Bruce D. Kirkcaldy (Ed.)

The Art and Science of Health Care

Psychology and Human Factors for Practitioners

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Acknowledgments

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Introduction

Introduction

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This book aims to unite various fields of health sciences in a multidisciplinary venture drawing on academics and clinicians from medicine, psychology (clinical, organizational, and cognitive), nursing sciences, biochemistry, economics, and neurosurgery. In part it has grown out of my own professional career of 30 years, the first half of which focused primarily on research and the latter half on clinical practice. Throughout these three decades I am extremely fortunate to have met and collaborated with many colleagues in clinical, health, and organizational psychology who share my enthusiasm to unite clinical psychology, especially psychological health, with occupational and leisure psychology. Ironically, this quest for unity has taken place at a time when conventional authorities in psychology would have viewed such fusion as virtually impossible.

The interdisciplinary approach adopted here has assembled medical and health specialists – representing a rare ensemble of outstanding academics *and* clinicians, all experts in their fields. Collectively, their scholarly outputs reveal the interplay between medicine and psychology and social sciences from many different cultures and faculties, and share my vision of the nexus of psychology and human factors in healthcare.

Getting individuals to participate in such a publishing venture resembles the management of a sailing expedition across unexplored seas. It requires a competent and enduring crew, each an expert in their own field, and a willingness and motivation to endure the hardships whilst not rebelling or abandoning the journey underway. Hence, I value having completed this journey with them and seeing not a single person abandoned or thrown overboard from launch to completion – although the journey had some perilous moments and required the occasional around the clock watch (writing through the midnight hours to meet the deadlines!).

Each chapter addresses questions which will be central for social and policy makers in the public health field in the 21st century. This volume is intended as a creative and exploratory set of guidelines for a wide audience of medical and health professions, including general practitioners, psychiatrists, allied health personnel such as social workers, nurses and counselors and clinical psychologists, and hopefully prove to be of value for health professionals during their training and influence health policy makers. We have deliberately maintained a low level of mathematical or scientific expression to promote clarity of exposition which should ensure its popularity among professionals, researchers, and students alike.

The book is divided into five sections. The first focuses on culture, health, and medicine, the second on personality and health outcome determinants of the medical and healthcare profession. The third section addresses cultural and individual aspects of patient care. A fourth domain centers on cognitive psychology and medical/therapeutic treatment. The volume closes with a section on the barriers of economics and literacy in health care. To some extent this division is idiosyncratic. It could have easily been dichotomized into the more and less scientific/artistic categories. But that would have given a distorted impression that health sciences are an "either (science) or (art)" domain, when many of us in this crew feel that the health sciences require a fusion of both, a blend of art and science.

Again we all hope that the reader finds this collection of essays both up-to-date and practical. We have aimed to produce an innovative book offering creative guidance on the changing face of medicine. The book is also international, it assumes that there are common aspects in the experience of "being a health professional." It focuses on the physician's and health practitioner's experience, including the psychosocial environment in which she or he works and lives. It broadens common conceptions, and provides stimulation for physicians and others as they seek to understand more about their journeys across the unsettled seas of health and medicine.

Let me briefly provide a summary of the structure and content of the sections of the book.

Martin Brune begins from a biological perspective. Evolutionary medicine is a highly interdisciplinary field that draws from biology, psychology, anthropology, and diverse fields of medicine. One view argues that many contemporary social, psychological, and physical ills are the result of incompatibilities between the environments of human evolution and those in which most of us live today. This chapter provides an overview of the field of evolutionary medicine with selected examples and proposes that, by adopting an evolutionary perspective, medical researchers, and healthcare providers may be able to approach contemporary health challenges in ways that improve health and well-being. The chapter begins with an introduction to evolutionary medicine and goes on to examine selected health challenges from an evolutionary perspective, including: Medical consequences of bipedalism, evolved bodies and modern lifestyles, and evolution and reproduction. Martin then outlines further an evolutionary view of "normal" health and offers his ideas on what medicine can gain from an understanding of evolution.

In clinical practice, irrespective of medical or psychological ailment, health practitioners will observe sleeping disorders amongst their patients, although the effects of such problems are frequently overlooked. Indeed medical and allied personnel themselves are often "victims" of such disruptions in circadian rhythms. In Chapter 2, Timo Partonen, Finland Institute of Mental Health, examines the impact of biological rhythms of work and health among medical doctors and nursing personnel. His chapter defines the concept of circadian misalignment, followed by a brief introduction to the circadian and sleep processes in humans. Timo then summarizes relevant research results from simulated (Laboratory) and field (real situation) studies of shift work on performance in medical

profession, and makes recommendations based on scientific trials regarding monitoring sleep-wake patterns and to improve adaptation to night-shift work in particular.

