Diabetes education is a process, the key to which is establishing a therapeutic relationship with the individual. The overall goal of diabetes education is to enhance the individual’s health capability, including their ability to solve problems and apply the learning to self-care. Thus, diabetes education is an interactive process of teaching and learning where information is co-generated. This innovative and thought-stimulating new book explores the ‘how’ of diabetes education, rather than the ‘what’ and the ‘why’.

Diabetes Education: Art, Science and Evidence will help health care practitioners teach diabetes effectively from diagnosis and ensure people living with diabetes receive individualised support and information. It will enable practitioners and educators to examine and reflect on their practice when managing the person with diabetes. Bringing together all the thinking and experience of the diabetes journey in one text – this book is essential reading for all practitioners and students involved in diabetes care.

SPECIAL FEATURES

• Explores the ‘how’ of diabetes education, rather than the ‘what’ and the ‘why’

• Features short stories, case studies, illustrative quotes, practice points and reflection points throughout

• Edited by an internationally renowned expert in the field, with contributions from some of the world’s leading diabetes educators

ABOUT THE EDITOR

Professor Trisha Dunning AM is Chair in Nursing, Deakin University and Barwon Health and a Clinical Nurse Consultant in Diabetes Education, Geelong, Australia. She is widely published in peer reviewed journals and non-peer reviewed publications, and is on the editorial boards and reviews panels of several health professional journals. Trisha also writes regular columns for The Australian Diabetes Educator and Diabetes Conquest. In addition, she is a highly experienced clinical nurse consultant having worked in the field for over 20 years.
Diabetes Education
Education is not the filling of a pail but the lighting of a fire.
(W.B. Yeats 1865–1939)
Diabetes Education

Art, Science and Evidence

Edited by

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Foreword

Trisha Dunning and her co-authors have compiled a book that knits state-of-the-art research findings with best clinical practice and good common sense to produce a most readable book of everyday application to clinicians and healthcare professionals in diabetes, as well as to the more enquiring person with diabetes seeking quality information. They are to be warmly congratulated for the many recommendations and helpful tips in the book, which derive from their lifetime in professional practice.

What particularly struck me was the vein of empathy with the person with diabetes that runs throughout the book. Those with diabetes so often fear that disappointing results at their clinic visit will earn disapproval or judgement, but the most welcome standpoint of the authors is to be non-judgemental and thoroughly supportive of those whom they serve, those with diabetes. For that reason, people starting their journey of diabetes and their carers would also profit from reading this book. Although learned, it contains a wealth of valuable information that can support them in the daily challenge of living with a chronic disease whose complications can, indeed, be life-threatening.

Although it is now over 25 years since I carried my comatose five-year-old daughter Kate into hospital with diabetic ketoacidosis, I shall never forget the sense of bewilderment and anxiety that engulfed me and the brutal realisation that this little child now faced a lifetime of insulin injections. How it would have helped to put everything in perspective for my wife, Naomi, and myself had we encountered at the outset, health practitioners of the sensitivity of the authors! That said, Kate was well cared for, and I can testify to the continuing gratitude parents and carers feel for those who care for their dependent child with diabetes. Together in Glasgow’s Royal Hospital for Sick Children, a ‘triangle of care’ was formed between the caring professionals, my daughter Kate as the person with diabetes, and Naomi as the principal carer. When that triangle of care works well, there are immense benefits for all, and there are frequent references in the book to that potential for successful and mutually beneficial relationships between professionals and patients.

Without in any way denying the impressive support of the paediatric diabetologist, the key professional in that triangle of care was the Diabetes
Nurse Specialist. As unflappable as she was caring, she was indeed the educator, the source of advice, the encourager, the soother, the reassurer. She was the embodiment of all the fine attributes of the educator to which there is frequent implicit reference in the book. Without the ready access to such support, as carers we could easily have felt isolated and helpless when problems arose. It will come as no surprise that, to this day, I carry a standard for the nurse educator professionals.

This book is additionally welcome because not only does it summarise the best of diabetes care but it ‘encourages educators to reflect on their philosophy of diabetes education and how they teach’. Educators are encouraged to excel and the myriad of practical recommendations—together with a vast anthology of references and research—should satisfy the most enquiring mind. Writing in my capacity as the incoming Global President of the International Diabetes Federation, I know instinctively that better informed, more accomplished educators will succeed in helping their patients to maintain better control of their diabetes.

