

Why become a doctor if there's Internet? Open letter to a first year medical student¹

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Introduction

Internet search engines provide access to diagnosis and treatment of many of the ailments that afflict us. By typing the signs and symptoms it is possible to obtain an approach that can be more correct than an approach offered by a real doctor: "Are we doctors becoming redundant?".

I will try to show you, dear student, that no, that doctors would be needed even if artificial intelligence could surpass the Turing test. By the way, go online and read about Alan Turing, his life and his "test." Turing died in some way for being gay, in a period after the Second World War in which doctors defined homosexuality as a disease. A sample of medical abuse with serious consequences in the lives of patients and societies. Homosexuality is still a crime punishable by death in some countries, it is a sin in many others, it is a disease in a number of countries, and a "deviation from normality" in many.

Doctors are no strangers to this nonsense that continues in other ways; sex and sexual activity are a source of income for many pimps (read, since it will interest you, the book by Ray Moynihan and Barbara Mitze "Sex, lies and pharmaceuticals. How drug companies plan to profit from female sexual dysfunction ", which considers the methods of those who invent such diseases in order to do business, with regard to the transformation of the "decline of female sexual desire" in a diagnosis treatable with medication).

To believe in technologies (Internet and others) as a solution to suffering and fear of death is foolish. Technologies only help, from the stethoscope to anesthesia, from vaccines to morphine, from the best form of organization to the improvement of the transmission of knowledge, from videoconferencing to blogging. But there is no solution to the burden of living, there is no scientific answer to the fear of death. Religion can offer eternal life or reincarnation, but medicine can't. The pain is always with us; the suffering is part of life. The old saying mentioned "Is he dead? No, it's over, he began to die when he was born. " Technologies can't offer the compassion and empathy that a human and scientific doctor can give, the "healer" who we were and should be.

Human complexity

We have a brain that we do not deserve. When you study it, dear students, do not forget to marvel at its complexity. Be amazed, for example, at the study of vision. Ranging from embryology to the anatomy of the eye and optic nerve (with its sheltered position in the

¹ Summary of a class to first year students of the Autonomous University of Madrid (Spain) 14th Sept 2010. It was organized by IFMSA-SPAIN (AIEME-UAM). IFMSA is *International Federation of Medical Students Associations*. This text is distributed under Creative Commons by-nc-sa 3.0, therefore can be freely distributed and re-developing the condition include the author, not for commercial use and maintain subsequent product under the same license type ([full license](https://creativecommons.org/licenses/by-nc-sa/3.0/)).

skull and face) and its function, with the retina as an "extension" of the brain itself that faces the outside and that it "interprets" radiation in the visible spectrum. Do not forget that neither in the visual cortex or in any part of the brain there is a "screen" or representation of holograms. However, we still manage to see!

Governing the human brain is a complex issue. Maybe this is why drugs are a part of every culture. In our cultures, there are a lot of legal drugs: caffeine, theine, nicotine, ethanol, tranquilizers, sleeping pills, tranquilizers, codeine and others. We survive thanks to them and to the socially acceptable rites for common use (weddings, parties, gatherings, celebrations, desserts, etc..) or alone ("I can't sleep, doctor, and this pill helps me sleep; it's not like the drug addicts, who just want it without an apparent reason; but I need it, you know? "). However, the end brings jealousy, frustration, the anguish of living, regret, unpleasant memories, dissatisfaction, disappointment and a hundred of other feelings that make us unhappy even amidst the affluence of developed countries. Do not forget that doctors are more prone to take drugs (especially psychotropic drugs) than lay people; it is our response to the hardships of facing suffering and death. Moderate its consumption, especially if it becomes a form of "working through" the brutal work in the emergency department (or in the daily consultation.) Never forget that doctors are more prone to commit suicide, so the answer to the edges of the profession should be healthy in the sense of mental health.

