

Health economics: the illusion and the “bladder effect”

In almost all countries of the world nowadays, if not all of them, emphasis is placed on the imbalance between the minimum needs of society and the resources available to attend to them. The health sector provides an example in which the quest for service at what is considered an essential minimum level has generated many difficulties at the level of society as a whole.

Health economics, a new field (at least in Brazil) which involves medical concepts and knowledge just as much as economic principles, has the potential to contribute to the clarification of doubts in relation to the utilization of resources in the light of the needs of society. The basic principle of health economics is not to economize on the resources available, but rather to make use of them in the best way possible. Health economics does not aim to define what attitudes or decisions should be taken, but rather to supply data or information so that these decisions, at the level of health care, are made in a way that takes into account the context surrounding the decisions.

Health economics has three basic concepts: scarcity, choice, and opportunity cost. The first of these, already touched on in the introduction, refers to the fact that

resources are and will always be scarce for attending to the needs that society considers to be the minimum desired. In part, this is due to constant technological advance and the increasing demands of society itself as it evolves. Consequently, the tendency is to demand more as each day passes. The cellular telephone, for example, only a dream some years ago, is today a reality which is becoming more and more indispensable.

The second concept, choice, comes from the great number of options available and the limited and finite nature of purchasing power, or in other words, resources are and will always be limited. In our daily lives, we exercise choice like this in the face of the innumerable options which exist.

Opportunity cost is the basis for justifying the process of choice. If resources are finite, the acquisition of one product or service could make it impracticable to acquire another product or service. We put opportunity cost into practice every day. When we go to a supermarket and choose between two products, usually one more expensive and of better quality and the other cheaper and of lower quality, we are consciously evaluating whether the quality is worth the additional cost. If it was not for the limitation on resources, this choice (the opportunity cost of acquiring the product of better quality) would have no meaning, as we would always buy the one which was demonstrably of better quality.

In medicine, these concepts are also put into practice every day and by all of us. We only have to think a little!

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The big problem is that, as consumers, we make the decisions, deciding whether or not it is worth getting the best product in terms of quality, at the cost of using up more of our resources. As patients, however, this decision often does not depend only on our will. In most cases, the patient delegates the decisions of choice and opportunity cost to the health professional. This health professional is the "agent" of the patient. Consequently, the health professional has the power to generate this demand and thus, in a way, alter the whole process. This is a very important characteristic of health economics which, without doubt, should be given special attention by society as a whole. Here are some scenarios involving the participation of different characters in the decision-making process, in terms of how best to utilize the resources available, which serve to illustrate this characteristic and deserve some reflection:

1. Scenario A: "Health promotion in the public sector"

In almost all Brazil, if not all, we have enormous queues of patients in public casualty services waiting for medical attention (often, if not the majority, being outpatient cases), where a reduced number of doctors are actually on duty, discontented because of the working conditions in which they are exercising their profession, and because of their disgraceful salaries. Is this scenario an illusion?

2. Scenario B: "Health promotion in the health insurance and group medicine sectors"

In almost all Brazil, if not all, there are booklets listing doctors, hospitals and other health professionals registered or authorized to provide services to a select group of users. In this case too, many of the services rendered are frequently reimbursed at disgraceful rates. Is this scenario an illusion?

3. Scenario C: "Health promotion dependent on the decision of the professional"

In this scenario, as an example, let us consider a dermatologist who sees a patient (private, public or insured) in his consultation office and after diagnostic assessment is faced with the situation of a defined disease which has two possibilities for treatment: possibility A, with 90% possibility of a cure for the disease at a cost of X, and possibility B, with a 95% possibility of a cure for the disease at a hypothetical cost of 100 times X. The professional has a responsibility to his patient and to society. What decision should be made regarding treatment?

4. Scenario D: "Health promotion involving products of health-related industries"

In this scenario, let us imagine an orthopedist who sees a patient (private, public or insured) in his consultation office and after diagnostic assessment is faced with the following situation: there is a defined disease which necessitates a prosthesis. There are two of them on the market, one with an "average lifespan" of 8 years which costs X and the other with an "average lifespan" of 12 years which costs twice X. The professional has a responsibility to his patient and to society. What decision should be made regarding the choice of prosthesis?

In all the above scenarios, there is scarcity of resources, choice, and opportunity cost. Furthermore, there is the figure of the health professional as the "agent" of the patient (or in other words, the professional who will make the decision for the patient concerning the choice and opportunity cost, using the scarce resources of the patient or of society as a whole). In each scenario, however, the dynamics of the decision to be made are particular and the results which stem from this decision are distinct.

