DIAGNOSIS AND RISK MANAGEMENT IN PRIMARY CARE

words that count, numbers that speak

Wilfrid Treasure

FOREWORD BY ROGER JONES

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Foreword

It is a great pleasure to write a short introduction to this beautifully written book which I believe will have a major impact on the way that new generations of primary care doctors approach their work. Reading Diagnosis and Risk Management in Primary Care immediately took me back to twenty years ago, and the publication of Clinical Epidemiology: a basic science for clinical medicine written by David Sackett and colleagues – a book which had a profound personal effect on me and massively influenced medical practice in the US, UK and many other western health systems. At the time of publication, diagnosis in primary care was generally based on anecdote and received wisdom, bedside teaching in hospitals often lacked an evidence base and few undergraduate medical curricula included instruction in biostatistics and clinical epidemiology. It was difficult to see the scientia among the caritas.

Now, in the 21st century, medical practice is dominated by the strictures of evidence based medicine, the conclusions of meta-analyses, algorithmic guidelines and checklists. It can be difficult to see the patient amongst the paperwork. What a breath of fresh air, then, to find an author capable of holding these extreme paradigms, along with others, and to put the patient back at the centre of the consultation in which the lessons of clinical epidemiology are synthesised with those of experience, narrative and biography – and who is able to entertain at the same time as he informs and to stimulate critical reflection while, with an enviable lightness of touch, nudging us in the direction of a rigorous approach to diagnosis and the assessment and communication of risk.

It would be a pity if the only readers of this book were family doctors, general practitioners and their teams, because as well as providing learners, teachers and practitioners with a unique source of instruction, many of the pages contain material that needs to be understood by all clinicians. The opening chapter on Diagnosis, for example looks at the multiple processes involved in approaching a diagnosis and the multiple implications of diagnosis-making for the doctor as well as the patient. Residents in the out patient clinic would benefit from having this chapter metaphorically on their shoulder, and it, along with most of the rest

of the book, should be required reading for students and trainees. The same goes for statistics – rehabilitating likelihood ratios and odds – *Icebergs, Words that count* – no-one need ever get lost in a consultation again - and the lovely *Pattern design* chapter, which re-opens the diagnostic black box and provides fresh insights into the nuts and bolts of diagnostic decision making.

This isn't an easy read, not because of the writing - which is pretty well faultless – but because it makes demands on the reader. It makes us question our established viewpoints at many levels and opens new avenues of thought which are likely to enhance the consulting and diagnostic skills of the crustiest GP. And it is almost all brand new. Apart from the *Numbers that speak* chapter – a sort of well organised Schott's Miscellany of Medicine, providing facts and figures which constantly surprise, challenge and inform, and which is derived from the literature - the book has been written from the bottom up, drawing its authority from a remarkably wide reading, while reflecting the essence of Wilfrid Treasure's sophisticated and humane stance.

If you need to understand how the health system works, how the NHS runs, what is good and bad about it and where we might be heading in the future, settle down with something warming and simply enjoy chapter 2, on *Healthcare design*. In less pages than are occupied by the executive summary of some Department of Health publications, Treasure tells any willing consumer all they need to know about healthcare – this is the chapter our politicians need to read now and deserves separate publication as a guide for the perplexed on all sides of the political divide.

As resources shrink, lives extend, expectations and costs rise and the information load grows exponentially we need both a scientific and moral compass to negotiate the future of medicine. Medical education, professional training, continuing professional development and policy innovation all have a role to play in securing a future that we can, literally, live with. The wisdom and guidance captured in this book are gold dust which needs to be absorbed and understood by all those involved in shaping medicine in the years ahead.

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May 2011

Preface

'It is dangerous to have two cultures that can't or don't communicate. In a time when science is determining much of our destiny, that is, whether we live or die, it is dangerous in the most practical terms.'

Snow CP. *The Two Cultures*. Cambridge: Cambridge University Press; 1959.

'PATIENT: " . . . I'm nearly 45 and I suppose I must be on the change now?"
DOCTOR: "What shall I tell you now?"
PATIENT: (Laughter) "No . . . Women have done it before."
DOCTOR: "Is that what you are telling yourself?"
PATIENT: "That's what I'm presuming . . . I don't know."
DOCTOR: "Mmm, mmm …. " '.