It is not, however, just clinicians and healthcare professionals who can benefit from this book. As the information revolution advances inexorably, people with diabetes can inform themselves in a way that would have been unthinkable a generation ago. Kari Harno’s compelling chapter on the Internet superhighway highlights the many exciting opportunities now opening up to harness technology to help those with diabetes to obtain optimal outcomes. It set me thinking of the many imaginative ways in which diabetes care and self-management could be revolutionised and improved. The ‘quest for a better way’, intrinsic in the human spirit, will bring undoubted benefits in the future to people with diabetes, reminding and supporting them to do the basic things that help maintain good control and a healthy life.

As a non-clinician, I found this book enjoyable to read but could not help relating the observations and anecdotes to the experiences of Kate, Naomi and myself in years past. I particularly liked Chapter 2 where Jane Speight and Harsimran Singh describe the journey of the person with diabetes and their observation that ‘overcoming emotional reactions is likely to be one of the most important steps a person can take to manage their diabetes successfully. Yet, it is singularly the most overlooked aspect of diabetes care. Time and money are spent on screening for retinopathy and other complications of diabetes, and yet, very little effort is put into screening for emotional distress’. The authors of this chapter are right to highlight the imperative for health professionals to understand the role of the individual’s family context in their diabetes management.

Reflecting honestly, I can see how daughter Kate’s outcomes could have been improved if she had had access to proper psychosocial support at key times of her diabetes journey in adolescence and young adult life when leaving home weakened the parental influence on compliance. The importance of such psychosocial support is emphasised, directly and by
implication, in many places in the book. I remain interested in the different ways in which such support can be offered and found myself in strong agreement with Gretchen Piatt’s views on the beneficial effects of peer support. Whatever else, I am convinced that parents—hardwired to be protective—are not the best or right people to counsel when young people find compliance a tiresome burden, not least when they see their peers enjoying the diabetes-free existence they envy.

As with much else in life, effective communication can be the difference between success and failure. Trisha Dunning’s chapter on effective communication is essential reading for those who daily interact with patients. Nowhere is there a greater requirement for effective communication than in the therapeutic patient education that she rightly identifies as an essential component of equipping the person with diabetes to achieve optimal outcomes. Trisha’s chapters on education are pure gold, coupling practical experience with theory to produce guidance from which all health professionals can benefit. It is perhaps trite, but true, that continuing quality professional education is inseparable from good health outcomes, and without the benefits of good recurring education, the latter will be hard to achieve.

I hope that this book will be suggested if not prescribed reading for those who work in diabetes care. I hope too that those who read it, reflecting regularly as they do so, will find it relevant and useful and will thereby be empowered to care even more effectively for their patients with diabetes.

Sir Michael Hirst
June 2012
The word ‘education’ is interesting. It is derived from the Latin *educare*, to bring up, which is related to *educere*, to bring forth that which is within or bring out potential, and *ducere*, to lead. Significantly, *educare* also contains the word care.

There are many scientific books and papers about education including diabetes education—so why write another one? Ancient sages commanded ‘physician know thyself’ and suggested ‘physician heal thyself’. Both these sentiments are at the heart of this book. At the end of each chapter is a list of questions to encourage educators to reflect on what they read and what they need to know to develop the courage to really teach, rather than just provide information.

Therein lies an important distinction—educators share their knowledge by providing information. The person who receives the information turns it into knowledge through complicated mental processes and is in control of what they learn and what they do with the information. Thus, an effective educator finds ways to develop the skills to ‘sell’ their messages by tailoring them to suit the individual. To do so, the educator must be open to new information sourced from numerous places and must know how to apply the information effectively. Above all, they need to actively cultivate the art of listening and being fully present in each encounter. Sometimes, just being there is enough.

Joslin emphasised the importance of diabetes education in the 1920s, but clear evidence for its value was not documented until the 1970s when Miller demonstrated a link between reduced hospital admissions for ketoacidosis and hypoglycaemia and diabetes education. A great deal of research has been undertaken since then, which suggests knowledge is important; however, knowledge alone is not enough to encourage people to engage in effective self-care. An effective therapeutic relationship is a key determining factor.

Many educators assume people newly diagnosed with diabetes know very little about diabetes and require rigorous detailed diabetes education to overcome their knowledge deficits to be able to undertake self-care. In fact, many people with diabetes have some information about the disease, have developed an explanatory model to explain *their* diabetes...
and sought ‘facts’ about the disease. These explanatory models and ‘facts’ may be very different from those of educators: in fact they usually are, but they are no less ‘true’. Educators often regard people’s explanatory models as myths to be dispelled rather than accepting them as part of the individual’s story to be explored, discussed and understood.

