able to detect. In fact, the series was going to be called ‘Chasing Zebras’, alluding to the English refrain ‘when you hear something gallop, think of horses, not zebras’, where horses represent more common diseases and zebras the strange ones: just the opposite of the premise of the series. For its documentation, dramatic setting and careful selection of clinical cases, the series has received academic recognition and has been studied in prestigious journals such as *The Lancet*.

The detailed analysis that is a feature of the genre means that all these protagonists of medically themed novels, dramas and television series, these male and female doctors, be they heroes or antiheroes, reveal enormous talent, skill and ability. They are all extraordinarily well prepared to resolve complex, high-risk situations and are perfectly at home in the intricate healthcare environment of hospitals and team hierarchies.

No-one would question the fact that the hospital is an environment of unique potential for multiple narratives, not just because it is a space that hosts the passage of an unending number of anonymous citizens with their infinite array of personal dilemmas, but also because they provide the setting for health related stories of interest to everyone. The universe of medicine and hospitals is thus revealed to the reader. Writers in the genre must bear in mind that we are responsible for shaping the collective imagination when it comes to healthcare professionals and everyday life in hospitals. And yet, the process
makes the use of certain dramatic techniques inevitable. Events are often linked together: the success of a new treatment, the denial of a promotion, the harassment of a graduate student, medical fraud, a doctor suffering from a disease themselves, a surgical error, a trial, the revenge of a patient... all this might happen to the same protagonist within the limited time span of a novel. Toni de la Torre, a critic and scriptwriter, reminds us in his columns that some of these licenses are often criticized by the medical community as they create unrealistic levels of expectation among patients. Cardio-pulmonary resuscitation, for instance, has far better results in novels and especially on TV than in real life, but these are dramatic techniques that give the protagonists the heroic power of bringing someone back from the dead. The same is true of the equipment shown, with hospitals being spectacularly well-endowed with high-tech tools that the majority of the population have no access to in real life.

In the case of forensic medicine, series such as CSI, as has been pointed out in studies by Dr Magi Farre, a professor at the Universidad Autonoma de Barcelona, see crimes solved in hours, data processed instantaneously and analytical results obtained in just a few minutes. The series has been responsible for what is known as CSI syndrome, a growing trend among juries in the United States who request more and more evidence on which to base their important decisions, leading to the overload and collapse of medical forensic laboratories.

A clear consequence of the heightened expectations of our society is the increase in medical vocations. Novels and especially popular television series have been responsible for this phenomenon for different reasons.

- Firstly, they lead the young reader to empathize with the social role of the protagonists.
- Secondly, they portray specialities such as surgery in a glamorous light, making them seem the pinnacle of the medical practice.
- Finally, but just as importantly, they make us envious of the extraordinarily active sex lives enjoyed by doctors in a hospital environment, this is especially true of programmes such as Gray’s
Anatomy.

Needless to say, all these trends are potent recruiting tools for Faculties of Medicine.

Currently, Spain has the second highest number of Faculties of Medicine per capita in the world, just below South Korea, while its ratio of doctors per inhabitant is above the European and world average, with the predictable consequence that the young doctors who find themselves surplus to requirements have to emigrate. And yet enthusiasm for opening new faculties of medicine still abounds.

But this is obviously not just the fault of medically-themed fiction.

Thus far, I have explored a few ways in which literature is enriched by medicine, using examples of different authors who draw on science to create characters, settings and gripping plots that attract a large number of readers.

Now I’d like to examine the other perspective, where the pertinent question is: What benefits can reading medical fiction have for different aspects of medicine itself, including healthcare? I believe that they are many and significant.

I know that this opinion may seem gratuitous and even pretentious. Initially it doesn’t seem likely that a creative art, with its unruly, bohemian, solitary, difficult and elusive writers could have any effect on a health sector that is so politically structured, scientifically monitored and economically audited. But fiction truly can work miracles.

To start with, I’m sure you will agree that literature by necessity modifies everything it addresses, purely because of the interior process that takes place when we read; the degree of intimacy we establish with every book (sadly, it is one of the few acts that is left to us that we don’t have to share on the internet or with our next door neighbours). When we read, everything that enters through our eyes is absorbed directly by our body. When a novel describes a medical treatment, a little known health problem or an unfair aspect of the healthcare services, the dilemma, the protest, spreads throughout the reading public like a vitamin boost to our consciousness. Fiction truly can work miracles.
That is my intention, to show that fictional doctors, with their false settings and imaginary patients, have managed to influence and even change key aspects of medicine and healthcare.