We move between Eros and Thanatos, both related to the night, both regrettably related to the obscurity. We go from "poop, ass, fart, piss" to "cock, pussy, dust "and return to the starting point in old age. The matter that forms our bodies forces us to go on a brief journey ("to be born, to grow, to reproduce and to die"). And we do not know how it morphs into intelligence or kindness. The dissection of the brain certainly does not help discover the soul but it doesn't help discover love as well. And we all love but few are lucky enough to love someone that loves him/her back. No one can promise "love" to the human being. No one can promise health as well.

Health can be promoted, you can care, you can protect, but health is an asset that nobody can guarantee. The Iron Law of Epidemiology is always true, and everyone who is born dies. We can prevent some diseases, we can delay some deaths, but every disease and every death is different depending on the affected individual. Don't be, dear student, "idealist." Be "empirist". Diseases are poorly defined states of change that each patient experiences personally. "There are no diseases, but there are sick people" is a key theme for the physician. And it is a scientific truth that explains empiricism and not idealism. The empiricist believes in what he sees, in patients, and not in diseases. There is more illness (experiencing the disease) than disease.

Patients suffer in the three classical meanings, namely biological, psychological and social; so don't forget to "explore" those worlds that often doctors tend to ignore. For example, the patient's professional life and the impact of the disease in it (in this sense always assume that someone who looks after the house works in it; the prudent question is "do you work outside the house?"). In another example, the impact of illness on the patient's sexuality; sex is much more than human biology, do not be ashamed to talk about it with patients (and make sure you have a rewarding sex life, as a way to handle these issues "normally").

Much human suffering has its origin ("the cause of the cause ") in the determinants of health, particularly in the unjust distribution of wealth. Thus, there are many examples showing that "some spit blood for others to live better." For example, the subsidies for

cotton in the United States (for less than twenty thousand farmers-entrepreneurs) generate unfair competition to better quality cotton in poor countries like Mali, which consequently, leads to loss of crops, people displacement and many deaths. As far as clinical medicine is concerned recall the Inverse Care Law (those who receive more care are those in less need of it, and this specially applies where the health care system is more market oriented) and try to reverse it by providing care according to need, particularly to those with more problems in accessing medical services. Participate as much as possible in the social struggle against the causes of that Law.

In order to understand human complexity, it is necessary for the doctor to "get out of medicine" and wander through the worlds of economics, anthropology and sociology, which I recommend you do as part of your training ("the doctor who knows only about Medicine, doesn't even know about Medicine").

Social complexity

If human beings are complex, what is there to say about our societies! If a Martian paid a visit to Earth, he would probably pay special attention to the language. He would probably end up studying linguistics in order to try to understand humans.

In some ways it seems that we are "beings for the language" (as you study genetics, dear student, it will seem that our destiny is to be complex "gene carriers"). The language allows us to establish classifications and codes. Language is an interpretation of the world which facilitates human relationships and limits our global vision. We think what we are capable of expressing. What we do not express affects the limbic system, dear student, which you will study as a still poorly understood wonder, a wonder influencing the world of your emotions, which is so connected to the olfactory system.

Much of your learning time will be devoted to the acquisition of medical language, the domain of medical jargon. This language will help you connect you with your peers, and become part of a tribe, the tribe of the "healers", which we are a part of. Use that language so as to benefit the patient rather than harm the patient (in fact, in general you should always "pro-patient" and "never be against a patient"). On the other hand, do not let them vaccinate you with their language against the "skepticemia" ("skepticemia" is a disease of low infectivity against which students are vaccinated in medical schools).

Watch your verbal and body language, forms and courtesy, you are the most powerful placebo; a gesture, a kind word does wonders. For example, hold the hand of the widowed during the visit after the funeral; put your hand on the shoulder of the rape victim who came to the emergency department; start all clinical interviews with a handshake while introducing yourself to the patient; have natural flowers on the table in your office, etc. Your empathic words can make smile a terminal patient, they can make someone who seems harsh and hostile cry: no patient will "resist" a gentle and caring doctor, compassionate plus having scientific knowledge and technical skills.

Societies have norms which are nothing more than "institutions", general agreements that we respect. For example, we consider it is bad that doctors give in to the industries, as medical decisions will be guided by the interests of shareholders, and not the needs of patients and society.

