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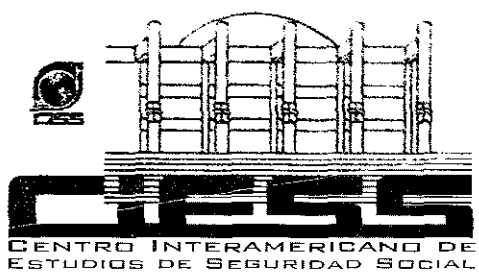

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The Medical Practice in the Context of the Sanitary Economy. False Premises and True Problems

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Introduction

In the last 30 years the medical science has shown a significant development based on an accelerated technological innovation, a condition that in turn brought about profound changes in the normal schemes of diagnosis and treatment, as well as a significant increment in the cost of medical care. Both in the introduction of new practices, medicines and sophisticated equipment, it is the doctor who finally assigns more than 80% of the resources of the health sector in thousands of diagnostic and therapeutic decisions taken daily under conditions of uncertainty.

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Within the strategic questions that integrate the reforms of health systems at their three levels –macro, medium and micro– the weight of professionals vis-à-vis the process of sanitary production becomes crucial, both in the adequate use of the scarce financial resources available and in the incentives to achieve this process.

There is no doubt that the essentiality of the process of sanitary administration sublies punctually on the professional practice, and acquires the transcendence of a **strategic point of change and of necessary consensus** among financers, insurers, doctors and politicians. There is no other aspect of the health system that at the same time administers, coordinates and motivates other persons in its own service or in central and support services, through its natural and permanent *taking of decisions* aimed at maximizing the benefit to the patient. Hence that, as a central ingredient of the process of production of health services, its involvement in the reform is a central aspect for the change in the assistance model (Ortun, 1996).

Taking into account the results obtained with each monetary unit invested in health, considering the expense in the medical care of the illness and the magnitude of the medical-technological complex in which it develops, the Sanitary Economy must be centered also in the aspects that link clinical aspects with the macro-economic aspects. Hence, its fundamental objective is that the doctor succeeds in incorporating to his activity a central question: achieve the maximum profitability of his results **just in time** (the moment in which the patient so requires and not when he can as a supplier of social welfare Services) with the **adequate resources** (those that have an optimum cost/demonstrated effectiveness ratio) and with the **necessary quality** (understood as the best clinic result with respect to the initial demand).

Conceptually, without an effective medicine there cannot be efficient sanitary services (Ortum, 1996). Therefore, a process of reform centered on the *clinic administration* requires two components: an **actor** (the doctor as that who takes decisions) and an **instrument** (an adequate information system) that will permit evaluating systematically process/result/costs; or more precisely, relating *efficiency with effectiveness.* One of the principal problems of the health system –after inequity– is the asymmetry between the progressive growth in costs and the results expected in terms of collective health (cost/effectiveness) or of satisfaction of the people (cost/quality); and that the sanitary expense, in its greatest proportion, is the direct result of medical acts and, hence, of the *Clinic Administration.*

Now then, there are two central problems in this critical node of administration within the sanitary dynamics. The first problem is based on three key elements of medical practice: *uncertainty, absence of reliable patterns for the comparison of alternatives and results, and abuse of the "experience".* The second problem refers to a high *variability* of the final result as a consequence of the different clinic decisions, in turn a function of the first problem. In his case, it cannot be wrongly pretended to find uniformity of criteria on the excluding base of cost/effective analyses, but these should be applied to orient the clinic administration knowing the effectiveness of results and the

adequate technical efficiency in the combination of resources to achieve them.

For these reasons, a context of administration is required that will permit establishing comparisons both on the part of the financer (the insurance) and on the part of the administrator (the doctor), thus adjusting the natural dynamics of the incomplete agency relationship.