On the hypothetical platform of literary influence, I have identified four levels:

- The first level is personal ‘d’evelopment, in medical training.
- The second is ‘d’issemination, communication and raising medical awareness.
- The third is the moral ‘d’ilemmas that arise during the rapid evolution of medicine.
- The fourth is protest and ‘d’enunciation to bring about social change.

In an interview about his novel Seizure, Robin Cook, the bestselling writer, discusses his preoccupations, saying: “My goal is to get people interested in some of these issues [here we have communication] because it is the people who will at some point have to decide how to address the ethical aspects of stem cell research [moral dilemma and protest and denunciation of research policies].”

Cook’s willingness to influence society is fairly rare among authors. In fact, it is difficult for a writer to determine the principle reasons that lead them to tell any story in particular. I remember that at the Ateneo, during my first course, one of our obligatory exercises was to have the aspiring writers outline the main drivers of their budding novel. The teachers were extraordinarily inquisitive: What do you want to communicate? What situation do you want to provide an answer to? What universal issue are you addressing? Or even: What aphorisms might apply? I can assure you that the exercise was no different from defending your thesis in front of a hostile panel. It was uncomfortable to be forced to be so introspective, because we didn’t have the requisite powers of abstraction, analysis or self-criticism. Often it takes several published novels, plenty of columns and lots of time pounding at the rock face for writers to be able to get such ideas down on paper. And sometimes they never manage it at all.
Let us begin with the first level: medical education.

The apprentice doctor must be taught all about the human body, but that doesn’t mean that they can only pay attention to the physical aspects of the disease, they must also take into account the related emotional effects as well.

In the novel *The Physician* by Noah Gordon, Rob Cole’s teachers warn him:

*Science and medicine are interested in the body, while philosophy takes care of the mind and soul, and these are just as necessary for the doctor as food and air.*

Enter philosophy, another great companion of medicine. It is a discipline very relevant to the study of health and disease, the concept of the invasion of bodily intimacy and the dilemmas involved in life and death decisions.

Fortunately, it’s very easy to get medical students interested in literature. They tend to be young people who like to read, write and enjoy human contact and emotional proximity with a patient, and who also need to escape to relieve stress, especially if the escape has something transcendental about it.

Including literary aspects in an educational course is certainly useful, even if it is just to teach the proper use of language. Doctors know perfectly well that words can be therapeutic for the patient, or they can be explosively destructive, so students need to know how to use them. These skills can be acquired before one starts to study medicine, but this doesn’t always occur. Unfortunately, students with a vocation for medicine are steered towards the sciences and separated from literature very early in their education and along the way they lose a significant portion of the ingredients necessary for the observation, expression and development of creativity.

It is true that the doctor has the inestimable back-up of psychologists and, especially, the effective, essential role of nursing in providing emotional support for the patient. But as a professional doctor they must have first-hand familiarity with the fear, bitterness, sadness and general emotions that come
with illness. There is no doubt that literature is an excellent source of learning materials.

There are very clear examples, such as the novel we mentioned above, *A Taste of my Own Medicine: When the Doctor is Patient* by Rosenbaum, in which the magnificent but haughty Doctor MacKee warns his residents:

> The mission of the surgeon is not to make friends with their patients but to cut them up with their scalpel: you go in, fix them and bugger off.

Suddenly, however, everything changes when he himself is diagnosed with cancer of the larynx by a doctor just as cold and distant as he... From then on, he realizes how hard it is to be on the other side of the desk, the feelings of the patient as they wait for test results, their uncertainty over their diagnosis and the feeling of not being listened to by their own doctor. The lesson of this novel with regard to students is that you don’t have to get cancer of the larynx to learn how to treat patients properly, to regard them as normal people with a disease, not impersonal numbers with an assigned bed and clinical history.