Significantly, to the individual, diabetes is not ‘failure of the pancreas to produce insulin’, or ‘insulin that does not work properly’ that needs to be ‘addressed’, ‘managed’, ‘treated’, ‘fixed’ or ‘cured’. It is an emotional as well as physical presence that affects the individual’s whole being for the rest of their lives. Importantly, the physical aspects of people’s reactions cannot be separated from their emotional, social, economic and environmental circumstances. Thus, accepting diabetes and coping with the hard work of self-care for a lifetime has a significant impact and is part of the individual’s personal journey. Most people do not make the journey alone, so involving family and other relevant carers is essential.

Although research has identified many commonalities in the way people react to diabetes diagnosis and their self-care behaviours, educators must never assume the commonality fits the person in front of them. They must strive to understand the individual’s unique story and the social and environmental factors that shape their story.

In fact, psychosocial and environmental factors, including culture, support, health and other beliefs, fears, locus of control, effective communication and therapeutic relationship, may have a greater effect on outcomes than knowledge. Thus, the educator’s social and emotional intelligence is as, or more, important than their knowledge of diabetes, the disease.

Many valid tools are available to measure these parameters—most of them focus on the person with diabetes, and success is largely concerned with whether the individual with diabetes’ knowledge improves, they stay out of hospital and whether their blood pressure, $\text{HbA}_1\text{c}$ and lipids are ‘normal’. Education and clinical care largely focuses on changing the person with diabetes. Equal focus must be placed on changing/enhancing, and measuring, the educator’s capacity to communicate, engage, empathise and engender hope: that is to effectively combine art and science.

Many models describe ways to help people with diabetes and optimal diabetes services. In addition, models such as the Health Belief Model, the Transtheoretical Model of Change and the Chronic Disease Model are widely used as the conceptual framework for diabetes education, service planning and research. However, few, if any, of these models help educators develop the skills to move from ‘good’ to ‘exceptional’ educators.

Diabetes care has come a long way, since it was first described as diabetes maigre (bad prognosis) and diabetes gros (big diabetes). Science and technology continue to make major contributions to our understanding of diabetes and produce new management options. However, the prime focus of this book is on exploring effective teaching and learning and
suggesting how educators can continue to learn and grow professionally and personally, rather than on the disease, ‘diabetes’.

The book is not concerned with what diabetes is, or medical care, and the focus is not on what people with diabetes need to know, or what they should be taught. Such information is clearly documented in many care standards, clinical practice guidelines and other publications. The book aims to encourage educators to reflect on their philosophy of diabetes education and how they teach.

Hopefully, the book will encourage educators to read widely, including fiction as well as clinical publications and evidence-based literature. Reading fiction enhances people’s social and emotional intelligence. Debating about and reflecting on a broad range of topics can help educators understand themselves as well as people with diabetes. Significantly, educators are not immune from illness, including diabetes, which can affect the quality of their lives and how they teach and provide care.

Carl Rogers stated:

*Relationships can’t flourish if they do not operate in a climate of listening and non-judgmental acceptance of the other person’s point of view. Empathy is the hallmark of a genuine person.*

Rogers (1902–1987)

Trisha Dunning AM
Many people were inspirational during planning and writing this book. Most of the inspiration and challenges came from the people with diabetes I have been privileged to know since I began my journey as a diabetes educator in 1984—they were and continue to be my true teachers and a source of inspiration.

I am also grateful to the many fiction/creative writers whose great books help me reflect on how I behave in my personal and professional lives. These include the members of Geelong Writers and Deakin Literacy Society who critique my stories and poetry and share their life experiences and insights through their writing.

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Michelle Robins and I thank Diabetes Australia-Victoria and the Victorian Aboriginal Community Controlled Health Organisation (VACCHO) for permission to reproduce the Feltman teaching tool shown in Figure 10.1.

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The book would not exist without the fabulous work and enthusiasm of the authors.

I am deeply grateful to Sir Michael Hirst, President Elect of the International Diabetes Federation, for agreeing to write the foreword and for writing such a great foreword despite being so busy.

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Trisha Dunning AM
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Figure 12.1 Overview of current health IT technologies used by healthcare providers or diabetic patients. Provider technologies represent comprehensive care applications in chronic care. Data are captured by professionals and information stored securely within the organisations.
Patient applications support self-care management and enable diabetics to capture and review their own data, which may be shared with a third party over the Internet.

Figure 12.2 The Continua Alliance has designed the guidelines towards the establishment of a personal eHealth ecosystem. These guidelines address the technical barriers and interoperability amongst different vendors allowing the transfer of data from self-management tools in this ecosystem. The diabetics that are supported by personal health tools engineer awareness and motivation, augment patients’ power to take decisions and be proactive in taking responsibility for their health (www.continualliance.org).

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