- ***False premises between medical practice and sanitary economy***

Sanitary economy is the science that deals with the consequences of the scarcity of resources for health care (Jacobs 1991). With this definition it unavoidably collides with the clinic manner in which the health of the people is seen and thought of, which is concentrated in the needs of each patient without considering the magnitude of the consumption of resources or the cost of opportunity it has with respect to its alternative use in other patients. Perhaps the main conflict brought up between sanitary economy and the exercise of medicine – not only in the public system but also vis-à-vis third parties who pay for quasi public insurance – arises from the contradiction between the traditional sanitary concept that "health is priceless" and the recognition that vis-à-vis growing medical costs there is an economic need to hold back expenses by reason of the scarce resources available.

The confrontation in the conceptual and methodological breach between both visions – clinic and economic – ends by concentrating in the need to delimit the benefits package, mainly as regards the number of practices that may or may not be financed with the available resources, an unacceptable situation if this means falling in inequitable access barriers. It is a fact that some of the benefits are not necessary due their high cost and low effectiveness, and that on occasions they may be both unnecessary and undesirable. But being able to define how the maximum benefit is obtained with each peso spent in health, as an individual or collective need, is a challenge difficult to overcome, because the opportunity becomes contaminated with complacent attitudes both of the professionals and of society itself, like the "all for all", a utopian situation if compared to the reality of the limited resources. Precisely, this attitude is paradoxical in a society lacking a rational citizenship culture as contributor.

At the same time, the justification of setting limits to the "all for all" clashes with the insufficiency of patterns to explain, and moreover to predict, the relationship between a causal factor with a given effect (morbidity) and the lack of reliable information to support a norm or procedure that will combine efficiency with effectiveness. On the other hand, the scientific evidence is also related to medicine and to its classic concept of art and science at the time of establishing the taking of decisions on the matter of health.

That is why the sanitary economy falls in its scientific link with medical practice into a "black box" that contributes to establish false premises around its harmonization. If from the viewpoint of sanitary economy, health is an activity of a quasi "industrial" profile that can be assimilated to an economic activity subject to transactions (Levin, 1986) far

beyond the characteristics that assumes medicine within this conception –as a handicraft practice, a mixture of science and art– it ends by not being assumable to that "reductionist and economicist" concept. However, in spite of the above, the medical practice is a particular "industry" and a service that exceeds that category, due to the conditions of the market in which it evolves, its marked imperfections and the level of technological complexity acquired.

- **True problems between sanitary economy and the professional activity**

If health care, considered in all of its aspects, is inefficient in terms of costs and ineffective in terms of results, whether due to medical or not medical errors in sanitary administration, it will be impossible to achieve adequate standards, not only economic but also scientific and bioethical. At the same time, not to present options to establish a responsible decision taking and incorporate judgments of value with a great dispersion of ideas implies - in a complex social environment where pressure increases with respect to providing services without thinking of the consumption of resources or in the alternate use of said resources for other patients - a cost-unconscious attitude (Insua, 1999).

To recognize or not to recognize widely spread benefits (monthly echography in pregnancy) or to exert pressure on certain offers of pharmacotherapy with a low therapeutic value, without sufficient scientific evidence on its safety and clinic effectiveness, or manifestly excelled by other available alternatives, consumes resources necessary for other benefits, and because of its cost of opportunity prevents guaranteeing a minimum equity as a whole.

On the other hand, in certain cases and for many benefits, there is not sufficient evidence of their effective contribution to the prevention, treatment or healing of the illnesses they are supposed to solve, or to the preservation or improvement of life expectation or of the quality of life, nor to the elimination or reduction of pain and suffering. Hence, it is rational to present, as from the point of view of sanitary economy, a cost-effective or cost-value selection of the benefits menu, under criteria of need and of welfare and social value, after having made an evaluation of technologies. But this also becomes a false premise for the doctor, who continues to believe in the need to exert a kind of medicine that will be individualist, defensive and of a nontransferable personal responsibility, with absolute freedom to prescribe. It is true that as an agent related to the demands of the patient, the freedom to elect what is best for the latter falls on him, but such election cannot cease to be exercised on the basis of scientific rigor and of effectiveness; that is, on the basis of evidence.

