

## MODERN MEDICAL PRACTICES: A COMMENTARY

**Guy J. Lavoipierre**

*Former Epidemiologist, World Health Organization, Geneva, Switzerland*

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### Summary

This chapter takes a critical look at the practice of modern medicine and highlights some of its failings in delivering both curative and preventive health care for patients.

Dramatic advances in human health achieved by developed countries were gained by provision of basic services (good housing, waste disposal, adequate food, clean water supplies, pest control, air pollution control) reinforced by generalized immunizations and the use of antibiotics. New problems, many of them lifestyle-inflicted (obesity, cardiovascular diseases, etc.) have appeared which are not always controlled in an optimum way: patients are not educated to take control of their health; doctors are not adequately trained to communicate with their patients, to integrate efficiently preventive and curative approaches and to assist with nutritional health. In many instances, there is an abusive use of laboratory investigations, with this practice reinforced by the tendency of patients to sue their doctors for malpractice. Consulting patients pressure doctors to prescribe a medicine and expect the prescribed drug to achieve 'instant' cure; but excessive prescription of drugs is often associated with an excess of unwanted and serious side-effects.

Unconventional therapies, including traditional oriental medicine, tend to be shunned by the medical establishment; yet they are often a valid alternative. Through their control of health budgets, politicians exert a subtle but determinant outcome in the delivery of health care with a premium on visible measures, usually associated with hospital practice, to the relative neglect of preventive care. In addition medical research can be biased towards drug treatment of disease through funding by pharmaceutical companies.

Developing and underdeveloped countries, many of which face the dual conundrum of diseases of affluence and diseases of poverty, have scarce human and financial resources to deal with their health problems. New approaches are reviewed. These would combine proven strategies as they exist in industrialized advanced countries and innovative ones which would bring medical practice to patients, use additional personnel trained midway between a fully qualified medical practitioner and a nurse, as well as redirecting more financial resources from hospital-based curative services to the development of basic health services - clean water, clean energy, good housing, waste disposal, cleaner air.

### **1. Modern Medical Practices: A Commentary**

Immense progress has been achieved since the early days of Hippocrates - especially over the 20th century - and continues to be achieved in our time in the integration of modern medical practice in universal health care delivery. However, there remain several areas of concern and some undesirable realities which need to be addressed in order to further raise standards and make the delivery of health care even more relevant to populations they are intended to serve.

Attempting to review current medical practices is a task fraught with difficulties because it depends to a large extent, on which perspective the reviewer looks at them. Take, for example, the case of a new and, as yet, not fully tested and proven surgical intervention. Prudently it will be reserved initially to so-called 'desperate' cases in which all known and well established techniques have little, if any, chance of success. Such a necessary selection will prejudice automatically the procedure against a favorable outcome. And if one assumes that the new technique, besides being lengthy and complicated, involves the intervention of a team of highly skilled specialists, this additional requirement will dramatically raise its cost.

Faced with the alternative of death, the 'test' patient is inclined to look at the unproven procedure very positively, notwithstanding the high risk of failure; other patients with similar but less severe conditions are frustrated that they cannot 'benefit' from what they perceive as a 'miraculous' technique; the surgical team implementing it is keen to test what is probably the result of years of patient research, unorthodox thinking and hard work; the hospital administrator is feeling less enthusiastic on account of increased budget costs implied in the possible success of the new technique; the media is foaming with excitement at the prospect of sensational news - whatever the outcome; and the politicians are measuring coldly the electoral advantage which this high profile procedure could bring them. And yet there are not many in this scenario who are considering the cost-efficiency of the new technique and questioning whether money spent implementing it could be prioritized and allocated to another activity covered by a

limited health budget that would reap a result of greater value for more people.