In *The Death of Ivan Ilyich* by Leon Tolstoy, a novel of no more than a hundred pages, we read the story of an ordinary man suffering from a terminal illness. Gerasim, a young butler, very much Ilyich’s social inferior, is nonetheless the character in whom the sick man finds the comfort and company he needs. This is a novel of exquisite literary delicacy in which Tolstoy confronts us with the reality of life and our mortality but also our behaviour when someone close to us is dying.

Another writer commonly read in faculties of medicine is Chekhov. Chekhov was already a famous writer when he was twenty-eight years old, but he was also a doctor and suffered from tuberculosis. One of his best texts is *Uncle Vanya* in which Doctor Astrov reveals how affected he is by the suffering of his patients:

> I’m running around all day and never get a moment’s peace but when I’m finally under the covers I suddenly wonder whether I might have made a mistake with a patient, with the diagnosis or the treatment.
In the story Rothschild’s Violin, Chekhov criticizes the way military surgeons treat the local peasantry:

“Hmmm... Yes... Fine...” mumbled the practitioner before sighing. “The flu, and maybe a fever. There’s an outbreak of typhus in the city. What can we do? Thank God the old woman has already lived out her years... How old is she?”

“She’ll turn seventy next year, Maksim Nicolaitsev.”

“Really! The old woman has lived plenty! Her time has come.”

Recommended reading is a very common practice in medical education, and is discussed and debated in international medical journals. For years, The Lancet dedicated a section to it that was followed closely by a large section of the medical community.

It must also be noted that some are against the reading of fiction during a medical education. John Bignall, for example, the author of many articles published in the aforesaid section of The Lancet, is a self-proclaimed enemy of literary prescriptions during one’s studies as he believes that they have no relevance in modern medicine. It was he who started a great debate after publishing a biting, funny and provocative criticism of what he described as an obsession with including literature in medical training courses. I quote a section from his piece:

*Faculties of Medicine and specialized journals fight tooth and nail to get on the bandwagon of medical literature. Look at how much doctors can learn about the human condition by studying literature, exclaim the practice’s committed followers. By literature, they mean stories written generally by dead men, most of them alcoholics, drug addicts or insane. And probably Russian.*

The article set off a flood of letters to the editor in protest, defending the values and qualities we have just enumerated.

The benefits of medical fiction are less controversial when it comes to level two on our list, communication. Few people doubt literature’s substantial
contribution to the transmission of knowledge. There is general agreement among experts in the methodology of raising awareness that eliminating technical language so that a non-specialized audience can understand isn’t enough to reach the population: to be effective, it must also arouse the interest of the target audience.

There is a famous anecdote that many of you I’m sure are familiar with that exemplifies this: in 1931, Albert Einstein remarked to Charlie Chaplin during a conversation between the two:

“What I’ve always admired about you is that your art is universal. You don’t say a word but everyone understands you.”

To which Chaplin replied:

“That’s true, but your glory is even greater: everyone admires you, even though no-one understands a word you say…”

This example leads us to imagine a hybrid between a scientist and an artist able to communicate their knowledge with gestures and well-told stories. That is the role of educational literature.

The protagonist of the novel *Enduring Love* by Ian McEwan, one of the most prominent figures in contemporary British literature, is a popular science writer with whom another character falls obsessively in love. The condition is known in psychiatric circles as De Clérambault Erotomania Syndrome. Poor Joe struggles to convince his wife Clarissa that he has never had any part in the relationship and often finds himself alone, abandoned and misunderstood. But it is precisely during these moments of solitude that he provides magnificent reflections on his profession – medical education – outlining some of the contradictions that he believes still exist.

Paradoxically, we have a wide variety of media at our disposal (the written press, radio, television and the internet) that often include medical and scientific content and yet only a small percentage of the public identifies itself as being actively receptive to that information.

Communicators such as Bibiana Bonmati at the Universidad de
Barcelona and Monica Lopez and Gema Revuleta at the Universidad Pompey y Fabra have studied this phenomenon.

Humans like stories, especially when they are repeated, like children who never tire of the same book, or stories in the ancient oral tradition that were passed down from generation to generation by elders and troubadours. Oral stories require memorization that can then be altered with the storyteller’s personal touches. Then came the episodic stories that were published widely, the direct predecessors of television series, and then whole novels in one block. The point I am trying to make is that the human brain is designed to listen to stories.

