Medical uncertainty and overcare - What can the patient expect from modern medicine?

Dr. Gianfranco Domenighetti
Cantonal Health Office of the Canton of Ticino, Bellinzona/Switzerland
Foundation «Paracelsus Today»

The Swiss health care market model tends toward overuse. Supplier-induced demand is a key factor together with the attitude, opinion and the degree of informedness of the consumer-patient. The probability of losing tonsils, prostate or other organs depends more on the area in which one resides rather than on scientifically based factors. Studies conducted by us suggest that as the public becomes more informed, the demand for medical services will decrease. A consumer empowerment could maintain the medical profession «under healthy pressure».

I would like to start with some general considerations about the Swiss health care system. Among European countries, Switzerland has the highest per capita health spending, estimated for 1993 at about 4000 - 4200 Sfr.

The Swiss health care system has practically no regulatory mechanism and the Swiss health insurance model allows everyone to benefit from any so-called «scientifically proven» diagnostic and therapeutic service. Physicians in private practice are paid on a fee-for-service basis. Only the prices for each service are under conventional control, promoting the multiplication of medical services, which is what economists call supplier-induced demand. In summary, the Swiss disease market scene could be defined as a system in which:

- the monetary costs are socialized, and
- the corresponding benefits are, by contrast, privatized.

Market factors promoted by the legal and organisational framework in which medical professionals operate therefore have a profound influence on the appropriateness of medical decision making (see *Fig. 1*).

Professional uncertainty is another significant factor which could influence the professional behaviour of physicians. The *uncertainty* related to a lack of up-dateness in medical knowledge seems to me to be the most relevant factor influencing the appropriateness of medical decisions.

The Swiss health care market model tends toward overuse. When medical decisions are biased by market factors, or are based on non-current medical

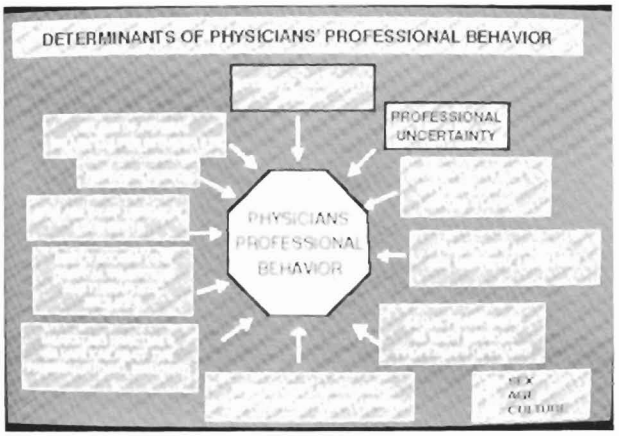

Fig. 1: Determinants of physicians' professional behaviour

knowledge, they result in inappropriate prescriptions and consumption of health services *(Fig. 2)*.

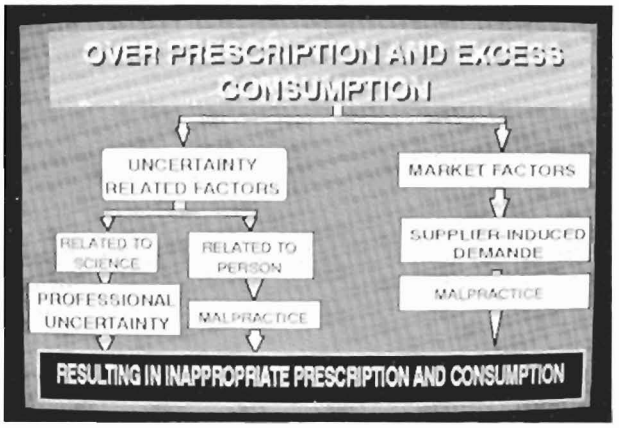

Fig. 2: Overprescription and excess consumption

Supplier-induced demand is a key factor in the Swiss health care market scene, in which the most performed play seems to be the miracle of the multiplication of loaves and fishes. Other key factors regarding appropriate care are the attitude, opinion and the degree of informedness of the consumer-patient. Today's health consumer environment is not conducive to an active role for the patient in his/her relationship with the physician. This means that, naturally, the preferred

situation for the patient will be the worst: over-consumption. Medical science and physicians' activity are perceived by the public as the most scientific form of activity and research, creating a sort of «car-repair agency syndrome» which is in striking contrast to the evidence that only 10 to 20 per cent of medical interventions are supported by solid scientific evidence.

