

The Challenge of Educating a Community with a Mature Look at Health Issues

Health care in Argentina has been decentralized and fragmented, and the leading role of medical professionals, academic institutions and health authorities is weak. Debates on health and education are not even priorities in political speeches during an election year, except for general invocations usually devoid of content.

Sooner or later, the problem of health care will emerge with the strength it deserves, as one of the most extreme and unacceptable indicators of inequality in our society. The debate will require setting priorities, funding sources, a different order, and certainly the involvement of different groups of professionals and the community. From this perspective, one of the relevant tasks for scientific and academic societies is to prepare non-medical community for discussion and understanding of health issues.

The relationship of patients and their families with medical structures –and professionals in particular– has changed a lot in recent decades, biased at various levels by the type of health care coverage.

At one extreme, physicians on duty at public hospitals report a treatment based on distrust, which even leads to violence from patients and families, reflecting a deficient health care system combined with a situation of life that is perceived as hostile: marginalization, lack of fulfillment of the promises or hopes for social advancement, and different social tragedies resulting from poverty and exclusion. Despite the sustained growth of economic indicators, a sector of structural poverty that covers 30% of the population according to recent figures has consolidated in Argentina, with little prospect of change in the short and medium terms.

At the other extreme, we find patients with health care coverage provided by work, or with enough money to allow for several consultations to professionals, Internet access that generates the new ‘cyberpatient’, thorough screenings, and the possibility to question medical opinions with an authority, or to confront those –usually dissenting– opinions from other colleagues. Conflicts are not the exception in the emergency rooms, but they are raised as consumer rights.

Even with the best coverages, it is common that patients receive ‘decentralized’ and overlapped, inefficient medical attention, lacking a containment structure, particularly regarding primary care physicians. An example is the absence of a unique medical record, even among hospitals from the same network, with few but honorable exceptions. These statements tend to describe a prevailing scenario, without ignoring the great achievements in family practice by some coverage systems.

A step forward to overcome the distance between medicine and society is to promote the adoption of a new participatory role of patients and community through the so-called “empowerment”, i.e., the acquisition, through knowledge, of a greater power of decision and control over their health problems. The question is how we, as physicians, can contribute to the population’s better knowledge and understanding of health issues, considered at various levels of complexity. At the base of the pyramid, recognizing the ‘health literacy problems’ in large segments of the population, and at the top, the possibility of a participatory and active role of the community in selecting medical policies and strategies. In the middle of the pyramid, the elaboration of a different medical discourse capable of having its voice in the media and recognizing the rational basis of medical decisions and scientific evidences, and its margin of uncertainty.

HEALTH LITERACY ISSUES

One of the major barriers hindering proper health care is the lack of what is called health literacy. The authors define it as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions”. (1)

The population has no reliable sources of medical information, and at many levels it is not even possible for them to understand the existing information and take advantage of the programs and resources available so as to prevent and manage their diseases. One of the basic barriers in our country is the increased functional illiteracy, i.e., the inability to understand the meaning of a text when it is read.

Certainly, there are conditions that determine population groups that are particularly vulnerable in this regard, defined by illiteration or low educational level, older age, or cognitive problems, and language barriers due to a significant migration flow in Argentina today. These groups require specific tools and programs.

At this level, the challenge is to produce information whose understanding can be assessed and guaranteed, and in turn generate structures for support and collaboration to follow medical indications. (2) Most health care systems in our country do not adopt structural proactive attitudes (scheduling appointments with patients, contacting them by telephone, inviting them to discuss health problems), although there are several partial projects.

To undertake this approach to patients’

empowerment so that they can make informed decisions about their health issues, the starting point is to know their level of literacy, culture, language, needs, values, beliefs, motivations, and habits. The work of antropologists, pedagogists, sociologists, caseworkers, and community groups is required, and it is one of the major weaknesses in leading health institutions.