Over the last two decades, there has been a significant increase in the use of pharmaceuticals especially in the developed industrialized nations for the treatment of ill-health and psychological disorders. Some have labeled this an "Era of Medication." Chapter 3 by Bruce Kirkcaldy, Adrian Furnham, and Georg Siefen begins with a review of the literature on the relationship between well-being and medication. Drawing on various cross-cultural data bases from the World Health Organization, the UN and additional sources, the authors examine cross-cultural differences in psychopharmaceutical expenditure, highlighting specific psycho-pharmacological agents such as antidepressives, anxiolytic medication, and hypnotics/sedatives medication. They analyze the relationship between medication health costs and life satisfaction. Exploratory analyses are provided on the prevalence of psychological disorders and suicide rates across countries, as well as the relationships between psychotropic drug use and psychological well-being and physical health. Finally, the association between socioeconomic factors and psychopharmaceutical consumption are examined, and the implications of these findings for future healthcare research.

In an American contribution, Richard Bogue and colleagues from Florida provide an overview of the research and prominent lines of thought related to physician motivation, physician satisfaction, and what it means to be an excellent physician. The chapter begins by exploring why people choose to become physicians, and the factors influencing choice of medical speciality. They then review three general lines of physician satisfaction research: (1) the most prominent in hospitals and health systems asks doctors to provide feedback on their work environment, (2) a second area focuses on how features of work and organization affect physician satisfaction, often using the term "career satisfaction," and (3) a third line of work attempts to index and understand physician satisfaction from the standpoint of physicians, including their work environment, work tasks, work relationships, and personal lives. They conclude by focusing on the two dimensions of being an effective physician, the cure and the care of medicine, being a flawless technician and a complete person.

In the next chapter, Bruce Kirkcaldy and colleagues provide a comprehensive review of the literature in stress and health outcomes among the medical professions. They begin by examining the "changing face of medicine," resulting in part from statutory, legislative, and technological innovations that have shifted the traditional medical health care into a new "orbit." Different personalities seem to be gravitating towards the occupation of medicine, whilst others are being pushed away. The authors examine the magnitude of the problem of stress and specific sources of stress among health professionals. A review follows on the consequences of stress in terms of emotional and psychological distress, job burnout, self-destructive behavior, physical illness (and absenteeism), work satisfaction, and worker-related accidents. As in the chapter by Bogue and colleagues, they look at differences between generalists and specialists. Finally, sociodemographic factors are examined such as age, gender and parenthood. They include details of analyses derived from their German survey(s) of the medical profession, showing, among other findings, that

medical practitioners' perception of occupational stress and work climate differed significantly between general practitioners and specialists. The implications of these findings are discussed and practical advice is given on how to tackle problems of stress-related ailments among the medical health profession.

Adrian Furnham's chapter reviews the literature on factors influencing our choice of medical practitioner. How do patients decide by which medical doctor they prefer to be treated? Adrian looks at the choices involved in selecting a general practitioner and those for a specialist. The chapter explores the medical consultation from the perspective of the patient and focuses on the academic literature on patient choice. It includes a section on communicative competence and subjective evaluation of clinical competence. He explores studies on demographic preferences, especially age and ethnicity, and their role in patient selection of medical treatments, and then examines why patients like what health professionals in alternative medicine do.

The practice of psychiatry and medicine does not occur in a vacuum. Society determines resources in training and salaries. The last chapter in the second section on medical health professionals is written by the British psychiatrist Dinesh Bhugra and his Indian colleague, Gurvinder Kalra, and they emphasize the methods of teaching the trainers and what works for medical professionals. Professionalism, they argue, is about primacy of patient welfare, managing resources effectively, ethical practice, and altruistic service. The medical and psychiatric professions would like to have autonomy, but recent medical scandals in the UK have changed the landscape of healthcare regulation. Consequently, instilling professionalism and leadership skills at an early stage is important. The authors explore the attributes of professionalism and leadership, the role of training and its components, and the various tools available to trainers. Finally, the implications of different approaches to training and instilling professionalism are explained.