This links to the paradox of communication as, lately, it has been argued that medical communication appeals to the reader’s rational side rather than their emotions. Traditionally, it has been assumed that learning is undertaken by the rational part of the brain (the left hemisphere), the analytical calculator, the side that applies mechanical, impersonal rules. But it seems that our brains were created to absorb stories, not encyclopaedic information, and so human interest is determined by emotional content. If we want to attract the attention of the reader, then we must also engage the emotional, right hemisphere.

What comes to mind when someone mentions cloning? Dolly the sheep and the sad image of her ageing and dying prematurely.

What about the recent Ebola epidemic? The nurse who caught the disease and her dog Excalibur who was sacrificed to prevent its spread. Stories that fill newspapers, television news programmes and the Internet. Stories are what stay ingrained in the brain.

Unfortunately, the telling of stories disappeared from scientific literature at the beginning of the last century, when science grew more complex and professional. But it is never too late to recover this fantastic literary tool. Needless to say, the medically-themed novel, when it places the plot, characters and emotions at the service of science, becomes a powerful tool of communication.

Ian McEwan is not a doctor or a scientist, he’s a literary professor specialized in creative writing but he’s fascinated by medicine and science and that is why his novels always feature a hospital, a doctor or a medical dilemma tucked away somewhere. In Enduring Love, McEwan addresses the theme of
popular medical communication at length, and specialists regard it as a work of reference for Erotomania Syndrome because he is a great emotional communicator and is a master of the narrative technique.

Other notable works by the same author include Atonement, a great novel that was made into an Oscar-winning film in which the protagonist, Briony Tallis, a girl from a good family, suffers as a war-time nurse at a hospital in London seeking redemption for her childhood sins; and the novel Saturday, which examines the life of a neurosurgeon, in this case Doctor Henry Perowne, a peaceful man who gets involved in a violent incident one weekend and who ends up operating on the brain of his aggressor’s daughter.

And we mustn’t forget On Chesil Beach, a sweet tale about female impotence, or Solar, probably his funniest novel, a satire of a bored, harassed Nobel Laureate for Physics with a dysfunctional personal life.

Those of us who have read these novels can appreciate the effective way in which the information is communicated, the perspicacity and the pleasure that comes with reading them. Clearly they are a great educational tool for both scientists and laymen, a far more entertaining read than a dull column in a scientific supplement.

Communication also has other functions, which we can enumerate below:

a) It raises awareness of rare diseases or those that are associated with social stigma such as schizophrenia, epilepsy, drug addiction or AIDS.

b) It explores different aspects from the history of medicine, in novels such as:

- The Doctor by Noah Gordon, which describes the contribution made to medicine by Avicenna, the Persian doctor who first described cataracts, appendicitis and the means by which the plague was transmitted.
- The Egyptian by Mika Waltari, which describes the drugs used in Ancient Egypt (some of which are still used today) and the anatomical knowledge gained from embalming techniques.
- Bodies and Souls by Maxence Van der Meersch, written in the late thirties, which portrays early psychiatric treatments such as insulin
shock and the much feared electroshock as well as the controversy over the treatment of tuberculosis through overeating.

We described the third level as Moral (or ethical) Dilemmas. This is the level where Doctor Robin Cook is king. Doctor Cook studied Medicine at Colombia University but soon became a very successful novelist and ceased his professional activities. He is a prolific writer and his novels keep track of advances in medicine with plots that address its possible deviations. Rather than a science-fiction writer, Robin Cook considers himself to be anticipating what might happen. He is an author who knows how to frame these questions in a way that will attract the reader. Is a person safe in a hospital? Do we really know what’s going on behind the scenes? What are the real interests of medical insurers? Is everything they do really to benefit patients?

Coma, his best-known novel, was adapted into a movie by Michael Crichton (probably the most famous doctor-screenwriter that medicine and science has ever had) and we all remember the scene in which bodies hang by cables in a large, secret ship that acts as a warehouse for donors of living organs, waiting for their recipients. Then there’s Marker, in which a series of deaths have something in common: the victims are young people all insured by a prestigious company who have undergone minor surgical procedures but have a genetic marker for a serious disease that will require lengthy, expensive treatment. And there are many more titles worth mentioning: Chromosome 6, which is about genetic engineering; Toxin, which addresses the machinations of the food industry, or Brain, which focuses on illegal research on human beings.

