B A S I C S I N
MEDICAL
EDUCATION
2nd Edition

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BASICS IN MEDICAL EDUCATION

2nd Edition

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Foreword*

Currently there is a vibrant and passionate debate on seemingly two contradictory positions of medical education establishments. One group muses on how successful the medical schools have been in recent years in cultivating society's best minds and transforming them into mature physicians. The other group's view is less congratulatory. The principal argument of this group is that medical schools are remarkably resistant to adopting the science of medical education. Medical schools are lagging far behind in the advancement in the science of education management. This group paints a gloomier future – either the medical establishment continues to adapt or face eventual atrophy. One may ponder how to reconcile these two seemingly opposing views. It may be that both viewpoints are true – medical schools *are* creating the best physicians but at the same time they are remarkably resistant to adopting new changes in learning and teaching paradigms.

Many argue, reasonably so, that there is a necessity to be cautious in adopting the fast-paced changes. The stakes are much

* This foreword has been reproduced from the 1st edition of the book (Amin Z, Khoo HE, *Basics in Medical Education*, 1st ed., World Scientific Publishing, Singapore, 2003).

higher and a false move is a move that we can ill-afford. Moreover, new is not synonymous with superiority. But, most believe there is a need to change — slow yet steady, cautious but determined at the same time.

Why are the medical faculty and medical schools so reluctant to change? One of the most important factors is the fear of the unknown — a substantial lack of knowledge about the science and art of teaching and learning in medicine. Ignorance breeds fear and fear perpetuates the collective inertia. The general lack of knowledge about teaching and learning among medical teachers is entirely understandable. Most medical teachers were taught in an era when the concepts of medical education were developing. Teaching was mostly teacher dominated, and there was very little emphasis on life-long and self-directed learning. Teaching was more of an art rather than a science without focus on empirical evidence to support the practice. But this cannot go on indefinitely.

Two of my colleagues and fellow medical education enthusiasts have completed the commendable task of bringing the teaching and learning concepts in medicine to the realm of general medical teachers. I am specifically delighted that the target reader of the book is medical teachers, as this is the segment within the medical establishment who needs the knowledge about medical education most. Throughout the book, they have maintained a delicate balance between the 'why' aspects of medical education emphasizing the needs for change and adaptation and the 'how' aspects demonstrating the way concepts and theories of medical education can be of immediate benefit to the medical teachers.

Teaching and learning is a much cherished activity; understanding the science behind teaching and learning should be an even more joyous and attractive pursuit. The book provides us with an easy yet essential reading to medical education. At the same time, it reminds us of the long journey that we eventually will

be taking in keeping up our good job of producing efficient healers for society by gradually embracing what the rich and dynamic field of medical education has to offer.

Professor *Lee Eng Hin*
Dean, Faculty of Medicine
National University of Singapore
December 2002

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Acknowledgments

We are grateful to our colleagues in Singapore and fellow medical educationists from all over the world who read the first edition of this book and gave us constructive feedback. In particular, we wish to thank Drs Matthew Gwee, Koh Dow Rhoon, Roy Joseph, Chong Yap Seng, Marion Aw, Dujeeпа Samarasekera, and Ms Yvonne Ng.

Zubair Amin personally expresses his deep gratitude to his wife Sonia and their daughters Bushra and Samira, his parents Professor Aminul Haque and Mrs Sitara Haque, and his father-in-law Mr Syed Ahmed. Without their unconditional support, the book would not have materialized.

Khoo Hoon Eng thanks Dr Sharifah Hapsah Syed Hassan Shahabuddin, a fellow educationist and now Vice Chancellor of the National University of Malaysia, for her continuing encouragement. She is grateful for the love and support of her sons, Ming and En, who are now contributing to education in their own ways.

August 2008
Singapore and Boston, USA

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Preface

We started to work on the second edition almost immediately after the publication of the first edition of the book four years ago. Major changes have taken place in our professional lives. Khoo Hoon Eng has recently taken on a new assignment as the Vice President for Academic Planning of an exciting new venture, the Asian University for Women. Zubair Amin moved to the Yong Loo Lin School of Medicine at the National University of Singapore, and is currently busy with planning and implementing the revised curriculum there.

Throughout the intervening period, we have continued to learn. We have more first-hand experience with educational program development, teaching, and assessment, especially in resource-limited situations. We have had opportunities to conduct workshops in various countries, resulting in incredibly enriching interactions with many distinguished colleagues. They have challenged us with thought-provoking questions, provided us with new examples, and highlighted issues that are most relevant to medical teachers. All of these have helped us to develop this new edition.

We have kept the sequence of the second edition unchanged. A general overview of medical education leads to educational concepts related to medical education. Subsequent to that, we present, in

sequence, outcome and objectives, teaching and learning methods, and assessment and evaluation.

However, there are major changes within the second edition. We have several new chapters on introductory concepts and assessment. We have revised, consolidated, and rationalized several chapters. Examples of chapters with major revisions include those on educational outcome and objectives, curriculum design and implementation, clinical teaching, assessment, and evaluation. At a micro level, virtually all chapters of the first edition have undergone critical review and necessary changes. We have taken a more pragmatic, rather than idealistic, approach. This is evident in the general tone of the second edition.

There is one thing we have not changed: we still target medical teachers as our intended readers. We have kept the book as an introduction to medical education with a balance between theory and practice scattered with examples.

The end result is a slimmer book that, we sincerely hope, is more readable, practical, and better organized.

We extend our sincere appreciation to the many readers and reviewers who provided us with advice, encouragement, and tips. Please do continue to guide us for an even better third edition.

Zubair Amin
Singapore

Khoo Hoon Eng
Chittagong, Bangladesh

Excerpts from Reviews of the First Edition

"... writing is simple, concise and free of jargon ... They do an excellent job of covering the field of medical education ... is well organized and easy to read and their use of good instructional design techniques not only helps facilitate comprehension of the material, but also provides a good example for the reader to emulate ... I highly recommend this book for anyone entering the field of medical education. It would also serve as an excellent text in faculty development fellowship programs and would be a good addition to medical libraries in teaching hospitals, residency programs and medical schools."

David J Solomon, PhD
Michigan State University
Editor of *Medical Education Online*

"I particularly like the way the 11 sessions, 38 chapters and all the subheadings have been clearly listed in the Contents so that the reader should have little trouble in discovering where to look for the topic of interest. The section on 'Assessment and Evaluation' is one of the better written sections as it provided practical points in guiding medical teachers in the conduct of student assessment and evaluation ... The authors are to be warmly congratulated for having

written a very useful book. I strongly recommend this textbook to medical teachers."

Ho Khek Yu
Annals, Academy of Medicine

"*Basics in Medical Education* represents a refreshing contribution to the current literature on education ... the beauty of the book lies not so much on its contents but on its simplicity of language and its reader-friendly style of presentation."

Singapore Medical Journal

"... handy volume of description. If you are too busy for daily activity to read a thick book, this book will help you and attract you very much."

Hiroataka Onishi, MD, MHPE
Chief, Medical Education Development Committee
Japan Society for Medical Education

"The authors have produced a useful realm of medical education and in doing so, achieved their main aim of delivering a main text of medical education to the general teacher. The book provides the reader with basic instruction in topics relevant to current medical education practices."

Gary Butler
University of Leeds
Book Review in *Education for Health*
The Network: Towards Unity for Health

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