The third section of this volume shifts towards patient care. A contribution from Rachel Davis and Charles Vincent, both from London, explores patient involvement in medical management. They describe what patient involvement is, introducing the terminology used in the literature and discussing discrepancies among definitions. They review why involvement is important and when the movement from paternalism to patient-centered care began, mentioning some of the key initiatives, such as the "expert patient program." They go on to explore ways in which patients can be involved, including self-management and patient safety. Rachel and Charles review the literature on whether and when patients want to be involved in their own care and discuss that patient involvement means different things for different patients: Being informed, for example, versus actually participating in health-related behaviors. Several relevant questions are raised: What the barriers are to patient involvement (health literacy, cultural factors, self-efficacy, power differentials)? How can these barriers be overcome? What interventions have been conducted? What works? Finally, they attempt to bring all the above ideas together in the form of key messages for this research for health policy makers.

Jutta Lindert from Germany provides an original contribution on "idioms of ill-health," first defining "idioms of distress" and then analyzing this construct in the context of the DSM IV and the DSM V. Jutta then offers an individual, familial, and cultural model

associated with idioms of expression. The author examines diverse studies on idioms of distress of migrants, patterns of migration (phases of migration) and help-seeking behavior. Finally, the relationships between distress, help-seeking behavior, and social class are explored.

Drug and alcohol abuse are reportedly increasing quite dramatically in the European Community and elsewhere. Our contribution from Greece examines problems dealing with drug abuse especially among immigrant families. Alexander-Stamatios Antoniou and Marina Dalla present their study concentrating on immigration and drug abuse and models for professionals treating refugee and immigrant drug abusers. The main questions addressed are: How do immigrants deal with immigration and acculturation? What risk factors are related to drug abuse among immigrants and refugees? What are the differences in drug abuse among immigrants and natives in Greece? How can professionals become more culturally sensitive in servicing immigrant and refugee drug abusers and their families? Ultimately, immigrants are understood to differentiate their behavior in relation to drug abuse involvement and drug abuse treatment in ways that are instructive to the healing professions.

Over the years Lorraine Sherr has researched intensively in the area of health medicine, especially regarding difficult situations and patients in clinical settings. Together with Natasha Croome they introduce the concepts of difficult patients, difficult situations, and difficult topics. They offer psychological approaches that allow for enhanced abilities to prevent problems in the first place, particularly through doctor-patient communication. Clinicians and practitioners at various levels are offered methods for breaking bad news, and handling subsequent interactions. The chapter also examines mental health problems in nonmental health consultations: Picking up mental health cues, knowing how to handle them, and how they may affect consultations. After providing guidance on dealing with difficult patients they look at "difficult situations" – and handling difficult situations – such as abandoned babies, pregnancy as a result of rape, gender disappointment in childbirth, and mental health problems. Finally, the authors move on to difficult topics including HIV, sex-related issues, dealing with young children, and taking a detailed sexual history.

There has been a surge of interest over the last decade or two of introducing concepts of mindfulness in psychosomatic medicine. In the next chapter, American colleagues address the effect of mindfulness training on health outcome. Shauna Shapiro and her colleague Caitlin Burnham provide a chapter introducing the role of mindfulness in health care, focusing on the implications of mindfulness as it relates to: (1) the mindful therapist, (2) mindfulness-informed therapy, and (3) mindfulness-based therapy. Each of these topics is reviewed, drawing on current research and clinical anecdotes, pointing to the effectiveness of mindfulness training as a way of enhancing therapist effectiveness as well as therapist well being. They also address the issue of clinician stress and burnout, suggesting mindfulness as a self-care technique. And they offer advice on using mindfulness as a health intervention in our daily practices and in clinical training programs. Future directions include the further exploration of the relationship between mindfulness and clinical outcomes, and the incorporation of mindfulness training into education curricula.

Michael Eysenck, a cognitive psychologist by trade, looks in detail at the contribution cognitive psychology has made to medical health care. He first reviews the literature on cognitive functioning and its relevance to health care, particularly through the association of health literacy. He suggests convincingly that low health literacy is related to lower compliance to medical treatment plans, with subsequent inferior health outcomes. Such limitations in cognitive functioning are manifested in deficits in executive functioning, long-term memory, and language comprehension. Eysenck goes on to present compelling evidence that individual differences in various personality dimensions (e.g., neuroticism) play an important role in the development and maintenance of several medical conditions. He focuses in particular on emotion regulation (e.g., distraction, cognitive reappraisal) and the relationship between personality and medical condition, which is often mediated in part by cognitive biases. There has been a rapid increase in our understanding of the cognitive processes and mechanisms contributing to ill health. This research has proved very useful in terms of cognitive interventions designed to reduce the symptoms of diverse medical conditions, such as pain perception, fibromyalgia, and chronic fatigue syndrome, and some of the more successful interventions are discussed in detail.