Moral dilemmas are resolved fairly simply in Robin Cook’s novels because they address issues about which the public has, for the most part, already made up its mind, allowing little room for debate. In other novels, these issues are more complex.

For instance, we can return to Ian McEwan and his latest work, The Children Act, in which a judge has to rule on heartrending cases such as the separation of conjoined twins and who should live as a result, or whether the religion of the parents, Jehovah’s Witnesses, should take priority over those of the child, who needs a life-saving blood transfusion. The judge is so overwhelmed by these dilemmas that his personal life suffers deeply.
Many contemporary dilemmas centre around the conflict between:

a) individual human rights
b) and the collective rights of public health and safety.

We have recently been confronted by the risk of maintaining medical confidentiality about psychiatric disorders in the case of pilots and drivers, as well as obligatory vaccinations, the way patients are prioritized when it comes to expensive treatments, and the use of public facilities for private medicine. There are also the dilemmas that might be considered ‘classic’, such as euthanasia and abortion, whose legal status often differs by country.

Ethical dilemmas are often conflicts that spur the reader to think about how they would address the issue themselves. Although the situations might be set in very different environments from our own, we can often see parallels with an experience involving acquaintances, family members or friends. These kinds of dilemma stimulate the intellect and oblige the individual to take a position free of any proscriptive moral strictures. The situation must be assessed, different points of view taken into account and all possible approaches countenanced.

Does the examination of moral dilemmas favour the world of healthcare?
Without a doubt. Moral and ethical conflicts related to healthcare are especially stimulating, they are powerful catalysts for the conscience and exercise the emotions of the reader as they come to take a position. Obviously, these positions constitute the first step towards improving failing aspects of the healthcare system.

And now we come to the final level: protest, a powerful social tool. Novels such as *Extreme Measures* by Michael Palmer, which denounces illegal research on humans, and *House of God* by Samuel Shem, known as the residents’ Bible by new doctors seeking consolation in the tough environment of large American hospitals, are classics of the genre. *House of God* is one of the landmarks of medical literature.

Do these novels really have any effect on healthcare? Do criticisms by fictional doctors help to improve the healthcare system? Let us examine two works that have achieved real, very worthy change.
Archibald Joseph Cronin was a Scottish novelist and doctor, the author of *The Citadel* and *The Keys of the Kingdom*, both of which were made into Oscar-nominated films. *The Citadel* especially is a landmark of protest literature. It portrays the young doctor Andrew Manson’s arrival in a Welsh mining town in 1924 with his degree under his arm and a willingness to serve society and alleviate the difficult lives of workers in the area. “With this novel,” the author wrote, “I am not trying to denounce anyone in particular, but the system.”

While Cronin was a practicing doctor, he noted down the experiences that he would then use for his novels:

“I have witnessed the horrors I recount here, the poverty and family drama but also the injustice of the medical profession, its limitless ambition, its stubbornness, its stupidity...”

Anyone wanting to know about how medicine was practiced in the first half of the 20th Century in the United Kingdom and the struggle to achieve proper healthcare for workers and their families need look no further than *The Citadel*. It is a work that denounces the social and medical plight of the miners, the corruption of the healthcare system and the lack of professionalism of some of the author’s colleagues.

The social and political impact of *The Citadel* was so great that it led to the first modern organization of healthcare systems in Great Britain, which enjoyed an impeccable reputation for decades. The National Health Service (NHS) was the first government healthcare organization in the world to provide universal healthcare to its citizens.

All that thanks to a novel.

The second example is more contemporary: *The Constant Gardener* by John le Carré is an unsettling novel that begins with the murder of Tessa, a young, attractive woman, close to Lake Turkana in northern Kenya, where she had travelled as an NGO volunteer. The protagonist of the story, Justin Quayle, is her husband. In this case he isn’t a doctor, but a diplomat at the British embassy in Nairobi, a gardening enthusiast. Justin is a man ennobled by tragedy who sets out on an individual crusade to track down the murderers. His investigation leads him into a world of international intrigue in which multinational pharmaceutical companies use Africans as guinea-pigs to test...
new medications that they then sell in the West. They carry out illegal clinical trials of a drug to combat tuberculosis that Tessa has discovered may be fatal. Justin Quayle uncovers the corrupt plot but also discovers in moving fashion just who his wife was, her generosity and commitment to the people of Kenya. The novel was an international bestseller and was also made into a successful film.