There are organizations that seek to promote transparent relationships, proportionate and

independentm with the industries. In Spain, "Nogracias", and around the world, HealthySkepticism. Students are not oblivious to these movements due to the development in Spain of Pharmacriticxs by the IFMSA students and in some countries the implementation of the "transparent medical schools" movement, which promotes the declaration of interests and commitments to industries by all speakers, and the eradication of promotional material from the classroom and teaching areas. As a real-life example, when you do your oncology rotation, dear student, ask doctors how much money they earned for including their patients in clinical trials.

A prehistoric skull with a worn out denture has been discovered in Georgia. It was not possible to live without teeth in those days, as the art of cooking or simply boiling the food did not exist. This skull shows the care its owner received, care and compassion of those who were his contemporaries. Over time, developed societies have organized a health system and social benefits that facilitate the exercise of that same care and compassion as part of justice (not charity). In all developed countries, with the exception of the United States, there is a public health system that provides care according to need, and not according to ability to pay.

Public, dear student, means "public funding". The Spanish health system is an anomaly among public health systems worldwide. No one else has these armies of doctors employed in hospitals and health centers (only seen in Finland, Portugal and Sweden). The usual (from Canada to New Zealand, from Austria to Norway, from Italy to Japan) is for the doctor to work as an independent professional, which does not mean that the patient has to pay for his/her services; medical care is often free at the point of care. Moreover, in Spain, the public health system is actually not very public at all, since private care comprises around 30% of the total health expenditure. In practice, this explains that the mouths of the rich can clearly be distinguished from the mouths of the poor, because there is poor coverage of dental care in Spain. Poverty is a determinant of health ("cause of the cause"), and it is for access to healthcare and for provision of care after gaining access to it.

It is important to understand the organization of the health system, its funding and policies supporting the various options. Nothing happens by chance, and you will end up practicing in a certain culture and social context that you should understand. The Internet can help you achieve this goal, but it is not an end in itself.

The response to pain and suffering

The earliest doctor was the shaman, the sorcerer of the tribe, the individual that could offer comfort to those that were experiencing suffering. The shaman provided spiritual comfort through spells and rituals, and provided physical comfort through the use of drugs and other techniques, such as the treatment of fractures and dislocations, amputations and more. This individual was probably the first member of the tribe who managed not having to hunt for food, as others did for him in payment for his services. Some argue that the midwife was a milestone, namely in terms of giving rise to the creation of doctors. The midwife was the woman who attended deliveries of all others and knew how to carry out an abortion whenever it was requested. This interpretation is more politically correct, but I fear that we are more like heirs of that gifted member of the tribe than of the midwife.

Army doctors and doctors providing care to the poor appear later on, and received a salary; doctors of the "free" were paid fee for services.

In Spain, King Alfonso X El Sabio (XIII century) had already established that the "physicists" had to provide evidence of their training and be accepted by the other physicians in the area, as a way to recognize their worth and skills (along with the corresponding "monopoly", which remains today). This physician was also a general practitioner, surgeon and dentist, and even a pharmacist. Also in Spain, during the Middle Ages, guilds developed payment by capitation ("la iguala", which corresponded to a fixed equal amount for each guild member, in order to ensure care to the disabled, widows and orphans).

In the late nineteenth century, the development of physical, chemical and biological sciences and of capitalism made possible the flourishing of specialties; some physicians became dedicated to very specific fields such as paediatrics or gynaecology, and there were middle and upper classes who could afford their services. Specialization has grown inexorably and in the XXI century it has ignored the fact that "the whole is greater than the sum of its parts," which is very true for persons. Specialists are increasingly one-eyed Cyclops; the eye is no longer a magnifying glass or an optical microscope, but an electronic microscope, which is dangerous when applied outside its area of expertise. Therefore, there is a need to combine knowledge of general practitioners and of medical specialists.