This year we surveyed *doctor-patient* relationships in Ticino and found, not surprisingly, that two-thirds of patients have a passive role and about one-third have a role which could be termed active *(Fig. 3)*.

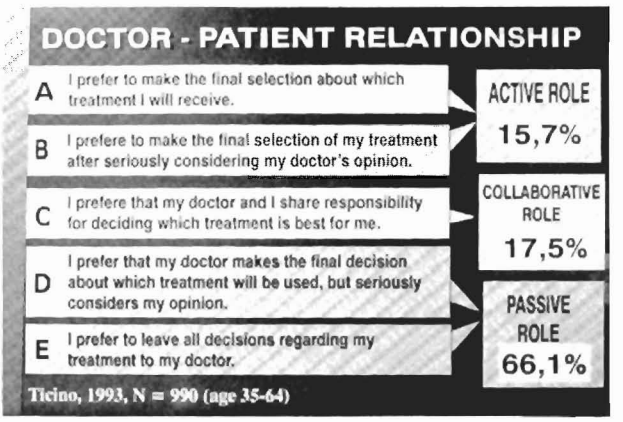

Fig. 3: Doctor-patient relationship

In my view, a passive role for the patient is indicative of the worst doctor-patient relationship model: the *paternalistic one*, in which the physician acts as the patients' guardian, always deciding what is in his or her best interest, even if the patient does not agree. It is clear to me that this model is the worst to fight against in over-consumption, and it makes bringing the patient's views and experiences to the centre of medical attention virtually impossible.

Consequently, the mythical and magical three to ten minutes spent in the consulting room are, according to the editor of the *British Medical Journal*, more often a time for a «folie à deux» relationship, in which the patient adheres to the idea that the doctor will cure him or keep death at bay, and the doctor wants to believe that he knows more than he does. Doctors' faith in their own knowledge is based on a mere 10 to 20% of medical practices which are supported by randomized controlled trials, according to the *US Office of Technology Assessment*. In other words, 80 to 90% of medical practices lack such support.

Wide recognition of these facts by the public is, in my view, urgent, in order to avoid unnecessary hopes, and also to avoid a waste of resources for society.

And now some Swiss facts: First, *ritual and «preventive» surgery*. The prevalence of tonsillectomy in Switzerland is three to four times higher than in France. 30 - 40% of Swiss have lost their tonsils compared to a mere 10% in France. The annual standardized incidence rate for tonsillectomy was five times higher in Ticino than in Sweden, and the Ticino rate was at least two times higher than in other regions (it is important to point out that the lack of statistical data in Switzerland does not allow the calculation of population based surgical incidence rates for other Swiss regions or cantons).

Important international variations in standardized surgical consumption (here for example prostatectomy, *Fig. 4*) have been found, also across small areas in the canton of Ticino. We found that these and other similar results suggest that the probability of losing tonsils, prostate or other organs depends more on the area in which you reside rather than scientifically based factors.

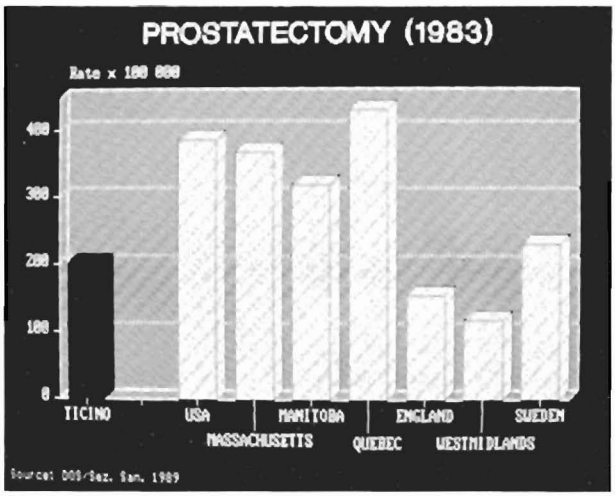

Fig. 4: Prostatectomy rate in various places in 1983

Another example of «preventive» surgery is hysterectomy. The physician's sex seems to be an additional uncertainty factor and could, in the case of gynaecologists, influence the probability of a woman losing her uterus. In fact Swiss female gynaecologists were found to perform about half as many hysterectomies as male gynaecologists. Upon ascertaining this, we were happy to ascertain that no female physicians in Switzerland are specialists in urology.