Obviously, the pharmaceutical industry does not come off well in *The Constant Gardener*, but the reader is aware that there’s a little of everything on God’s green earth and that the industry is generally honest, performs a valuable research role and has an unquestioned place in contemporary research. It must always be borne in mind that without conflict there is no novel and that portraying an efficient and honourable pharmaceutical industry would have sounded like propaganda; predictable and extraordinarily boring.

But *The Constant Gardener* was not just a literary success, it was also a landmark achievement from the point of view of healthcare.

In 2013, the Helsinki Declaration, a global guide to ethics in the medical community, was revised to include a paragraph specially dedicated to preventing the events described in the novel from happening. Point number 20 refers to research among third world populations:

> Medical research on a vulnerable group can only be justified if that research answers the healthcare needs and priorities of a specific group and the research cannot be carried out on less vulnerable groups. In addition, that group must benefit from the knowledge, practice and interventions carried out as part of the research.

So, once again, a novel with fictitious patients and hospitals brought about a change in international statutes. Justin Quayle and his wife Tessa have, under the guidance of John le Carré, helped to prevent illegal testing in countries in the third world.

After presenting and analyzing these different points, we can conclude that the relationship between literature and medicine is a necessary one that offers benefits on both sides:
1. Literature based on medical themes is well received, especially because of the way it presents the profession to readers.
2. Medical novels offer unquestionable educational value in terms of awareness of the psychological experience of a disease which teaching programmes cannot hope to address in the same depth as literature.
3. Fictional medical plots communicate medical issues in an emotional, moving way and are thus much more effective than approaches that only address the rational side of our intellect.
4. The ethical dilemmas portrayed in medical novels are especially stimulating and help the reader to get emotionally involved, making them more receptive to improvements in the healthcare system.
5. Novels of social protest related to healthcare are particularly effective and can lead to groundbreaking political action.

I would have liked to prove that reading medically-themed novels makes you healthier, improves your medical wellbeing or even significantly increases your life span. If that were so, then it would surely lead to official recognition of our bedfellows.

Sadly, as you know, such claims would require clinical trials, the parameters for which are rather difficult to determine.

At the very least we’d need three parallel branches of healthy individuals who volunteer to read. Well, in fact one branch would be non-readers, a control group that was not exposed to reading (unfortunately, that wouldn’t have been hard to arrange); another branch would consist of volunteers given a placebo (what one might consider a placebo text is a delicate issue in itself); and, finally, the branch of readers given medical novels.

We’d still need to determine what the key indicators would be: the length of the trial (months, years) and the health effects to be evaluated (mental, cardiovascular, motor or sexual health?)

In short, such a trial wouldn’t be very viable.

And I very much doubt that we’d ever find a pharmaceutical company or publisher to finance it.

Thank you very much for your attention.
Bibliography


Leonard Snart is very particular about his clothes and wants to see how far he can push his teammates, Ray in particular. But he doesn't get to fuck with Ray in the manner he was expecting. -- Written for the unofficial Snart in a Skirt week. Joe West never adopted Barry Allen. In the wake of his mother's murder and his father's incarceration, Barry is bounced between orphanages and foster homes, the child of an imperfect system. Fast-forward fifteen years, to a future where Barry was never struck by lightning, never became the Flash. He works as a forensic analyst for the police and volunteers his spare time to the Wishing Well Foundation, granting wishes to children with life-threatening conditions. It's a pretty straightforward life, really. Bedfellows quotes from YourDictionary: Late that last night, as I sat alone watching the interviews and the speeches and the what-not, she shouted to turn that thing off and come to bed. Once again politics had made estranged bedfellows. Resurrection, like politics, makes strange bedfellows. — Philip José Farmer, in The Fabulous Riverboat (1971), first line, spoken by Sam Clemens (Mark Twain). Tags: Resurrection, politics, makes, strange.