The authorities of the Programa Remediar (a national program that ensures the access to essential drugs for individuals whose health care system is exclusively public) have published that, for example, in the case of antihypertensive drugs, patients obtained medication to cover only three months per year. (3) Although one of the barriers to treatment adherence is the availability of the drug, the mere fact of providing it for free does not result in its continuous use if it is not part of a culture of personal care and attention to health issues. Assessments and publications regarding difficulties in the practice of this issue are scarce in our sphere.

HOW TO EDUCATE THE COMMUNITY ABOUT HEALTH ISSUES

Health topics on the print media

As opposed to the well-known phrase “good news are no news”, for the usual media –and even for medical journals– medical information attracts the reader when it reports a therapeutic success. Thus, it is common that we learn from newspapers about major breakthroughs in the cure of diseases, but unfortunately most of them are not true or are at the experimental stage with animals. In Argentina, there is a tradition of medical journalism and pages devoted to this topic in mainstream media, but we lack a critical and questioning approach as it has developed in recent decades in English-speaking settings. A few years ago, for instance, and due to a complaint about problems in clinical research, a morning newspaper developed a series of very low-level articles on the subject, with no other intention than to raise sensationalism. Luckily, and as expected, it ended up almost unnoticed. And it was not because of the lack of problems in clinical research, but because of the lack of seriousness of this undertaking and our lack of commitment to participate in public debates on health topics.

In cardiology, for example, it is common that articles on breakthroughs reported by renowned institutions be acritically published by major newspapers, and these are simply press and promotion strategies: the addition of a new equipment, a paper presented at the international level, which, analyzed in depth, adds nothing new, and so on. Just remember the novelty that an anti-inflammatory could compete with implantable cardioverter-defibrillators to prevent sudden death, which was published years ago. Due to modesty, or in order to avoid controversies in a small medical community with an impoverished polemical tradition, these articles remain in the collective culture as undeniable truths. Let's take a humorous –yet real– example.

Heart attack in women increased by 50%! Believe it or not, it is a true anecdote.

One Monday morning, 14 years ago, I received a phone call from an authority of the Argentine Society of Cardiology (SAC), who asked me about an article published in the front page of “a widespread morning newspaper”; the article stated that heart attacks in women had increased by 50%, according to studies carried out by the SAC. My name, as well as the name of a few other colleagues, appeared as source in that journalistic article. The authority said in a threatening tone that my responsibility in this journalistic episode would be investigated, and that I would be subject to penalty, because no one could do self-promotion, and so on. Trying to wake up from the nightmare of a strange Monday, I bought the newspaper and confirmed the surprising news. The story that we later rearranged seems to have started as follows: some weeks earlier, a journalist from that morning newspaper had asked the SAC for material, and he had been provided by the Research Committee with the surveys of two years in a row, one about myocardial infarction and the other about heart failure. This journalist uploaded the charts in the computer of the editorial, and apparently a chief noticed that there was a pie chart indicating that women held only 25% of the population (acute coronary artery disease) in the first survey, and in the second, 37.5% (multiple causes of heart failure), and he mistakenly believed that myocardial infarction had been surveyed in both of them. To mitigate the lack of news on Monday mornings, he created this front page, which had great impact. The comments from colleagues had been taken from the editorials of both surveys without consulting anyone, which finally avoided my being subject to penalty and to public foretold dismemberment.

In such circumstances, the political decision of the SAC was not to deny the news (“no one can beat a front page of that newspaper”) and to take advantage of the circumstance to negotiate advertising for the Congress and promote the importance of cardiovascular prevention in women. We were on several television and radio programs; an advertisement on shirts for men attributed the increase of heart attacks to the impact of their products on women; the issue was dealt with in radio talks as a source of men-women counterpoint; and it became part of the collective assets of epidemiology in ischemic heart disease.