The point being made here is that modern medical practice is costly and is becoming increasingly so, as new, improved, and better techniques are gradually implemented as a result of medical research. Many countries are fast approaching a point (if they have not already reached it) where the cost of providing comprehensive health care could literally bankrupt their national budget. Perhaps it is time to consider alternative ways of doing things in providing health care and focusing more attention on those measures - preventive or therapeutic - which are likely to benefit the largest numbers of individuals by bringing optimum morbidity, disability and mortality reductions for the most prevalent conditions in the community. And as an alternative rather than an alternative way of providing care, the time may well have come - particularly in the economically advanced countries (but not exclusively so) - to make a wider use of the Internet web in order to educate patients and increase their participation in anamnesis and auto-diagnosis of primary symptoms.

There is no denying the fact that progress achieved by modern medical practice is vast. Most individuals living in developed countries have access to a quality of care, which their grandparents could only dream about and the lot of many in poorer countries - particularly in Asia, Latin America and the Caribbean - is quickly improving. Diseases which used to carry heavy mortality rates - and still do in many poorer countries - have ceased to cause a significant risk to large population groups living in developed countries. However, because a significant chunk of human beings - perhaps as many as 75% - do not enjoy such high level of health and quality medical care it is necessary to consider separately the needs of these two groups and how they are met by current medical practices.

## **2. Medical Practices in Economically Developed Countries**

Looking back in time it is apparent that the measures that have had the highest impact on human health in economically developed countries have been the provision of basic services such as clean water supplies, pest control, cleaner air, good housing, proper waste disposal and adequate food. The gains achieved by these measures were consolidated further by the impact of generalized immunizations and antibiotics. Gone are the epidemics of waterborne diseases so commonly seen in the underprivileged world. Infectious diseases' incidence and prevalence have plummeted. In the USA, for example, crude mortality rates directly caused by infectious diseases such as pneumonia, influenza, tuberculosis etc. have decreased from around 800 deaths per 100,000 in 1900 to less than 100 in 1950. Elsewhere two of the best indicators of a nation's health - infant mortality and life expectancy - have changed dramatically: Sweden saw infant mortality reduced tenfold between 1750 and 1950 (from 200 to 18/1000 live births) whereas life expectancy in the same short interval in England and Wales went from 34 to 68 with a sharp rise (from 48 to 68) in the last 50 of these 200 years.[See Bibliography 1-9]

### **2.1. Changing Morbidity**

However, these 'killers' have been replaced by a completely new set of diseases no less

threatening to life. For the sake of discussion (notwithstanding genetic and environmental risk factors) they can be conveniently grouped into two broad categories: mainly [but not exclusively] lifestyle-inflicted and mainly age-related. In the first group we find cardiovascular diseases, hypertension, obesity, osteoporosis, diabetes, and some pulmonary diseases such as chronic bronchitis, emphysema and lung cancer; in the second group we have a variety of cancers, severely crippling arthritis and diseases associated with brain degeneration such as Alzheimer and dementia. This dichotomy is mentioned because ideally each set requires a different medical approach to their control.

## **2.2. General Medical Practice**

In a simplified description of what happens in contemporary developed countries, medical practice has evolved towards a two pronged system or two level of health care: a universal level involving screening and some treatment, and a specialized level where more complex - and radical - treatments are undertaken. This second level is the world of hospitals and specialists whilst the first is where the general practitioners operate. Each level has its set of positive features as well as negative features.

With the advent of an almost universal adoption of some form of medical insurance (or social security co-payment), a visit to the general practitioner (GP) today is financially affordable for most individuals living in economically developed countries. A positive outcome of this situation is that early diagnosis of a pathological condition is a rule if patients call on a GP at onset of initial symptoms; however, this ease of access to a GP's consultation tends to create some abuse either by patients who have minor problems which they "want the doctor to check" or by overanxious patients who 'clog' the waiting list of an already very busy practice. The unwanted side-effect is that a GP spends less time with each patient in order to service everyone knocking on the surgery's door.