Regulating the variability of the medical care process both in the assignment of resources and in the achievement of more effective results, implies advancing on a central component (the doctor) who, as from his knowledge and experience, becomes the critical node of the sanitary process. Any regulation starts from the effective possibility of defining adequate parameters for the combination of resources and the level of effectiveness of results, as well as the costs of said interventions.

In this context, there are three variability conditions that must be pre-established:

- Its *amplitude*, which is not only a function of the biology of each individual or of the epidemiological nature of the illness, but also of how the doctor manages the uncertainty with respect to the evolution of the illness itself as from the process of care. Even more so when it is not supported by evidence or by the comparison itself of effects/results.

- Its *cause,* linked to the different degree of use or application of diagnostic/ therapeutic techniques and procedures as from empiricism or "experience", and

- Its *consequence*, as from the presence of individual patients or groups with similar illnesses, similar medical care processes and strong asymmetries in the cost/quality of results -in turn a function of the quality of the evidence on which they are based– and from the degree in which doctors inter-relate among themselves and how they establish within the doctor-patient agency relationship the adequate information with respect to the best clinic decision.

Applying regulations on the micro-administration to reduce the variability of the care process will no doubt affect frontally the exercise of medicine. When the professional applies daily the medical science in an economic and social context, where technology does not stop in its innovating advancement, the classic model of sanitary administration is gradually radically modified and the economic resources become scarce vis-à-vis the expansion of the expense in medical care; he is progressively immerse in the need to take decisions as to how to reorder his range of services and establish a rational and ethical base for the deviations to the benefits scheme. No doubt, from being a mere supplier of services he will have to become someone who efficiently combines administrative know-how in the assignment of resources and achievement of results in terms of effectiveness, which in the near future will demand from him a basic training in sanitary economy, specifically in economic evaluation methodologies aimed at *technological innovations* in health.

· Conclusion. From the false premises to the true problem

With this new vision of the medical practice linked to the sanitary economy, both health preventive activities and social welfare benefits should be provided for on the basis of their effectiveness; that is, that they will permit reaching results that may be objectively measurable in health, taking into consideration, at the same time, the costs they generate and the resources available. Consequently, among the possible therapeutic alternatives, those that are most cost-effective should be assigned priority. This idea of linking cost/effective practice-administration in medical care will be, no doubt, a central node of medical education in the next decades, and its gradual development will imply radically changing the effectiveness and efficiency criteria slantwise imposed from the technically narrow viewpoint of some lines of thought of the sanitary economy more associated to the positive than to the normative criterion.

In this manner, the economic efficiency applied to the sanitary field from the simple technical scheme of "quasi industrial" production, it ceases to be the central objective element to be achieved, in a certain way unreachable due to the already mentioned variability of the activity of the professionals themselves, as well as to the different risk and therapeutic uncertainty of each patient. What acquires real transcendence is the combination of costs and effectiveness in any ambit of medical practice, possible to be quantified or qualified from the evaluation of the final results of the sanitary system and of the corresponding expense. Starting from this concept, the certainly scarce economic resources available in the health systems of Latin America could be administered in a more efficient manner through the doctors themselves, by reason of such effectiveness of results, a condition that in turn requires having available sufficient and opportune information not only in terms of technical quality of medical care, but with respect to the objectives themselves of the health system.