AN ATTEMPT TO EVALUATE AND CONTRIBUTE TO IMPROVING HEALTH INFORMATION IN THE MEDIA

There is currently no active instance in the control of published information on health topics, and in general, medical associations adopt a very cautious approach regarding the fourth estate, as shown in the example above. Otherwise, there could be no television programs, which bloom after midnight, promising cure by the laying on of the hands, non-validated new technologies, testimonials of patients miraculously healed, and even offers of mantles or water from Mount Sinai. The trend to magical

thinking is very strong in our culture. Carl Sagan pointed out that there is a divorce between the great scientific development of the United States and the half of the population who read the horoscope every day and take it into account for their daily decisions. (4) We still have a huge cultural work ahead to integrate health and scientific medicine to the body of beliefs of the population, particularly for our sins of dehumanization and our excessively technical and operational view, a gap that is now bridged by non-validated alternative medicines and by impostors of all kinds.

A first step would be to produce high-quality information, which would enable a serious and consolidated presence in the media for our scientific society. A major challenge ahead.

An equally important issue is to assess the quality of medical information that is published in the media. In the United States, the website of an independent foundation rates news stories on health topics published in general journals. (5) For that purpose, they developed a guide with ten questions, such as those we use to arbitrate research papers for congresses or publications. For example, a research on the proper use of angioplasty in patients with chronic coronary artery disease in the United States was recently published. (6) This publication of JAMA reported that 71% of angioplasties are performed for acute events and may be considered appropriate. In half of chronic cases –the remaining 29%–, angioplasty was considered appropriate, in 38% ,of uncertain benefit, and in 11.6%, inappropriate. Given the importance health expenditures have for the U.S. economy, the Wall Street Journal reviewed this article for its readers. (7) The news story was excellent, it was assessed with the system commented above, and reached a score of 9 out of 10. (8)

For the purpose of an exercise, I applied that same scale reproduced in Table 1 on several works published in a high level morning newspaper. I will provide an example of one of them, without specifying neither the topic nor the participating physicians. The news story had a clear self-promotional goal, which to some extent is valid in an interview; what went wrong was the work of the medical journalism, which contrasted the arguments of the colleagues with scientific information or other sources. This article emphasized the limited utilization of a surgical procedure in our country, and the benefits it could bring about. Table 1 summarizes my personal evaluation, based on the guideline discussed.

I would like to clarify that this is one of the best news stories, which highlights the need to take a role in this matter. Perhaps the blog of the Argentine Journal of Cardiology may be a context for colleagues to publish their evaluations about the quality of medical information provided by the media, and to promote a change in the culture of medical journalism in the future.

Blogs and medical social networks can play a very significant role if they try to show the deficiencies and limitations of the health care system, which is hidden under a cloak of silence. A very interesting example has been the experience of physicians from the emergency rooms in Taiwan. The Taiwan Society of Emergency Medicine had been in slow-moving negotiation for several years over an appropriate solution to emergency-room overcrowding. In February this year, a physician, who was a blogger, created a Facebook group called “Rescue the emergency room”. Within a few weeks, 1,500 participants –most of them emergency physicians– joined the group and started discussing the limitations and concerns, and even the Taiwanese Minister of Health got engaged in the discussion, which gained greater dimension. The Minister then organized surprise visits to emergency departments, which confirmed that concerns were seriously taken, and they initiated an open dialogue that led to spending more resources for this sector. No picketing, work stoppage, or strikes! It seems another cock and bull story. (9)

PATIENT AND COMMUNITY EDUCATION ABOUT HEALTH ISSUES. WHAT IS KNOWN AND HOW SHOULD THEY LEARN TO ASK?

One night, when turning over in my bed, my right ring finger got caught in the sheet; I heard a slight click and I noticed I could not stretch the distal portion of my finger. I assumed I had suffered a cut tendon, and called the hospital to talk to the orthopedist, who told me I should do nothing with my finger, and that I would be applied a bandage or something similar the following day. So the next morning, I went to see the Chief of Department for advice, who scheduled my surgery for the following day. I preferred to consult with a colleague from other institution where I worked, who also agreed to surgery and –as he was planning to travel– suggested me that I referred to a fourth orthopedist, who refused to perform surgery because he said it made no sense. Finally, I consulted with a fifth orthopedist –this time a professor– to break the tie; he spent enough time with me, and based on his knowledge of the literature and bionomics, he explained to me that immobilization covered 80% of recovery, and the surgery remained as an option for a month later; while initial surgery had a higher recovery rate, it was obviously more aggressive and had possible complications. I opted for immobilization, and was lucky to progress within the higher percentage of recovery.

