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VIEWPOINT

# Preparing doctors for the 'post-science' era: Focusing back on the patient

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**Abstract** Judging by public comment, doctors and society are no longer connected. This paper argues that much of this disconnectedness is based on an overemphasis of technology, evidence and economic rationalism and a neglect of the humanistic values of caring – the art of medicine. As medical educators we have a duty to integrate the art and science of medicine, that is to open the world of daily surprise of the human condition called illness – the experience of suffering, adaptation and recuperation – to our new generation of young doctors.



**Key words:** community-based education, evidence-based medicine, medical education, medical technology, patient care.

*When all the gain from good communication has been achieved and all knowledge from textbook and technical studies has been mobilized, there is a final step that is no less crucial than all the others. This is the wise and scientific integration of all the varieties of data into the biologic portrait of a single human being.* Dana Atci-Iley, *Cecil – Loeb Textbook of Medicine*.

## Introduction

Do patients need doctors who care or technologists who attempt to cure? This is a central problem for medical education as it raises the issues of whether education is about technology and the transfer of knowledge or about 'the patient'?

## Medical science and society

These questions come to mind when reflecting about the apparent disconnectedness of doctors and society. Hardly a day passes without newspapers publishing a story about medicine. These stories fall into one of two categories – the 'good news' stories about the latest scientific discoveries, prematurely marketed as another breakthrough towards eternal life, or the 'bad news' stories about medical negligence, the latest threat of 'killer' diseases and so forth.[1]

Thus our public image is that of a chameleon – the 'omnipotent hero' or the 'contemptuous villain'. How often does this public image create high expectations without communicating a medical perspective? How familiar does this statement sound – 'You are fortunate, we discovered it early, so you can be cured'.[2,3]

### *Over emphasis on technology*

Medical technology has resulted in many breakthroughs in both diagnosis and treatment, but medical technology also has put a wedge between the science and the art of medicine.[4] Our faith in the latest technical possibilities has shifted our focus away from the other determinants of health, namely a clean physical environment, mental well-being[5] and supportive social factors like adequate housing, stable employment and a functioning family/community.[6]

These latter factors are still affecting a large number of our patients. In a recent study 51.8% of patients had some, and 13.8% of patients had substantial mental health problems. A total of 48% of patients stated having at least one social problem – nearly 25% reported relationship problems, 15% problems with poor housing and 8% troubles with employment. However, only 11% indicated that they would want to talk to their doctor about these problems (JP Sturmberg, unpubl. data, 2002).

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### *Over emphasis on evidence*

At a time when, on a collective scale our health has been the best ever, people feel more vulnerable about their health and worry more about dying then ever.[1,7] By vigorously justifying our scientific practice through the perusal of evidence-based medicine, I believe we are undermining the magic of the art of medicine.[8,9] Our blind belief in randomised controlled trials does not seem justified for the types of problems we deal with in primary care.[10] This also applies to our denial of the effectiveness of the placebo effect.[11–14] However, more evidence is needed to clarify what helps our patients' needs and desires[15] and what helps patients to understand their illness.[16]

### *Economic rationalism*

Primary care doctors are widely regarded as the cornerstone of the health care system. However, the economic pressures on health care further erode the confidence in them. The result:

- shorter consultations,
- patients complain about not being listened to,
- patients are less involved in decision-making,
- and satisfaction and trust are decreasing.[15]

In Australia the problems are compounded by stock market listed companies buying out primary care providers. This allows big businesses to capitalize on patients heightened fears and gain financial benefits by vertical and horizontal integration of 'the medical market' through increasing the use of specialist, pathology and radiology services.[17,18]

## Medical education – scientist or doctor

These developments have a lot to do with the history of medical education. Since Flexner's reforms 80 years ago, medical education has been dominated by the tertiary teaching hospital and its organ systems oriented departmental structure. In addition, the development of technological innovations have altered the approach to patients – traditional care has been replaced by the pursuit of cure at any price.