This exchange takes place early in an audiotaped consultation forming part of a seminal mixed methodology observational study conducted by two alumni of the Royal College of General Practitioners and published in 1976.[1] It's moving. The patient seems to be in a fog. She speaks and reaches out for guidance. The doctor says enough to let her know he's heard and he takes her hand but doesn't lead because he doesn't yet know where they're going. Over the next few minutes, the mist clears and they can see their way. Some of the mystery[2] is solved. The consultation might have turned into a discussion about the menopause: instead it becomes an opportunity for the patient to talk about her mother's nervous breakdown. The patient might have gone away pathologised, prescription in hand: instead a woman leaves less worried and more confident—healthier—than before. At the time I read it in 1989, I might have carried from my hospital registrar post into my general practice traineeship the biomechanical model of medicine, and confidently pointed lost patients towards their diseases: instead I was introduced to a gentler touch, a quieter way of observing, more intelligent listening.

Listening intelligently, I realised, didn't mean showing my intelligence. 'What shall I tell you now?' doesn't seem to mean anything. The doctor's speaking to let the patient know he's there.[3] The question hangs in the air between them until an

answer begins to emerge. After 20 years of practice—and practising—I understand this a little better.

Consulting requires judicious use of words and numbers. There are other things that matter. But if we can't use words effectively and don't know any figures, we'll flounder. We don't need to be particularly articulate—and certainly not verbose—but we need to be able to hear what the patient is trying to tell us and respond in a way that's comprehensible and comforting. Numbers underlie what we do even though we often don't refer to them directly. In fact, we're necessarily selective in what we articulate—we think more than we say. This book attempts to provide an account of the set of communication skills along with the stock of facts and figures needed to conduct an adequate consultation in general practice.

I think my job as a GP is to give patients the chance to live longer, healthier lives. To do this, I need to combine evidence-based medicine with patient-centred consulting. Is there a tension between being patient-centred and being evidence-based? 'Overall diagnosis', which is one of the aims of patient-centred medicine, includes identifying physical illness using the biomechanical model.[4] And evidence-based medicine uses the individual patient's 'predicaments, rights, and preferences' in decision making.[5] So if there is a tension between the two, it's like the tension in a watch spring that makes the hands turn around.

Cochrane said 'all effective treatment must be free':[6] I would add 'all free treatment must be effective'. To move towards that goal requires the clinician not just to use evidence in the consulting room, but to work with researchers to identify and develop the evidence that's needed.[7] The two cultures considered by CP Snow to have become disconnected were literature and science.[8] The two cultures whose division, I think, jeopardises good healthcare are general practice and medical research.[9]

This book's main title, *Diagnosis and Risk Management,* derives from the first and last chapters. Chapter 1 diagnoses the diagnosis: if we're solving puzzles, we need a rulebook;[10] if we're looking for meaning, we want a phrasebook.[11] The last chapter addresses risk management and argues that practice is safest and the patient most satisfied when we keep our diagnostic minds and our consulting room doors open. Chapter 2 on healthcare design takes the form of a discussion, a device that enables a range of referenced facts and opinions to be presented in a condensed form: it envisages progressive judicious assimilation of technology into traditional holistic general practice. In Chapter 3, it's proposed that statistical stumbling blocks like sensitivity and specificity be replaced with the building blocks of likelihood ratios and odds. Chapter 4 is based on the symptom iceberg[12, 13]—the large volume of distress present in the community of which we see just the tip in our consulting rooms: the examples given are depression, sore throat, and colorectal cancer. Chapters 5 and 6 provide the book's subtitle. Chapter 5 is a repository of numbers that speak: the prevalences of different diseases and the likelihood ratios attached to symptoms, signs, and tests that help us in diagnosis. Chapter 6 is about the words that count: it's a guide to consulting skills, covering a spectrum from the most patient-centred

to the most doctor-centred and stressing the importance of reflecting and checking. In Chapter 7, clinical acumen is analysed in an attempt to discover what it's made of and whether it can be learned and taught. Chapter 8 looks at the education of general practitioners from medical school application to retirement: it identifies the objective criteria that have to be met to pass examinations while emphasising the importance of role modelling.

The book is densely evidenced, material from elsewhere sometimes being used unchanged, sometimes developed in different directions from the original. For broad concepts and detailed statistical information, I've tried to track down and refer to the primary source because every iteration—every subsequent commentator's paraphrase—will have changed the meaning. For ideas and statistics that have been usefully summarised, I've referred to the summary rather than to the original. Where technical terms form not a route but a barrier to understanding, I've bypassed them.