The possibility of effectively incorporating this modality of administration as from the welfare practice is far from been attainable in the short term, especially within the present sanitary context. Even more so, vis-à-vis the problems faced by the sector regarding the actual availability of funds, their budgetary application and final assignment of resources. The central problem is not only "what" to do, but "how" to measure the sanitary product, since at present the system lacks indicators that may establish qualitative and quantitative parameters of activity in services; basically, because health services measure process activities (intermediate results or intermediate *outputs)* instead of final results (*outcome).*

Generally speaking, the measuring of final results in health is based on parameters not closely linked to the production of medical-welfare services, but to the total of other variables, both economic and social. In general, the direct impact of the expense in medical care on children mortality, life expectation or premature mortality, is low. It is precisely in the multiple production functions of medical care where a significant amount of resources is consumed, that specific effectiveness measuring parameters are scarce (final results in terms of morbid-mortality and quality of life). Hence the need for the sanitary economy to become linked with the professional practice to define, from the point of view of costs and results, those potentially effective activities and, at the same time, reduce every benefit component that has no justification by virtue of its scarce results, even if it is the case of an *induced demand* resulting not only unconsciously from the consuming habits of population, but consciously from the undue use of services promoted by the professionals themselves.

If the supply of medical care services has the possibility of generating its own demand (Sanitary Say Law), and in turn provides the benefits to solve the problems derived from the illness, the "free will" in this activity leads to an unlimited lack of control of the expense. From the scheme of sanitary economy that represents the doctor as an agent in relation to two principals (the patient who transfers his demand *for the solution of the problem* on the one hand and the

health services that transfer their demand *for production* on the other), it is considered that the doctor cannot act effectively without incorporating economic responsibility to his acts. This condition leads to the need to have available certain norms of concerted practices that will reduce the variability of the professional activity, and that a the same time permit defending his criterion vis-à-vis the pressure of demand (one of his principals in the agency relationship). Simultaneously, minimize the induction of welfare activities as from the indication of diagnostic and therapeutic practices that will serve the interests of his other principal, the sanitary technical-industrial supply and that do not prove to be truly cost/effective.

It is necessary to insist on the definition of sanitary economy, presented as a discipline that integrates concepts, theories and economic and medical models to be approached in the study of production, distribution and consumption of medical care services. In this context, it is necessary to adapt the use of resources to the constant redefinition of the needs for health with an economic vision different from that of the classic disciplines of public health. Its role is to contribute to the field of health with a theoretical and methodological body to support in the taking of decisions and in the assignment and use of resources, and especially to give depth to the economic evaluations with respect to new and not so new technologies and procedures in the health services sector. To this effect, it has instruments such as the measuring of cost/effectiveness and its more sophisticated version, cost/value. It also must and can give priority to the incorporation of equity contents or aspects in these evaluations, that will permit overcoming the reductionist concept of economic efficiency, because the latter is limited to the technical aspect of yield, according to the production function resulting from the link with demand.

Within this scheme, it is not only useful to apply cost/effectiveness to medical care services in order to reduce the variability generated by the professional autonomy, but it must be incorporated to those decisions that, from the point of view of sanitary policy, try to reduce morbidity or mortality by means of prevention. A preventive program, although it does not avoid the presence of illnesses, because when they are detected they are already installed and cannot be predicted, it makes it possible to reach as an objective its early detection and adequate control in clinically asymptomatic individuals.

For example, the planning of a program for the detection of arterial hypertension may incorporate approaches starting from the conception of sanitary economy. Its final purpose is to reduce premature mortality derived from complications of the arterial hypertension and succeed in increasing survival in terms of years of useful life free of disability (basic concept of cost/value).

On the basis of this conceptualization, the program will attain efficiency (economic concept) with the lowest possible cost if it succeeds in avoiding a death or increasing the number of years of life without disability (sanitary concept), that is, being cost/effective or cost/valuable. Precisely, although the program would not reduce morbidity nor would vary the rate of incidence of the illness, if it efficient in its administration and effective in its results, it will be able to

reduce the number of deaths from brain vascular accident or acute myocardial infarct, or at least attenuate or reduce the disability sequels that both cases determine.