In Scenario A, what happens is that in paying the health professional in this disgraceful way, an illusion that this health sector can make savings is created. These salaries are very well-enumerated and documented amongst us. It is forgotten, however (perhaps for convenience), that these doctors are using the other existing resources excessively, precisely because they do not have acceptable minimum working conditions. A practical example of this is the excessive number of x-ray examinations carried out in casualty services to document infections of the upper respiratory tract, ie common colds. (Sometimes the x-ray is demanded by patients themselves, and at other times it is simply a reflection of not getting the clinical history, an incomplete clinical examination, and consequent non-establishment of an appropriate doctor-patient relationship or generation of confidence). Moreover, it is noteworthy that the x-ray technician sometimes repeats the same x-ray four or five times to reach an acceptable quality, either because the equipment is inadequate or because he does not have sufficient training. These examples are happening now and all the time in this country of ours. There is no shortage of other similar examples.

What kind of illusory economics is this? Who is paying this bill? It is all of us! This is an example of the so-called "bladder effect", in which one side is squeezed and on the other side there is an excessively increased use of resources. Is there someone in the public sector today who is concerned with documenting this problem? Could this be the moment to concern ourselves more with getting to know all facets of the problem and having at least the curiosity, with the

participation of those directly involved, to search for solutions which provide a return for society and not just political decisions for our own use and benefit? In this example, the power as "agent" of the doctor or health professional is illustrated. These people should be treated with respect and dignity, as they define how much and in what way to better utilize public resources. This is certainly not happening! The illusion is to pay the professional badly and economize in the public service.

In scenario B, the health professional has the responsibility to provide consultations to patients, usually in his own office. The generation of demand by the doctor can be seen here as well. Frequently, the professional is reimbursed for his services in an equally disgraceful way, although, faced with the necessities of daily life and in the hope of one day getting that private patient, these professionals accept the established rules. In this example once again, consultations of short duration have become frequent, to make the "business" economically viable. As a further consequence, innumerable requests for supplementary examinations are made and return consultations are arranged. Again there is the illusion of economizing: by paying the professional inadequately, he generates a demand for other resources, often much more valuable. This is the "bladder effect"! Recently, within some organizations, there has been some concern about solving this problem, as these organizations have now noted that this mutual collaboration depends on their "financial health".

In scenario C, the dermatologist generally and as expected wants to offer to his patient the best available in terms of health promotion. It is worth emphasizing here that often the decision about which therapeutic strategy should be adopted depends on the disease and whose resources will be used (who foots the bill!). If faced with a dermatophytosis (mycosis), the dermatologist will probably decide that the additional 5% cure rate (95% minus 90%) is not justified by the difference in the cost of treatment (100 times). On the other hand, if faced with a melanoma *in situ* (skin cancer), this increase in cure rate using procedure B could be justifiable even considering the additional cost.

Regarding who pays the bill, the same exercise occurs: frequently the professional inquires whether the patient is covered by the insurer for performing a particular procedure. Once again, the health professional's role as "agent" appears here: he generates the demand. It is also worth remembering that the "financial health" of one party should

lead towards the "financial health" of the other party. If we are aiming for a society with a capital "S", such questions should no longer be posed. The resource would have to be regarded as an extremely precious thing and should be used in the same way, independently of who takes on the costs.

In scenario D, many of these problems are repeated. In this scenario, however, we have the involvement of industries related to the health sector. Directly or indirectly, these industries are being increasingly requested to manufacture higher-quality products at costs which justify the choice of these products. This occurs in the field of medications, where it is not sufficient to produce, for example, a medication which is less toxic, more efficacious or effective, but it must also be efficient, or in other words, the additional use of resources must be justified by the benefit gained, when this product is compared to its direct competitors. Once again, doctors or health professionals, as "agents", need to keep themselves familiarized with these new concepts so that they can use third-party resources in the most appropriate way.

To conclude, it is important to emphasize that health economics requires for its proper implementation the use of resources which at first sight are not insignificant. The health sector needs to move in the general direction of what today is called "evidence-based medicine", or in other words, the time has come for us to no longer accept expressions like "in my experience", "in my hands", "if it worked over there (abroad) it must work here as well", "I am the decision-maker", amongst others.

It is important that universities and medical schools include in their undergraduate curriculum the discipline of clinical epidemiology, or evidence-based medicine, to empower professionals to generate knowledge through research relevant to their local situation (and when properly carried out this should be interpreted as one of the most valuable investments), or to empower the professional to keep himself up-to-date through appropriate use of the scientifically valid material which is constantly being produced and published (there is a lot of "scientific pollution" being published in major international journals, let alone Brazilian ones).

Health economics depends completely on the information coming from evidence-based medicine. Only thus will we be in a position to make decisions in the health sector which benefit society as a whole in the future. In this process, as a matter of urgency, decisions should cease to be political and should increasingly become based on good scientific information.