The contents of this book are based on what I've learned while consulting, teaching, and working with other members of the team in a large general practice in an area of deprivation in Edinburgh, Scotland. This experience has been supplemented by meetings, discussions, and reading. To avoid a 'pantomime of caution',[14] the provisional and personal nature of the views expressed throughout the book is implied rather than stated explicitly every time. There'll be aspects of general practice—in the UK and certainly beyond—that aren't captured. However, despite differences in health and healthcare around the world, evidence exists for the importance of universal access to sustainable,[15] low-technology management[16] provided in a patient-centred way in primary care.[17] There should, therefore, be material of some use to all primary care doctors anywhere, not least if they're preparing for MRCGP. With that in mind, the RCGP Curriculum,[18] Competence Framework,[19] and General Medical Council appraisal headings[20] are used as the basis for relevant sections of the book and are referenced.

Wilfrid Treasure
May 2011

Some terms used in this book

For readers not familiar with general practice in the UK, a guide to the meanings of various terms might be helpful. A 'general practitioner' is a primary care physician or family doctor; a 'consultant' or 'specialist' is a senior secondary care doctor or internist; a 'specialist trainee' or 'ST' is a junior doctor specialising in general practice through a series of hospital and primary care posts, and working with a dedicated 'trainer' or 'educational supervisor'; a 'foundation year' or 'FY' doctor is a junior in the first year after graduating who spends some time in general practice under a 'supervisor'; a 'medical student' is an undergraduate; 'surgery' refers both to the building in which a general practitioner works and to a consulting session; a 'house call' or 'home visit' is a consultation in a patient's home or institutional residence; a 'follow up' is a repeat consultation serving as a continuation of an initial consultation; 'assessment' is the same as 'evaluation'; a 'district nurse' is a 'community nurse'; and a 'learner' is anyone wishing to improve —I guess that's all of us.

About the author

Wilfrid Treasure graduated from Guy's Hospital Medical School in 1983 and specialised initially in gastroenterology, becoming a hospital registrar before transferring to general practice. He has worked for 20 years as a full-time general practitioner in Muirhouse Medical Group, a large group practice providing National Health Service care to patients in a part of Edinburgh with a high level of deprivation. He is a trainer and takes part in teaching specialist trainees, foundation-year doctors, and medical students. Before studying medicine he obtained a music degree from Clare College, Cambridge, and continues to play piano in his spare time.

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I'm grateful to Dr. Susannah McLean; when she was my registrar, I taught her a little about patient-centred consulting and now she's a researcher she's taught me something about evidence-based medicine, helping me to interpret and represent research findings more accurately. That said, any discrepancies between what I've read and what I've written are down to me.

I'll always be indebted to Dr. A. Alan Robertson for what I've gained both professionally and personally from knowing him. I'm glad to have the opportunity to thank Dr. J. Roy Robertson, my other partners, and the staff of Muirhouse Medical Group who've been a support and a pleasure to work with for 20 years. I also owe a lot to junior doctors, medical students, and patients for what they've taught me.

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Wilfrid Treasure
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To Ann, for loving me and criticising my writing.

CHAPTER 1

Diagnosis

'If it is to classify as a puzzle, a problem must be characterized by more than an assured solution. There must also be rules that limit both the nature of acceptable solutions and the steps by which they are to be obtained.'

Kuhn TS. *The Structure of Scientific Revolutions*. 2nd ed.
Chicago: University of Chicago Press; 1970.

'Being ill is not a state, it is a status.'

Kennedy I. *The Unmasking of Medicine: a searching look at healthcare today*.
London: Granada Publishing; 1983.

POWER AND CULTURE

Diagnosis is an exercise of power. Doctors are granted their authority to diagnose, formally by society through its institutions[21] and informally by patients through the consultation.[22] Patients have the freedom to decide what material they bring us and we use our discretion in how we respond. If they assert their own authority by diagnosing themselves, we subject that self-diagnosis to scrutiny and decide whether it's accurate or inaccurate, desirable or undesirable, to be accepted, contested, or rejected.[23]

Use of the term 'wear and tear' by an active old woman who deals with her joint pain by 'just getting on with it'[24] might be regarded as accurate, desirable and acceptable, while an idle young man's conviction that he's unfit for any work because of low back pain[25] might be deemed inaccurate, undesirable, and contestable.

The doctor exerts their authority on the diagnostic process against the background of their own personal and cultural values.[26] The patient comes to the surgery in a state of illness; the doctor may or may not grant the illness the status of a disease.[27, 2] The doctor weighs the patient's knowledge and beliefs against their own knowledge and beliefs and arrives at some sort of synthesis or compromise.[28] One doctor might have the skill and inclination to elicit and explore the patient's