This shift has led tertiary institutions to slowly divorce themselves from their patients' needs and their local communities' expectations. Today's teaching hospitals have great difficulties in dealing with the environmental, psychological and social determinants of health and disease in a practical fashion.

### *Technology defines the divide*

Not only has the organization of the hospital system and its associated technology focus shifted the focal point of medicine away from caring for patients' illnesses towards treating identifiable pathology, they have also adversely affected the rapport with, and the regard for primary/community care and allied health providers.

### *Teaching maintains the divide*

Student selection into Australian medical schools is largely based on students' performance in the science subjects, with an inadvertent discrimination against the humanities, hence most students already have a preference towards patients' diseases rather than their illnesses. This predilection for the science aspects of medicine is reinforced in the teaching and the behavior of their teachers on the wards, both of which have been shown to have a strong influence on the students' developing understanding of their role as medical practitioners.[19]

This aspect is potentiated by the fact that medical specialists and subspecialists provide most of the clinical teaching, and as such they teach specialist attributes and values, relevant to their particular setting within the hospital environment. However, these may not necessarily be relevant to community care, the setting in which the great majority of patient care takes place.[20,21]

### *Perpetuating the belief in the omnipotence of medical sciences*

The teaching hospital in particular reveals a distinct role distribution – the heroic doctor aiming to achieve cure even in the face of adversity, and when confronted with failures, medical practitioners frequently delegate to social workers the task to console patients and relatives. This clearly reflects a misunderstanding of the notion of interprofessional and continuity of care.

## Are we losing the patient?

Healthy communities have healthy people – loss of the sense of community makes people sick.[6] The impact of caring does increase the sense of well-being, improves overall functional health, and prevents hospitalization and institutionalization.[22,23] These findings are especially important to all those for whose disease there is no cure. These patients above all look for a good quality of life – and quality of death, and they seek a doctor who is willing to share and make sense of their illness experience.[16]

Economic rationalism and science/technology preoccupation stand in the way of holism – the focus on the singularity of 'cure' subdues the environmental, psychological and social factors affecting health and well-being.

In addition the preoccupation with 'hard' outcome measures reflects a simplistic view of looking at the achievements of medical care – particularly in primary/community care. The outcome measures of interest to patients is their functional health, and all want to maintain this until they die. Poor quality of life is the ultimate failure of medicine, not – as many still believe – death itself.

## Embracing community-based medical education

If medicine – that is, the traditional science-based model – is going to remain relevant in the broader health care environment, we need to develop a better 'customer' focus, to borrow a term from the economic world. We first need to understand the community we are living and working in. We then have to take seriously our advocacy role to tackle the environmental, psychological and social problems affecting the health of our patients, that is, ensure improvements in education, employment opportunities and social justice issues.

On a community as well as on an individual level, we have to outline a more realistic picture of the achievements and limitations of medicine. In the end, care is often more important to our patients than cure.[24] Doctor means healer and the power to heal has been demonstrated by many of the great physicians of the 19th century. Today we tend to belittle their 'skills' calling it placebo. Yet, the power of healing, also known as the art of medicine, has recently been described in scientific terms through neuro psycho immunology.[8,11]

In the end, compassion for the person is more important than passion for the science of medicine.[25] Hence the selection criteria to identify tomorrow's young doctors need to include excellent emotional intelligence,[26] as well as a good grasp of basic scientific principles. This way we train clinicians for the benefit of the individual patient. This was eloquently expressed by Feinstein when he stated: 'A clinician's privilege and power in clinical therapy is his ability to make both the therapeutic and the environmental decisions concomitantly.'[27]

Community-based education offers a way out of the crisis of medical education.[28] This approach teaches young doctors to connect with their community (or constituency) and enables them to approach the health problems of an individual in a holistic way. Communities more than ever need doctors who embrace primary care and who help patients to understand the treatments offered by doctors with specialist skills.

The challenge for medical teachers in the 21st century is to open the world of daily surprise of the human condition called illness – the experience of suffering, adaptation and recuperation – to our new generation of young doctors.

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