Physicians are usually backed up by society, which can be demonstrated continuously in polls, where, of course, politicians always end up socially despised. They are an example not to emulate. What matters, therefore, is a meritocracy, the value of what doctors know and do. This makes patients come to our appointments, and to surrender their body and soul in the hope of being healed or relieved from their problems. Doctors almost inadvertently trespass the barriers of the skin and the soul and it is important not to abuse that power. Sexual abuse, for example, is rare in consultations, but exists, do not forget that, dear student, because it serves as an indicator of more frequent abuses that break the duty of medical secrecy and the right to patient confidentiality, thus infringing on their dignity.

We physicians have limited, finite power. There is almost magic in our consultations (for example, in my own consultation, when a local anesthetic cream allows me to painlessly remove a naevus, or when a "glue" allows me to suture a wound without using stitches, or when medication is able to eliminate pain in a terminal patient, or when I make a child laugh, who comes crying with a broken tooth after a fall), but we are not magicians but mere healers. We are also not scientific, but we use science to discern the true from the false (and philosophy to distinguish the important from the irrelevant.) Do not be a magician, dear student, but don't discard science as well. For example, never believe that statistics is science or that it "saves lives." Don't believe in the cardiopulmonary resuscitation (is simply "reanimation"). Statistics is just a tool that should not blind you with its appearance of scientific neutrality, because numbers can be as easily manipulated as ideas. For example, the definition of health is transforming the feeling of being healthy into "biometrics", by delineating with false statistical precision the increasingly narrow confines of "normality." In general, dear student, it is better to get it right by approximation than missing with precision, and don't be afraid to decide by "statistical inference" (approximate calculation of probabilities which are unconscious and continuously refined in the brain).

You will inevitably make mistakes that will hurt as permanent burns. Identify the errors, analyze the chain of events that preceded them, share them with patients and their families in order for them to understand you and for you to understand them, discuss them

with your peers (we all make mistakes, but in most cases they hurt so much that we never talk about them), try to correct them as much as possible and try to make sure they don't happen again.

Doctors only prolong lives. Again, anyone being born dies. Even when someone avoids dying from a disease that can be avoided with a vaccine, we, it could ironically end up dying because of hunger. As such, it is important to ask about the quality of life achieved by prolonging life. This is a critical question in western societies, where death by suicide is increasing.

"Saving lives" is not enough. The quality of life following our action matters.

Life is not "the supreme good." Sometimes life is worse than death, which is demonstrated in the opinions of parents of some children with "very low birth weight", who believe that the health outcomes throughout the years have been worse than death. Talking about life and the consequences of medical acts is also talking about euthanasia and voluntary abortion. There is no place for refusal or indiscriminate objection of conscience; there is only place for a human, compassionate and scientific response. All abortions, whether voluntary or spontaneous, have a tremendous emotional impact on women. Every voluntary abortion is a health and educational failure, a failure in avoiding unwanted pregnancies.

Voluntary abortion is often a topic of discussion because of its legalization, but little is discussed about the "boatman's syndrome" which retains its implementation in clinics by gynecologists, and often resorting to surgical methods. The closest and most humane methods, resorting to medication use at home have existed for decades, but they are still an exception. The "boatman's syndrome" explains that the possibilities of technology for achieving the "highest quality, with minimum quantity, appropriate technology and as close to the patient as possible" is far from be the "normal response" to illness. The technology has its literary parallel in the ring of "Lord of the Rings": its possession blinds physicians and the power bestowed upon them is used for personal benefit.

Be understanding and compassionate with patients, put yourself in their shoes, accept them as they are. Do not become their friend, and do avoid being a doctor to your friends or your family. Respect the beliefs of your patients, whether they believe in Escrava de Balaguer, in Shiva or in the Devil; respect their life experience as well, whether their lives are "vulgar" or extraordinary, whether they are drug addicts, workalcoholics, sex workers, or gambling addicts; appreciate the Muslim in the same way as a Jew, or the Protestant in the same way as the agnostic. Patients are fragile as people feel threatened in their life journey. Very often, people don't know how to re-organize their lives and how to cope with the disability and death. Ask the patient how he wants to be treated, if formally or informally, if like Doña Francisca, or Mrs. Garcia, or Francisca, or Pepita. Find out what the patient wants to know about his/her disease and try to fulfill these desires in an exquisite and prudent way (without lying).