In 1984 we promoted a public media information campaign in Ticino about

rates and needs for hysterectomy. The result was a drop of 26% in hysterectomies whereas in the reference area, where no information was given to the public, hysterectomy rates were practically unchanged. The follow-up through 1991 has shown a steadily lower hysterectomy rate for Ticino. The curve for the year 1988 suggests a further decrease in rates probably due to publication of these results in the *Lancet*. The results were sent for comments to all Ticino gynaecolgists in January, 1988.

This year we will conclude a further study regarding the consumption of seven common surgical procedures by the most informed consumers acting in the health care market: the physician-patient. In this study we compared the consumption by physicians (considered as a gold-standard), lawyers, other graduates and the general population.

The results showed that the standardized consumption was consistently and significantly higher in the general population compared to the physician-patient group *(Fig. 5)*, except in the case of appendectomy, where no differences were found.

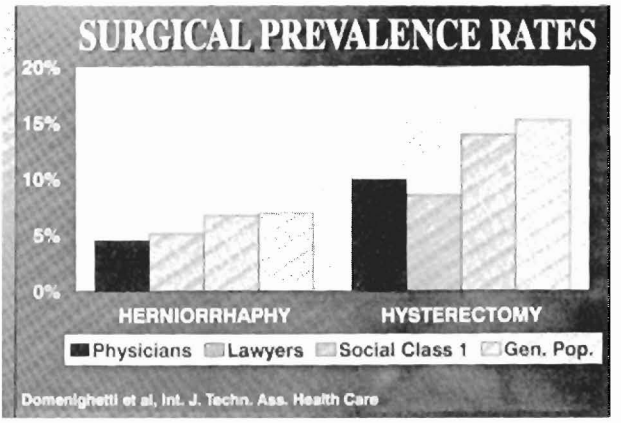

Fig. 5: Surgical prevalence rates in different social groups (herniorrhaphy and hysterectomy)

However, the surgical rates for lawyers were similar to those of physicians. This result is perhaps indirect evidence that physician-patient consumption can indeed be considered as a «gold-standard». It appears that lawyers are regarded by the medical profession as «special» or «risky» patients potentially in a position to cause more legal troubles than the ordinary ones. The results of this study suggest that as the public becomes more informed, the demand for medical services will decrease.

I would like to point out that these kinds of studies, which are common in

Nordic and Anglo-Saxon countries, are perceived as unpleasant jokes by the Swiss medical profession. They have been a source of unfair incitements against authors and co-authors, particularly if they were physicians.

My *last example* will concern diagnostic screening tests and practices. It is important to stress that an excess of such practices, especially for incurable or rare diseases and for implementing doubtful and uncertain therapies, could be a source of individual and social stress and a source of waste of resources for society. The example I would like to present concerns, once again, today's mythical «cholesterol-saga» *(Fig. 6)*.

Fig. 6: «Good news»

Fig. 7 shows the market share figure for the three most important groups of lipid lowering drugs for the year 1992.

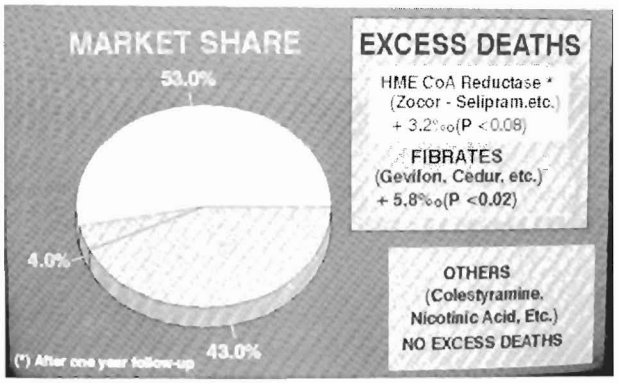

Fig. 7: Lipid lowering drugs 1992 (Ticino and Lombardy)

It was very difficult to obtain this data because the information is considered «top secret». The data concerns the canton of Ticino on one hand and the nine million inhabitants of the Italian region of Lombardy on the other. It is important to point out that, for each of these two regions, the market share figures were exactly the same, suggesting therefore a degree of universality of the pattern on the slide. It is astonishing to see that 96% of the market pertains to lipid lowering drug groups that, in population controlled follow-up studies, have shown an excess of total mortality in the treated groups compared with controls. By contrast only 4% of the market share concerns drugs that have not shown such an over-mortality pattern in primary prevention studies.