Although the cardiologic controls for arterial hypertension in patients older than 50 that incorporate sophisticated tests, such as Gamma-Chamber with PET or Echo-Stress with medication, the scheduled follow up of the hypertense patient in external consultation on the basis of norms of a diagnostic-therapeutic procedure, permits making efficient the benefit in its intermediate results (*output*) with less deviation of costs and expense, and achieve effects as regards final results (better quality of life and less complications). In this case, the association between the sanitary economy and the professional practice for the recording of detection and follow up of the hypertense patient and his control with an early and cost/effective treatment, permits guaranteeing the benefits and at the same time reducing the cost of opportunity of assigning the always scarce resources available to sophisticated and high cost practices of a low diagnostic effectiveness when they are not justified.

The need to finance future activities cannot be centered only in simple criteria of their use on the part of those who require medical care (efficiency on the basis of demand), but on the basis of the effects on the health of the persons that certain procedures have demonstrated (effectiveness on the basis of demand). The sanitary economy can then, as from one of its central instruments such as the cost/effective evaluation of interventions in the sanitary field, provide the necessary value both to the medicine itself and to public health even more so than if they were based on evidence.

Finally, a paragraph related to the transcendence of bioethics and the meaning of the social aspect in the economic definition of "what and how much to whom". The indiscriminate application of interventions based simple in the technological innovation and beyond scientific evidence, clashes with the right of the human person and of his own organism. A border between applied – or applicable in the future - techniques has began to be necessarily delimited, on the basis of new technologies of intervention, with higher economic and social demands not only for effectiveness but also for safety.

To leave out of the decision the persons affected within the decision of the interventions or to leave out society itself in the definition of the "what and how much" on the basis of the probability for success and of the uncertainty of the result, makes it necessary to think of sanitary economy also from the bioethical point of view. An ethical professional behavior, subject exclusively to economic definitions of an efficientist type, may clash with the social behavior that demands from the professional interventions included in a fan of topics that go, from genetic limits to assisted procreation to the acceptance of the irreversibility of an illness vis-à-vis the cost of maintaining life artificially. This is where the bioethical conception must be incorporated in the assignment of resources, when the principles of sanitary economy are confronted –on the basis of efficiency and effectiveness– on the one hand with the medical science itself, which has the capacity for intervention,

sometimes ilimited, and on the other with a society growingly demanding in terms of providing medical care without reasonably adequate limits nor differences between individual and social benefit.

Bibliography

1.- Sevilla Perez, F. Gestión clínica: la gestión de lo esencial como una estrategia de reforma en el Sistema Nacional de Salud. Administración Sanitaria magazine. Vol. IV No. 13. January/ March 2000.

2.- Del Prete, S. Gestión clínica y ecuación costo/ calidad. Una propuesta para la reforma de la Reforma Sanitaria. Medicina y Sociedad magazine. Vol. 4 No. 1. January/March 2001.

3.- Rovira, J. Evaluación económica, establecimiento de prioridades y racionamiento del gasto en sanidad. JAMA. Vol. 267; 9-17.

4.- Arredondo, A. Niveles de aplicación de la economía de la salud. Revisión y análisis. Gerencia y economía de los servicios de salud. CIESS Book I. 165: 180.

5.- Hernández P. Arredondo, A, & col. Avances y retos de la economía de la salud. Salud Pública magazine. Brazil. Vol. 29 No 4; 1995.

6.- Arruñada, B. Gestión empresarial de la sanidad pública. Demanda y limitaciones XIII Jornadas de Economía de la Salud de AES. Spain; 161:193; Publisher: MSPGTR. 1996.

7.- Del Prete, S. La economía de la salud en la evaluación de la tecnología sanitaria. CISALUD magazine. Year 2; No. 4; July/August 2001.

8.- Rodríguez del Pozo, P. Micro distribución asistencial: ética y asignación de recursos escasos. Gestión en Salud magazine. Year 1. No. 1; 30:40. July 2001.

9.- Insúa, J. Evidencia, economía clínica y resultados de la atención médica. Salud para Todos magazine. Year 7, No. 72; 6: 10. July 1999.