Note, by the way, that the operative word is 'care'; no mention is made of 'prevention'. In fact it is arguable that a modern GP is not even expected to conduct any preventive medicine activity especially if the surgery is a busy one with a high turnover of patients. This is probably THE major shortcoming of health services delivery in the majority of economically developed countries: too often the two systems - care and prevention - run in parallel, somewhat ignoring each other. Because of the closer relationship between GPs and patients, it would seem logical that, in addition to treatment, the former should be providing preventive services as well as being heavily and intimately involved in educating the latter. Yet, this is rarely the case although some welcome trends are slowly emerging. Since the logical approach is not happening, it is worthwhile exploring some of the reasons behind this failure of modern medical practice.

The first factor which comes to mind is money although this consideration does not apply in those systems where the practice of medicine is completely socialized (i.e. paid for by the State as in the UK or Scandinavian countries). Educating patients in taking control of their health, reviewing their lifestyle and their diets, advising them about nutrition, stress reduction, relaxation and exercise takes time - sometimes a lot of time; and time is precisely one ingredient that is at a premium in a GP's practice. Doctors

have to earn a living which implies that they must ‘process’ a minimum number of patients daily if they are to cover the costs of running their practice and be left at the end with a decent income. This unavoidable aspect of medical practice is evidenced by the fact that wealthy GPs are the exception rather than the rule whatever the economically developed country one chooses to consider.

### **3. General Medical Practice and Training of Medical Students**

A second factor limiting the joint practice of prevention and care is the training of medical students. In most medical school and teaching hospitals, the emphasis is almost exclusively on treatment by medication or surgery and the development of technical skills in using state of the art techniques such as color ultrasound, computerized tomographic scanning, magnetic resonance imaging or radio scans. The linkage between the prevalent pathology in the community - overweight, obesity, cardiovascular diseases, hypertension, diabetes, osteoporosis, chronic bronchitis, emphysema and arterial atheroma - and lifestyle and nutritional habits is not sufficiently reflected in the training curricula of medical students with the result that, in general, doctors are not properly equipped to advise their patients. As a result of this situation, patients are left somewhat ‘in limbo’ with inadequate guidance, support and practical advice on how to go about making the required changes. Furthermore, when one keeps in mind that nutritional habits are mostly acquired during childhood and that changing them in adult life after years of self-indulgence is not an easy exercise, it becomes apparent that the issue is a complicated, difficult and therefore costly one to resolve.

Compounding this negative aspect of medical training, the necessity of acquiring excellent communication skills (including listening to the patient) is not impressed as a matter of great importance on medical undergraduates. More often than not they are advised to divulge the minimum to patients in their care lest the latter should become unduly anxious and stressed about their failing health - perceived or real. Instead of enlisting the co-operation of patients in the therapeutic process, too many doctors are inclined to shut them out - an attitude which can be traced more often than not to a combined lack of communication skills and adequate time.

This weakness in the training of medical practitioners has two undesirable negative effects. First it leaves patients unsatisfied and frustrated because they feel that the doctor is not listening to them. In turn this frustration leads patients to consult so-called healers who may not be fully trained or equipped for timely detection of medical problems which otherwise could be eliminated by an early intervention. Second it leaves medical practitioners badly equipped to handle the psychotherapy side of disease, including the natural anxiety of patients *vis a vis* their condition and its long term consequences or the feeling of guilt haunting those patients who feel that their sickness is a ‘punishment’ directly linked to something wrong or reprehensible that they may have done. By and large most doctors would prefer to spend more time helping patients handle their fears and anxieties but the system is not geared in this direction because time is of the essence. It should be noted, however, that a new tendency is slowly emerging - particularly amongst specialists who do not have the same time constraints as their generalist colleagues - to involve patients more closely in the therapeutic process.

Paradoxically, stress itself is a cause of illness which can (and does) aggravate a patient's condition. Relieving it by patient and attentive listening coupled with practical advice should be at the core of a practitioner's daily work routine. Yet, the time constraints of modern medical practice combined with the emphasis in training on all matters which are technical rather than human would seem to negate the need to attend to the 'emotional' side of disease and 'heal' the patient - as enunciated in the Hippocratic Oath.