I did as a usual patient does: a patient consults with the professional who, in his opinion, knows most about the matter, assuming that the problem is known and solved, and trusts his suggestion without asking too much. Medically speaking, this is the ideal patient, a doctor's admirer and non-questioner; luckily for both of them, this patient is in danger of extinction. Why would this poor questioning patient be negative for the doctor? Because this way the doctor can lean on

<p>1. Does it state the availability of the treatment, product, procedure? <input type="checkbox"/> Not satisfactory The article makes it clear that the method is not used, but fails to address its availability, except by pointing out that there is only one surgeon who performs it.</p>
<p>2. Are costs discussed? <input type="checkbox"/> Not satisfactory There is no reference to costs.</p>
<p>3. Does it avoid 'disease mongering'? <input type="checkbox"/> Not satisfactory By reading the first paragraph, the description suggests that it is a common problem (weakness, shortness of breath, non-specific data), when it is a rare disease.</p>
<p>4. Does it grasp the quality of the evidence? <input type="checkbox"/> Not satisfactory There is no reference to bibliographical sources, and there have certainly been no peer reviews or reading on the topic. All the information depends on the opinion of a specialist, although some paragraphs function as reaffirmations of the journalist.</p>
<p>5. Does it quantify the potential for harms? <input type="checkbox"/> Not satisfactory The surgeon holds that this disease can be operated with 1% surgical risk in some centers, but he is not asked about the surgical risk from his own experience, or what the the medical community in Argentina expects, which determines its behavior. Following international guidelines, a mortality rate lower than 10% is accepted as ideal in a consensus of the Argentine Society of Cardiology about this issue.</p>
<p>6. Does the story establish the true novelty of the treatment? <input checked="" type="checkbox"/> Satisfactory It reports that the technique has been known for some time but has not been used much and has shown a potential for benefits in individual cases.</p>
<p>7. Does it quantify the potential for benefits? <input checked="" type="checkbox"/> Satisfactory Benefits rely too heavily on reported cases with full recovery.</p>
<p>8. Does the story appear to rely solely or largely on an only source or news release? <input checked="" type="checkbox"/> Not satisfactory That is precisely the case in this news story.</p>
<p>9. Is there an independent source, and are conflicts of interests disclosed? <input type="checkbox"/> Not satisfactory Obviously, the conflict of interest here is the self-promotion of the professional, and, as pointed out, no independent sources are included.</p>
<p>10. Does it compare the new strategy with existing alternatives? <input checked="" type="checkbox"/> Satisfactory The story mentions that the treatment is used when others have failed, and there are no alternatives available.</p>

Table 1. Personal evaluation on an article promoting a surgical procedure, published in a morning newspaper.

his preconceptions, and has no need to defend them with serious and solid arguments when he is asked.

One would think that –as a physician I am– I should have had clear questions in mind; however, in practice, this is not always the case. How are we educated on health issues in our community? Health education is only a minor issue in primary and secondary schools, and it is not included in university programs. Little by little, we learn from family experiences, from the doctors we consult, from medical news stories in newspapers, journals and TV programs on health,

and from the permanent advertising by health-related companies.

In a recent book, with the apparently innocent title “Ten Questions You Must Ask Your Doctor”, (10) the recognized health journalist Ray Moynihan develops a series of proposals to reflect upon contemporary medicine from a theoretical but pragmatic view. Table 2 summarizes the ten generic questions the author suggests, which are deeply analyzed and diversified into many others in each chapter. These questions explore the broad spectrum of contemporary medical

thought: usefulness and dangerous limitations of screenings, overuse of diagnostic methods, quick or interested decisions, overindication of procedures, lack of information on scientific evidence-based medicine, interests behind the prescription of a drug or medical device.

At first, the mere idea that the next patient to whom we will diagnose and recommend tests or treatments can submit us to such questioning may look like a torture, but shortly after meditating about it, we will notice that it also brings about benefits.