Being a doctor in the XXI century

Anyone who was in the talk that generated this text (September 14, 2010) will reach the end of the century. However, developed societies believe they can fulfill the desire of Gilgamesh, and gain access to the source of eternal youth. Blinded by the magic of medicine as Gilgamesh ignored the advice of Siduri, the owner of the tavern of the Sea of

Death, and prefer to find today's uncertain future good embittering the present good today. They embitter with the "pornoprevention," that excessive desire to avoid harm, all suffering, all pain and death.

Prevention services transfers resources from old to young, from poor to rich and from the sick to the healthy. Prevention should therefore be limited to what is efficient, in the social sense to offer the best to those most in need at a cost that can be supported (for us and for future generations). Unlimited prevention destroys medicine and society. For example, think of the origin of Nazism, so bound to the good intentions of social hygiene and eugenics.

We have the healthiest and most aged population of the entire history of mankind; it is a medical and social success to have achieved such health capital. But the practical consequence is the fear of loss of health, fear of aging anxiety, the fear of death. Thus, there is a paradox that converts the healthy in the sick, just by practicing prevention that has become dangerous because of tests, activities and drugs. No wonder that in U.S. medical activity is the third leading cause of death. Nor it is surprising that everything is "medicalized", that medical problems become a variation of a compulsory normative normality, which facilitates the invention of disease (disease mongering) and the "sales" of all diagnostic and therapeutic repertoire only adds suffering. You should avoid becoming a merchant in the business of "imaginary diseases."

Thus, much of your activity as a doctor of the 21st century, dear student, will be about engaging in "quaternary prevention." That is, to prevent damage caused by medical activity. Especially to avoid unnecessary medical activity, since all medical activity (necessary or unnecessary) implies adverse effects and damage. Only some medical activities offer more benefits than harm. Some activities clearly offer more harm than good, such as check-ups (gynecological, healthy child, occupational, elderly, and others).

Quaternary prevention is the twenty-first century equivalent to the old principle of medicine "primum non nocere" (first do no harm, first do not complicate things further). Of course, physicians do much good, great good, but sometimes we cause avoidable harm. Sometimes, we hurt unnecessarily, sometimes we're dominated by the "health malice." It is essential, dear student, that you end up doing much more good than harm, so that when you retire you can say that the good things you did definitely made up for the damage you caused. Do practice quaternary prevention.

Remember the two goals of medicine that are summarized in the Hastings Report: avoiding medically preventable suffering and helping to die with dignity. As such, we prevent diseases, we help cure them, we always console and we attempt rehabilitation if the patient becomes disabled. To do this we provide care to the terminal patient so there's no pain, distress, insomnia, ascites, oedema, constipation, vomiting, or other signs and symptoms that prevent the patient from dying in peace and dignity. Avoid, above all, unnecessarily premature and medically preventable deaths, like death from appendicitis or from tetanus. As much as possible, avoid deaths due to medical cause, such as those caused by the advice of "sleeping down" to babies in the eighties and nineties of the last century, or those caused by hormones given to climacteric women or the consequences due to overuse of radiology. But when the time comes, accept that death is part of life and that "bodies find a way to die." It is not a failure in itself that patients die, if we manage that patients are able to die with dignity, with the cause of death not being medical.

Heal yourself. Luke, the evangelist physician, registered the rejection of Jesus of Nazareth

by his countrymen. "There is no prophet in his own land", was also said on that occasion. You should apply the part about "doctor heal themselves", which entails a broad sense of taking care of yourself, of knowing yourself, of analyzing yourself, to consider about yourself what you will apply to patients, about being human and compassionate with yourself first so that you can be the same towards your colleagues and patients. That includes the ethical considerations to help you choose the best possible course of action in each patient and situation.

