

Welcome, esteemed reader

It is our pleasure to present to you A CRITICAL VIEW OF MEDICAL REASONING. STEPS TOWARD TIMELY MEDICAL PRACTICE: A READER. The reader collects materials from the 1st scientific symposium of the *Paracelsus Today: Foundation for Innovative Critical Appraisal and Practice in Medicine*. The book covers the breadth of the topics covered at the symposium, which took place in October, 1993 in Einsiedeln, Switzerland. The symposium celebrated the 500th anniversary of PARACELSUS, Swiss physician and philosopher. In the spirit of PARACELSUS, the *1st Scientific Symposium* explored various avenues of opening our concepts of conventional medicine to innovations and/or revision through clinical epidemiology. Topics covered include various aspects of the theoretical basis of clinical epidemiology, various applications of clinical epidemiology, especially in areas of alternative delivery techniques, and the application of clinical epidemiology in several specific areas, e.g. breast cancer screening, ultrasound in pregnancy, the cholesterol hysteria and others. The authors include many medical doctors, some with high international reputations, as well as a theatre director and two abbots, one Catholic and one Tibetan.

PARACELSUS, Swiss physician and philosopher, was born in Einsiedeln 500 years ago. *The 1st Scientific Einsiedeln Symposium* was dedicated to his spirit and life's work, which to this day lead us to timely questions regarding contemporary medicine: Which study results have practical meaning for our patients? Which risk and disease factors constitute real health threats? To what extent does treatment indicated by laboratory results benefit the patient? Which methodological fallacies allow the approval of therapeutic benefit which in fact does not exist? What is the frequency of false positive results? How often is there a practical clinical consequence of exhaustive testing to rule out a hypothetical diagnosis, and are there untoward side-effects of such testing?

The symposium was not about PARACELSUS himself, but held in his spirit of innovation in science. He united the urban learnedness from his German father and the wisdom from the rural background of his mother. As a consequence, the academic preference for theory was transparent for PARACELSUS. He once set fire to the academic textbooks in a public scene.

The motive was perhaps not necessarily to discount the Galenic humoral theory on which these books were based, but rather the arcane and impractical teaching and logic systems imbedded therein. 500 years later, although the modern «Galenic theory» (the biochemical/molecular basis of modern medical science) is much more sophisticated and probably much nearer to the real world than the

humoral theory, the same questions and doubts linger. At any rate, setting fire to the textbooks of «molecular theory» would be a vain enterprise. The important question which the Einsiedeln symposium addressed was much more: What therapy is of true benefit for the patient and how can we define meaningful criteria to assess therapeutic outcome?

The *1st Scientific Symposium of Einsiedeln* was dedicated to *clinical epidemiology*, a new practical science uniting the detached observation of controlled clinical trials with the practical scepticism of «is it relevant for my patient?». The contributions to the Einsiedeln Symposium, compiled in this book, provide a unique introduction to this field.

By its nature, clinical epidemiology does not distinguish between what now is known as traditional (biomolecular) medicine and other forms of clinical therapy, often called alternative or unconventional therapy. Thus the boundaries of biomolecular medicine are likely to be extended through the application of practical criteria to the measurement of therapeutic results. The observation-oriented research methods taught at the symposium allow the study of the practical effect of therapy without requiring that the theoretical mechanism of the therapeutic effect be established through controlled theoretical conformity.

Meanwhile, we face a formidable research task, since therapeutic outcomes measurement is confounded by many sources of bias and threats to validity and reliability. Until now, methodologically acceptable studies of the effect of unconventional therapies have been very rare, and the position of these therapies remains largely unclarified. In order to further case management in a direction which maximizes the benefit for the patient, conventional and unconventional modes of therapeutic theory and research of their effects must be combined.

PARACELSUS was discredited by his colleagues because his observations and perception set were not accepted by them. PARACELSUS saw that one's perception set is coloured by the society in which one lives. PARACELSUS foretold the limits of our physico-chemical procedures in measuring biological phenomena. As he once said, «Because the stars are visible does not mean that they are heaven!» History has, one might say, vindicated PARACELSUS. Similarly, discrediting alternative therapies through biomolecular theory because we cannot see or measure the strength of the postulated mechanisms carries the risk of relegating beneficial therapies to the sidelines of medical practice.

In our society, symptoms of illness are generally considered to be disturbing and negative, and our efforts to deal with the symptoms are directed at eradicating the disturbance. The fascination with the potential of modern technology contributes to the increasing one-sidedness of this disease model. On the other

hand, the communication possibilities opened by technology allow us as never before to look beyond the confines of our own culture. We are learning that symptoms which are viewed in western culture as negative may be perceived as a positive sign in a healing process in other cultures.

If indeed some of the symptoms which we view an indication for treatment rather are indicators of a healing process which we should be enhancing, a completely new medical problem arises, i.e. how to find which these symptoms are and when and how to enhance the healing process. Only through methodologically sound, controlled observation will it become clear whether a symptom is best eradicated or enhanced in terms of its meaning for the ultimate outcome. In the Western mind frame, the poles of this continuum from the patient's point of view are acquiescence and action. Historically, we have prioritized action (the eradication of symptoms) with a concomitant loss of acquiescence (allowing the symptoms to persist while enhancing the healing process) and a reduced sensitivity to natural processes. In spite of his strong antiauthoritarian and anticlerical attitude (he considered the clergy to follow a theoretical religion alienated from practical needs), PARACELUSUS was convinced that «practical religion» was a necessary healing element in overcoming the fear of distressing symptoms.

Careful critical appraisals suggest that many therapies and preventive measures currently practised have no demonstrable effect when controlled for biases in conventional medical reasoning. For example, it appears that early cancer detection, with a few exceptions, is not beneficial. Instead of facing death and its trappings, we often engage in vain activism. This tendency is reinforced by an age-old illusion of life without suffering which is again reinforced by the promise of technological advances which might relieve suffering. Meanwhile, it becomes an intriguing hypothesis that progress is perhaps actually being impeded, since we are neglecting case management advances which might be made through a more relaxed culture around death. It is the combination of the critical appraisal concept with the sojourn into the realm of acquiescence which gave the Einsiedeln Symposium its logical basis.

The foundation *Paracelsus Today - Foundation for Innovative Critical Appraisal and Practice in Medicine* feels encouraged by the result of this book to continue its work with further publications and conferences (see announcement on page 270). We hope you enjoy reading this book, and we will be pleased if this book impacts your practice or perception of medicine. We look forward to seeing you sometime in Einsiedeln at one of the future seminars and congresses.

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