The first benefit is that we must keep up to date with each one of these possible questionings about our decisions, maturing the concepts of scientific evidences. In this case, a clinical practice guideline is not enough; it will be necessary to understand on what grounds each recommendation is based. It will necessarily imply a greater commitment and educational requirement to estimate the magnitude of benefits and potential for risks, and to be able to explain them in the context of that patient. This approach is also associated with an advance in understanding the conflicts of interest and the limited value of consensus when no solid data are available except for the opinion of participants, codified as level of evidence C.

The second benefit is the possibility to share the inherent uncertainty of medical decisions with patients and their families.

PATIENT DECISION AIDS

Several medical institutions all over the world develop reading material to help patients make medical decisions, providing scientific and didactic information about complex topics. In Argentina, this has also been poorly developed in our specialty. Just as an example, in recent years, great emphasis has been put on the risks of cardiovascular disease in women. In my professional practice, postmenopausal women –of 55 years of age, for example– often come to consultation because they have been prescribed statins to treat their total cholesterol of 230 mg/dl in the absence of other risk factors, ‘to prevent sudden blockage of arteries’. By using the European risk score, the risk of a fatal attack at 10 years at that age and with risk factors is

7 per thousand, and it is reduced to 6 per thousand by lowering their cholesterol level to 60 mg/dl. With this information available, the decision will be made together with the patient, but from another rational platform: where can the patient read this concept? In this regard, it is advisable to compare the rethoric of fear with the guidelines developed by the Mayo Clinic (Figure 1) for high risk patients, according to the Framingham score about this same decision.

Warning!

Given the decision to take statins or not, we cannot tell whether you will be among those who will not benefit (for not having a heart attack naturally or for having it despite taking statins) or among those who will benefit (avoiding a heart attack by taking statins).

This educational tutorial includes another similar chart on statin side effects. Visualizing that most people will follow their course unchanged despite taking statins but that some will benefit undoubtedly plays a didactic role; it highlights the importance of the major impact on population strategies, although they are individually unpredictable.

The use of materials to help make decisions has a great conceptual interest, since it allows to consider the value and relevance patients attribute to this phenomenon. It is not the same to recommend calcium and hormones to a woman with osteopenia “because otherwise she is more likely to have a fracture” than to place risk and benefit in quantitative terms, as well as the level of certainty over statements, and to share the decision with the greatest rationality. There are plenty of international sites with a lot of material on patient decision aids available for free. (12, 13)

The Cochrane Collaboration published a meta-analysis on the impact of the use of decision aids material reviewed in control studies. (14) They observed reduced choice of invasive surgery in favor of more conservative options, and reduced choice of menopausal hormones and of PSA screening. No improvement was demonstrated in terms of satisfaction in decision making, level of anxiety, and objective health outcomes.

<p>About diagnostic strategies</p> <ol style="list-style-type: none"> 1. Do I really need that test? 2. Do I really have that disorder? 3. Do I really need to be screened?
<p>About treatments</p> <ol style="list-style-type: none"> 4. What are my options? 5. How well does that treatment work? 6. What are the side effects? 7. Will this operation really help?
<p>Some general considerations</p> <ol style="list-style-type: none"> 8. What is the evidence? 9. Who else is profiting here? 10. What can I do to help myself?

Table 2. The ten questions you must ask your doctor, according to Ray Moynihan.

It is reasonable to expect greater emotional stress when one is forced to make a complex decision than when one continues to believe that the doctor knows what is good and trusts him thoughtlessly.