I would also like to stress that the commercial advertising for *lovastatin* is based uniquely on the lipid outcome profiles resulting from the *EXCEL study*, the largest double-blind placebo controlled trial carried out with this agent. The duration of the study was 48 weeks. After 48 weeks the total mortality in the lovastatin group was about *three times higher* than in the control placebo group. The difference was at the limit of statistical significance. More troubling: of 36 deaths, 33 were cardiovascular. The ultimate goal in treating hypercholesterolaemia is to decrease morbidity and mortality, not to achieve an ideal lipid profile.

To conclude this «cost-devilish» analysis (or, less harshly, a «cost-misdeedness» analysis) for Switzerland, we published it in the *Journal of the Ticino Medical Association* in October, 1993. Our aim (or hope) was to modify the current medical attitudes regarding cholesterol drug treatment for asymptomatic persons free of cardiovascular disease.

In Switzerland 1.4 million people are intervention candidates because of a high blood cholesterol level. If all were treated, one would on the basis of the mortality data theoretically expect *an excess* of about 6 thousand deaths after 5 years of intervention. This *not* so hypothetical massacre will also cost about seven billion Sfr. The cost of the drug «bullets» necessary to cause one excess death would, consequently, be 1,200,000 Sfr. If we add the known adverse side-effects of these drugs and the psychosocial adverse effect of labelling a «non-disease», it seems prudent to reconsider the present strategy for both ethical and financial reasons (see also contribution by SKRABANEK on p. 28).

We should not send millions of people who feel well and are well into the battle against one of the two hundred and forty-six suggested independent risk factors of heart disease. In conclusion: I believe that the time is ripe for consumer empowerment *(see Fig. 8)*.

This can be brought about by launching and carrying out community health promotion programmes with the aim of improving the self management *of health* and a *more conscious access to medical* care by the population. The promotion of a

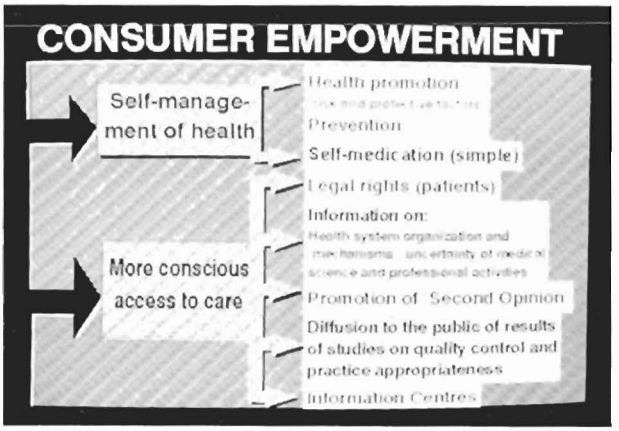

Fig. 8: Consumer empowerment

healthy suspicion among the public is also an essential step in diminishing the widely held view that medical practice offers a service similar to that of a car-repair agency.

Consumer empowerment through community health promotion programmes leads to a more active and collaborative attitude for the patient and, consequently, to an increase of physician-patient relationships based on informative and participative models, that are the «first choice» for an effective and «adult» oriented medical consultation.

Last but not least a wide community health promotion programme aimed at consumer empowerment could maintain the medical profession «under healthy pressure» regarding scientifically proven health promotion matters and also regarding more scientific and appropriate prescription practices.

This pressure could also lead to improved attitudes and updating of physicians' knowledge and furthermore lead to a revisitation of physicians' demiurgic position when facing a new, more active and informed consumer-patient.

Further reading

Domenighetti G. Marché de la santé: ignorance ou adéquation? Réalités Sociales, Lausanne 1994

Domenighetti G, Gutzwiller F et al. Revisting the physician-patient as an informed consumer of surgical services. *International Journal of Technology Assessment in Health Care* 1993; 4: 505 - 513

Inlander CB, Pavalon EI. Your medical rights: how to become an enpowered consumer. Little Brown & Company, Boston 1990

Domenighetti G, Luraschi P et al. Modifying hysterectomy rates. *Lancet* 1989; I: 1273 - 1274

McKeown T. The role of medicine: dream, mirage or nemesis? Nuffield Provincial Hospital Trust, London 1976 (Deutsch: Die Bedeutung der Medizin. Suhrkamp Verlag, Frankfurt 1982)