## Pharmacist Disease Management: Diabetes. 3rd edition

American Pharmacists Association, Washington, DC, 2005. ISBN 1-58212-082-X. Softcover, 155 pages. US\$99.95 for nonmembers.

This book provides a practical, thorough review of the basics of diabetes for pharmacists. The book is divided into 3 modules, each of which is preceded by learning objectives and followed by learning reinforcement exercises ("fill-in-the-blank" questions, with answers displayed upside-down after each question) and a 20-question self-study exam (for a total of 60 questions). Completion of all 3 exams qualifies the reader for 15 contact hours or 1.5 continuing education units from the American Pharmacists Association (APhA). Much of the

content was originally published as a certificate training program titled "Pharmaceutical Care for Patients with Diabetes", developed jointly by the American Association of Diabetes Educators and the APhA. This third edition replaces the second edition, which was published in 2003.

Module 1 reviews basic disease information such as pathophysiology, diagnosis, acute and long-term complications, landmark clinical trials demonstrating the benefit of optimal glycemic control, and current targets for blood glucose and glycosylated hemoglobin (HbA $_{\rm IC}$ ).

Module 2 describes in detail the use of nutrition therapy, physical activity, and insulin therapy, as well as treatment with oral antihyperglycemic agents. Also included are sections on monitoring glycemic control and the treatment of dyslipidemia, hypertension, and long-term microvascular complications (neuropathy, retinopathy, and nephropathy). The remainder of the module addresses proper care of the skin, feet, eyes, and teeth, as well as immunization and smoking cessation.

Module 3 focuses on diabetes education, psychosocial issues, behavioural counselling, cultural sensitivity, and implementation of diabetes care in the pharmacist's practice.

The strengths of this book include the wide variety of aspects of diabetes management that are addressed and the fact that it was developed specifically for pharmacists. The basic disease information in module 1 is clear and concise, providing just enough detail for a solid understanding without being unnecessarily complicated.

Module 3 should prove particularly helpful to pharmacists interested in providing intensive diabetes education and disease management for their clients. The inclusion of teaching strategies and the provision of insight into behavioural issues should enable the reader to become an effective member of the health care team delivering diabetes care.

The book was written by, and is intended primarily for, American pharmacists. Accordingly, it cites the guidelines, recommendations, and standards of the American Diabetes Association. This limits the applicability of some of the material for audiences outside the United States. Canadian pharmacists should be familiar with, and should provide advice based on, the recommendations of the Canadian Diabetes Association (CDA). Specifically, the CDA's 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada¹ should generally take precedence over corresponding material in the APhA textbook.

Other country-specific limitations of the book include the fact that the standards (e.g., eligibility requirements) for

certified diabetes educators presented in the book are those of the American Association of Diabetes Educators, which differ from those of the CDA. As well, readers should be aware that the book generally does not use SI units for blood glucose values and blood lipid concentrations (mmol/L). Finally, the drug products listed reflect availability on the US market, which differs substantially from the Canadian market.

References to support the information presented are limited. Although the source of material in tables and figures is often identified, statements in the body text are not referenced. Instead, each section within each of the modules is followed by a list of "Additional Resources".

One area of weakness, in the opinion of this reviewer, is the section on oral antihyperglycemic agents. Although basic information is provided, there is no discussion about the relative efficacy (HbA $_{\rm IC}$ -lowering capacity) of the various agents and no information concerning their place in therapy (e.g., first-line or otherwise). This reviewer advises readers to consult the CDA guidelines for the pharmacologic management of type 2 diabetes.<sup>2</sup>

In summary, this resource can be recommended to Canadian pharmacists as a primer on diabetes. Despite its American content, it has many strengths, including a practical approach, broad coverage of the issues, inclusion of continuing education quizzes, and provision of unique material relating to delivery of diabetes education and teaching of self-management skills by pharmacists for their clients with diabetes.

## References

- Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Canadian Diabetes Association 2003 clinical practice guidelines for the prevention and management of diabetes in Canada. Can J Diabetes 2003;27(Suppl 2):S1-S152.
  Also available from: http://www.diabetes.ca/cpg2003/down-load.aspx [cited 2006 Feb 14].
- Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Pharmacologic management of type 2 diabetes. Can J Diabetes 2003;27(Suppl 2):S37-S42. Also available from: http://www.diabetes.ca/cpg2003/downloads/pharmacologic.pdf [cited 2006 Mar 5].

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