FOCUSING ON COMMUNITY HEALTH ISSUES. WHO SHOULD DEFINE A NEW DISEASE AND THE TREATMENT GUIDELINES

Scientific societies and academic groups have created instances of joint work to summarize recommendations that greatly influence on the medical practice. One of them is the definition of new diseases. Years ago, a debate was generated between the American Diabetes Association, which proposed the elimination of the metabolic syndrome as a health disorder, restricting its conceptual use to further research. (15) This proposal was quickly rejected by the American Heart Association, which defended that concept to the utmost with new definition criteria, (16) leading to the need for a complex negotiation and a temporary “harmonization” for the use of this term among several societies some years later, although the controversy still persists. (17) The debate is not naïve, since one view states that the term is simply a cluster of epidemiological risk factors that are less important than the traditional ones, and therefore does not require a strategy of its own, but simply the correction of influential factors; in other words, it would be an “invented” disease. The other view has a common pathophysiology associated to hormone factors, and therefore requires its own specific approach. So far, the medical approach is directed only to specific factors, but the pressure in the opposite direction is enormous.

Changing the thresholds to define disease has strong implications in the quality of life of the population and in the orientation toward consumption of medicine and drugs. The change in threshold for diabetes to 126 mg/dl –based on the future risk of developing microvascular disease– compared to the previous level of 140 mg/dl, increased the number of

diabetic patients in 14%. If the threshold of 110-126 mg/dl for impaired glucose tolerance was lowered to 100-126, the current estimates of 9 million people over 50 years of age with impaired glucose tolerance or diabetes in the United States would increase to 33 million, that is to say, a 266%!! (18) There is no evidence that the original change has had any positive influence, and population projections to further lower the threshold are dubious; even the studies in recent years have discarded the usefulness of strict controls of glycemia that reached such low ideal levels. (19, 20)

Thresholds for the definition of gestational diabetes have been recently changed, which markedly increased its incidence: with the new definition, one in 5 pregnant women would have this diagnosis. (21)

The phenomenon of consensus definitions multiplies in the case of psychiatric conditions, in which the proposal of new diseases that imply a diagnostic code an a reason for treatment is permanent: for example, the social anxiety disorder (very shy individuals), menstrual dysphoria, and attention deficit disorder in adults.

Recently, the British Medical Journal devoted a cover and several articles to discuss who should have the authority to define new diseases, proposing the limitation of scientific societies contaminated by huge conflicts of interests, and recommending the community participation in fora where interested parties be excluded from voting. (22, 23)

In cardiology, with the spread of new imaging technology, we face a significant number of new diseases that we do not know if they are such: patent foramen ovale, atrial septal aneurysm, non-compacted myocardium with no ventricular dysfunction, myocardial bridges detected in one out of three healthy individuals by multi-slice computed tomography, coronary obstruction without documented ischemia. We should avoid going through the negative experience of the epidemic of mitral valve prolapse with the advent of the echocardiography, which compromised one every five women, and today it has turned to be a

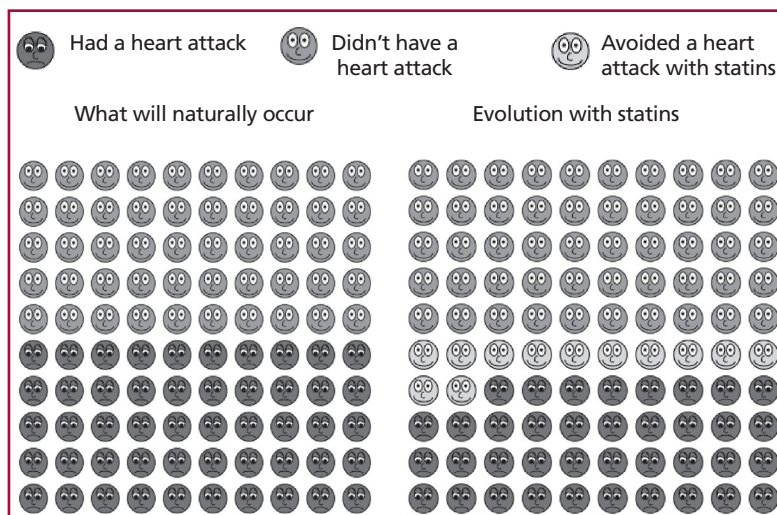


Fig 1. Helping to decide about the use of statins. A Mayo Clinic guide for patients at risk of more than 30% for heart attack at 10 years (50%). Translated into Spanish from the source document by Mayo Clinic. (11)

low incidence problem, once the criteria were changed according to what was learnt about natural evolution and improved imaging technologies. In this regard, to expose the criteria to a community panel may offer its advantages, such as evaluating the real impact this measure will have on health, culture, and costs of the system.