Willi Ruch, Appletree Rodden, and Rene Pryor combine the expertise of a researcher, a medical practitioner, and a neurosurgeon/artist in their original contribution. For many years the Swiss-German team have explored key concepts in humor and laughter in psychology and medicine. They emphasize the value of implementing humor and laughter in medical and therapeutic scenarios in "appropriate dosages." Laughter "binds people together, leads to relaxation and enhances pain tolerance ... But humor and laughter also represent a double-edged sword." They introduce the field and the measurement of humor and humor-related moods and traits. They explore cognitive and motivational processes associated with humor. The chapter focuses on results from studies on the impact of humor on mental health, and on physical health. Moreover, the question is addressed as to whether humor can be learned/trained? They look at humor and the health movement and the various implementations of humor in hospitals and clinical settings, such as clinic clowns. Finally, the authors explore the potential of implementing humor and other positive oriented interventions in the health setting.

The volume's next chapter looks more intensively at economic factors that relate to health care, centering on the UK model. Douglas McCullough begins with "scarcity and choice" – simple questions, but complex value-laden answers. He discusses in detail the incorporate information costs and economy in health care, the importance of budget definitions, the impacts of patient travel to distant large-scale hospitals, how to ensure adequate numbers of rare cases in physician training, and other economic factors in health care. Douglas then examines and explains prioritizing mechanisms, such as the quality adjusted life year, cost-utility analysis, lattice analysis, and programmed budgeting and marginal analysis (PBMA). He then turns his attention to the scarcity of researchers' time and the resulting conservative bias of research. As the number of researchers increases, so does the degree of competition and the conservative bias of new work, also making support staff harder to get. The author attempts to resolve the question as to who's the "perfect

agent" for the public interest. In this context, he reviews the economic relevance of patient lifestyle choices, sanctions, and the roles of the state, the doctor, and the voter.

Finally, John Skelton from Birmingham Medical School in the UK provides a novel chapter on narrative and literature in health care. His chapter looks at the development over the years of the significance of story-telling for the clinical professions, and suggests how it may develop in the future. The concept of narrative medicine has thrived in recent years in the context of a shifting emphasis, since the 1970s, on the holistic nature of medicine. Skelton makes clear that neither holism nor the idea that the clinician should be a well-rounded individual are new ideas. The pages of *Academic Medicine* from the 1920s frequently reflect on the need for doctors to have an understanding of the Humanities. He demonstrates, however, that in recent years the sophistication of the debate has increased.

There is a nexus of ideas which are generally held to be part and parcel of "holism": Patient-centeredness, empathy and so on. At worst, these are interpreted as a kind of intellectual laziness, the replacement of knowledge and logic by a kind of unfocussed sense of caring and sharing. But in fact, what is at stake is a different understanding of the nature of our world and its people, one which goes beyond the concept of "evidence" defined as the conclusions from experiment. An evidence-based understanding seeks to improve our understanding (and our grasp of how to help patients) by reducing uncertainty. A narrative approach recognizes, in a tradition that goes back to Empson (1930), that this kind of reductionist approach is not the only way of making sense of life. Sometimes to represent the world truly is to represent it as inherently ambiguous.

Let me return to the primary intention of the book. Our goal in inviting contributors to participate in writing these 16 chapters was to reach a target readership of academics and practitioners in the health professions. We are also hopeful this book will meet the needs of pre-med programs and their students, medical schools, medical school students, and the counselors or behaviorists in residency programs, or working for or with health systems. Many of us, in addition to our research and clinical tasks, do some form of teaching and certainly are familiar with the literature in our respective fields. Hence we want to offer not only scientific information relevant for students and professionals alike, but to share some of the more creative and artistic aspects of our work which may be difficult to find in a single authored volume. We hope this book provides diverse strategies and techniques for health practitioners, by interweaving ideas from art and science, hopefully filling a niche in the health literature, and at the very least maybe stimulating new areas for clinical research and practice.

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Culture, Health, and Medicine