#### **4. Laboratory Investigations, Medical Malpractice and Cost of Health Care Delivery**

Another plus of modern medical practice is the significant progress made in simplifying and bringing down the cost of sophisticated laboratory investigations and preventive therapies to the point where they are now affordable by the majority of patients particularly in those countries where health services are run by the State or comprehensive universal medical insurance is in place. The better known examples of this progress in the sophistication-simplification process are the morning-after-pill, the contraceptive pill, the pregnancy test, and the diabetes test. It is also possible to run with a single blood sample a battery of tests covering what is generally known as blood chemistry and measure a range of parameters such as lipids, proteins, platelets, white cell counts, red cell counts, etc. These modern testing methods supply the treating physician with a comprehensive picture which in turn improves the quality of the diagnostic procedure.

In this instance too, all is not perfect. Simplification and lower costs can lead to an over reliance on the 'blunderbuss' laboratory approach i.e. measuring more than required 'just to make sure' as well as an under-reliance on the more time-consuming practice of a careful interrogation, history taking and clinical examination of the patient to narrow the list of differential diagnoses as used to be the case only until about the 1960s. This feature of health care provision raises its delivery cost; and since nothing is free in this world, the added cost of these excessive laboratory investigations is born by the community - both users and nonusers of the health care system.

The 'blunderbuss' approach in using para-clinical and laboratory examinations to establish a diagnosis is reinforced by the alarming contemporary tendency to sue treating physicians for malpractice when their intervention goes wrong - as it happens sometimes in any human activity. For instance, it has been documented that medical errors in hospitals - iatrogenic illnesses as they are technically described - have reached an alarming rate (somewhere between 5% and 10%) depending on the country and hospital. Patients and their families have every reason to be concerned by these relatively high figures. However, by paying attention to patients' management procedures within the hospital system, this rate can be significantly reduced and is slowly being reduced in some hospitals as developments since the 1960s indicate.

Nevertheless, the excessive use of the Law to redress cases of medical malpractice - be they hospital-based or in general medical practice - has three unwanted 'side-effects'. To cover themselves against possible legal procedures medical practitioners tend to request the maximum range of para-clinical and laboratory investigations - hence

reinforcing the ‘blunderbuss’ approach and adding to the cost of delivering health care. The second unwanted ‘side-effect’ is the necessity for medical practitioners to purchase expensive malpractice insurance premiums - a cost which is transferred partially or *in toto* to the patients and eventually paid for by the community. In extreme cases, some specialist physicians - obstetricians and gynecologists come to mind - have simply chosen to close down their private practice because they simply cannot afford the malpractice premiums. The third negative aspect of abusive suing of physicians is a tendency amongst the medical profession to cover themselves by prescribing antibiotics whenever they are consulted by someone suffering from an infectious condition or who could possibly develop an infection. This unfortunate (but understandable) tendency is best illustrated by viral infections, such as the common influenza, where antibiotics are prescribed more often than not when other simpler and less costly medications would be more effective - in this example bed rest, inhalations, fluid intake and decongestants. Fortunately, many physicians do not fall into the trap of excessive antibiotic prescription but enough do it to question how much this aspect of modern medical practice is not only adding to the cost of health care delivery but, perhaps more alarmingly, accelerating the appearance of antibiotic-resistant bacterial strains?

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### **Biographical Sketch**

**Guy J. Lavoipierre**, MD, DTM & H, MPH & TM, Dr PH (Epid.) former Epidemiologist, World Health Organization, Geneva, Switzerland. He obtained his MD and DTM & H at the University of Bordeaux, France, his MPH & TM and Dr PH at Tulane University, USA, and worked extensively as a field epidemiologist in developing countries (mainly in Africa), focusing on control of tropical parasitic and infectious diseases, both before and after joining WHO. He was involved as a medical advisor for several years with the World Food Programme reviewing from a health perspective all their major assistance programs. Additionally, a significant portion of his professional life was spent developing and teaching training programs specifically designed for practitioners of field epidemiology in developing countries. He is now retired and lives in Australia.