In the article cited in the BMJ, Moynihan insists that the type of evidence required to accept the definition of a new disease is not generally exposed to the same rigorous criticism that is applied to assess the relevance of therapeutic trials.

To summarize this complex issue, the BMJ Director makes a recommendation to general practitioners: "Be on the alert about new disease definitions, determine its origin, require transparency and strict rules from decision-makers, maintain your independence of judgement, and find a way to encourage it in your peers". (22)

TOWARD THE END OF CONFLICTS OF INTEREST. COMMUNITY JURIES IN THE ASSESSMENT OF CLINICAL PRACTICE GUIDELINES

In recent years, we have increasingly seen presentations of international panelists who –quite reluctantly– have to display the list of conflicts of interest prior to each presentation in congresses. They are required to mention what companies they have maintained a financial relationship with. In general, that slide is passed quickly, and the medical community –which is not exempt of this type of relationships– seems to solidarize and understand that every clinical researcher has to be related to different pharmaceutical companies that sponsor trials. These relationships with the industry vary from collection of fees for conferences or participation in clinical trials to the holding of shares or investments, according to the success of the projects. The influence of these conflicts of interest on panelists' opinions has been documented in several research works, and even the most honest ones cannot avoid being consciously – or maybe we prefer to say unconsciously– involved in those biases. As an example, the latest release of "Universal Definition of Myocardial Infarction" (24) included 19 pages, 8 of which were devoted to the declaration of conflicts of interest. I have already discussed the enormous bias in favor of troponin and the inclusion of microinfarcts as events, with such high cost for the industry of biomarkers and recent clinical trials. (25)

It has been pointed out, for instance, that the outcomes of the meta-analyses on cardiovascular risk for rosiglitazone were driven by the conflicts of interest of their authors. (26) The two points under discussion were the relevance of increased myocardial infarction and the recommendations for its use. In both cases, the rate of favorable conclusions was 3.38 (CI 2.2-5) high when the authors had a relationship with the industry, and 4.3 high when they were not related specifically with the drug manufacturers. In

other words, physicians on financial relationships with the manufacturers of rosiglitazone were three times more likely to give an opinion in favor of the drug than against it. This would be irrelevant if the authors were considered attorneys of the drug, but it is very worrying when the meta-analysis is intended as a scientific publication. Another clear finding of that review was that the authors of the meta-analyses do not declare their conflicts of interest –which do arise clearly in the original trials. It obviously distorts the truth about their relationship with the industry and the conclusions. Moreover, it has been pointed out that clinical practice guidelines are also driven by conflicts of interest. In a review on the topic about cardiovascular guidelines, 56% of them had direct conflicts of interest, and a quite significant number even held shares of the pharmaceutical or medical device companies. (27)

For that reason, in 2009, the Institute of Medicine (IOM), health arm of the National Academy of Science, set a series of recommendations in a document, to prevent these interests from influencing upon the conclusions of the guidelines. These recommendations included that the writing and conduct of each subtopic be performed by professional experts with no direct relationship with the industry of that topic. (28) Over the past years, the Food and Drug Administration (FDA), the National Institutes of Health (NIH) (29), and the National Institute of Clinical Excellence (NICE) in Great Britain have implemented zero tolerance for the involvement in voting individuals with financial conflicts of interest on the topic. The NIH are currently requesting that panels have a wider representation than the subspecialists. As a general rule, they also suggest that, in addition to general practitioners and researchers, the panel should include biostatisticians, epidemiologists, non-medical professionals, and people representing a wide perspective of the public interest.

Clearly, this does not prevent the whole problem. There are political interests due to financial support to scientific societies, or development interests in the area involved, which also drive the conclusions.