Practice medicine with at least two kinds of ethics: the ethics of the negative and the ethics of ignorance. Ethics of the negative is about saying "no" to the uncontrolled desires of those "above" and of patients and say it with training, education, smoothness, firmness and determination. Ethics of ignorance is to share with those "above" and the patients the limits of medicine, what we do not know how to resolve and what we can not solve; for that purpose you must try to have a comprehensive and permanently up to date array of knowledge and be a good teacher in their transmission.

Study, study hard, like a brute, but do also read poetry, try to be happy, go to see movies, dance, do sports and observe, analyze and, if possible, participate in social drift, political and economical life of your society; do not forget to enjoy the love, family, sex, friends and life in general. If you can, consider having children, it is an amazing experience being pregnant and raising a brood, to watch the human puppy grow and a teenager flourish (but now, unfortunately, having children is a matter almost reserved for those who can afford it financially, with many renouncing due to impossibility and not to sterility or personal decision).

A doctor is a highly qualified professional that requires study and training throughout life, is able to make quick decisions and is generally accurate in situations of great uncertainty. You'll become a doctor without realizing it, based on hard study and on developing an attitude of "healthy skepticism" (hopefully, you will now have caught my "scepticemia"!). Doubt even what you read here. Read if possible the original studies and form your own opinion. Never be cynical, do not admit "the culture of complaint". Do not complain, act. Be tolerant towards clinical uncertainty, but do not be reckless. Do not accept "the tyranny of diagnosis". The diagnosis is only an aid to the decision and it is possible to make a successful decision without reaching a diagnosis.

Be optimistic, there are thousands of reasons.

Remember that no Spanish university is among the best in the world (or the group of the top ten, nor in that of the hundred best). Visit, if you can, other top universities, such as Maastricht University (Netherlands), where the first medical student mentor and guide from the first day is a general practitioner and go to the hospital and faculty to complete the training. Or the University of Tampere (Finland), York (UK), Ottawa (Canada) or Queensland (Australia).

Travel, it is a way to mature.

Today the Internet is a window on the world, look into it. Get in contact with those people who can help you, and join "invisible colleges" in order to share knowledge and recognition. But without a doubt, Dr. Google does not have any of the powers you will acquire.

In short, avoid preventable deaths, promote a life with quality, and don't give reasons for

Quevedo to be right about his sonnet:

*MÉDICO QUE PARA UN MAL QUE NO QUITA,
RECETA MUCHOS²*

*La losa en sortijón pronosticada
y por boca una sala de viuda,
la habla entre ventosas y entre ayudas,
con el "Denle a cenar poquito o nada".*

*La mula, en el zaguán, tumba enfrenada;
y por julio un "Arrópenle si suda;
no beba vino; menos agua cruda;
la hembra, ni por sueños, ni pintada".*

*Haz la cuenta conmigo, doctorcillo:
para quitarme un mal, ¿me das mil males?
¿Estudias Medicina o Peralvillo?*

*¿De esta cura me pides ocho reales?
Yo quiero hembra, vino y tabardillo,
y gasten tu salud los hospitales.*

NOTE TO MY DEAR STUDENT

Read more on this subject and author of publications on www.equipocesca.org about Gilgamesh ("False promises of eternal youth in the XXI century. Gilgamesh revived) and on the idealism / empiricism (" Illness: Science and Fiction ") for example.

Above all, complement the text "unknown territories of our mind" (on the reasons for a doctor) <http://www.equipocesca.org/wp-content/uploads/2009/10/por-que-ser-medico-2009-final.pdf> and "Patient information about your physician" <http://www.equipocesca.org/wp-content/uploads/2009/03/triptico-consulta-gervas.pdf>

Occasionally re-read this text and complement it and add and correct what is appropriate to construct your own ideology, religion and utopia.

TRANSLATION

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² Los médicos solían llevar joyas ostentosas ("sortijón"), iban en mulas bien enjaezadas que dejaban en la entrada de la casa (zaguán) del enfermo y recetaban ventosas y "ayudas" (laxantes). Peralvillo es localidad manchega donde se cumplía cruel sentencia de muerte a saetazos. Tabardillo es alegría desordenada, y persona tal.