Great Britain has developed a policy to elaborate consensus and guidelines through the NICE. Unlike standard guidelines, those are developed by general practitioners, members of the community, with expert advice but with the capacity to make their own decisions. The participation of panelists and non-medical juries imply the translation of benefits, risks, and costs into a clear language of community interest. This requires a high level of expertise in health issues by community groups, and the expectation based on an opinion driven only by the most beneficial interest in the health of the population. Table 3 summarizes an overview of the evolution of guidelines, and what can be expected in the near future.

Let's take an example of opinions biased by conflicts of interest. Ezetimibe is a drug that was

	Author	Conflicts of interest	Authority
Preliminary stage	Scientific societies of the specialty	Not declared	Consensus of specialists
Present stage	Scientific societies and community institutions	General declaration	Consensus of specialists
Probable evolution in the near future	Community institutions only	Accurate declaration of financial amounts Inhibition to vote or elaborate guidelines	Voting of community juries

Table 3. Three conceptual stages in the elaboration of clinical practice guidelines

Diagnosis of the issue	Possible conducts	Perspectives
Lack of literacy on health issues	Recognizing the issue. Developing interdisciplinary structures, material, and appropriate rhetoric to overcome the issue.	Improving the empowerment over their health issues in vulnerable sectors.
Lack of accurate information in the media.		
a) Due to inappropriate biased information.	Public and constant criticism of the health messages in the media if they have no scientific validation.	Improvement of the level of medical journalism in the media.
b) Due to lack of conceptual information.	Development of adequate information material.	Contributing to the shared decision based on the best interests of the patient.
Lack of community participation in health decisions.		
a) Guidelines and consensus.	Excluding participants with conflicts of interest, and discussing the information with community structures.	Guidelines oriented to patients, and not to drugs or medical devices.
b) Definition of diseases.	Discussing the priorities in health and the implications of new nosologies.	Definitions to avoid medicalization, overdiagnosis, and excessive medication.

Table 4. Diagnosis, possible conducts and perspectives in community education on health issues.

patented and introduced in the market for its ability to reduce cholesterol levels. In recent years, several studies have shown its ineffectiveness over the progression of atherosclerosis, and there is no evidence of its usefulness for clinical events in any context of this condition. The misconduct shown in the Enhance trial, (30) whose publication was delayed for over a year because of the unknown benefit of this drug, led the American College of Cardiology to claim publicly that the drug does not belong to the therapeutic arsenal in cardiology. However, there is an ongoing trial conducted by the Oxford group, whose ending is still unclear for now, which is trying to determine the clinical usefulness of this drug. Would it not be more reasonable to discontinue selling the drug for some years? Isn't the support of an open study promoted by Oxford what maintains the sellings of a drug of unproven usefulness? In a recent editorial, Topol referred to the decade lost with the nesiritide. The drug was patented on the basis of a study about its diuretic potency with a very short duration. Only ten years later, the first study with relevant clinical events was concluded, with no benefit. We hope that the ezetimibe issue does not end up in a new editorial

about the 15 lost years.

CONCLUSIONS

The immense challenge ahead for professionals and scientific societies is to educate the community about health issues. We often feel that patients with concerns or a high cultural level in terms of health are configured as a great demand for the brief times of medical care. However, this level of participation can be improved with suitable reading material, and the presence of academic groups and societies in the media, in an effort to change the culture of empty promises and new promotions. It would be a great contribution to society to help in the construction of ideas about health, based on the best scientific evidence and the values of medicine. That would allow for a shared view on virtues with patients and families, but also on limitations of knowledge and uncertainty, always present when dealing with an individual decision. It would help construct the conceptual basis for mature community participation. Defining new diseases, elaborating clinical practice and systematic guidelines to be supported by the health system are highly important tasks that cannot be handed over to professionals or institutions with financial or

power-based interests. The active participation of a community concerned about health issues, who have the best material available for reflection, and high-quality education within the contemporary medical scientific context can lead to a more rational and humane medicine.

Table 4 summarizes some of the issues discussed in this letter, trying to determine the diagnosis of the problem, the possible conducts and the perspectives to be achieved.

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