• Midazolam and verapamil suspensions in Ora-Plus and Ora-Sweet: At the recommended 50 mg/mL strength, these suspensions are very bitter.

• Midazolam: As noted above, the recommended syrup/palet vehicle is not available in Canada. The Hospital for Sick Children has a formulation in chocolate-cherry vehicle (see http://www.sickkids.on.ca/pharmacy/manu.asp).

• Omeprazole solution in sodium bicarbonate: Reports in the literature have shown that omeprazole in sodium bicarbonate has poorer bioavailability than the intact capsule.\(^7\)

• Propranolol: The authors do not mention that for maximum stability of propranolol, the pH must be adjusted to between 2.8 and 4.0 (because the drug degrades readily at alkaline pH). The syrup used in the cited stability study\(^6\) contained an "undisclosed quantity of citric acid". We have found that the pH must be adjusted with citric acid when this drug is prepared in simple syrup, as the pH is only 6.24 when the drug is freshly compounded. Furthermore, the suggested expiry date of 238 days should be shortened considerably.

• Tacrolimus: This lipophilic molecule has high solubility in lipids and can therefore adsorb onto plastic surfaces such as PVC.\(^8,9\) The stability study\(^11\) cited in the book was done in glass and plastic (type not specified) prescription bottles. Therefore, it is advisable to store this suspension in glass (preferred) or non-PVC plastic bottles.

• Trimethoprim: In the cited stability study\(^12\) the drug was prepared in a simple syrup–methylcellulose combination (50:50 v/v) and was stable for 42 days at room temperature. However, the authors of the book under review suggest that it be made in simple syrup. I recommend a shorter expiry date than 90 days with refrigeration, as the product must be removed from the fridge daily.

• Ursodiol: Use the recipe with Ora-Sweet-SF instead of the one with strawberry syrup.

References


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Competence Assessment Tools for Health-System Pharmacies (2nd edition)


Spiral-bound, 500 pages. US $313.00.

Over the past several decades, hospital pharmacy practice has become increasingly regulated. Hospital pharmacy departments must routinely undergo accreditation to ensure that they are providing safe and effective patient care services and, in some cases, to ensure staffing and infrastructure are sufficient to provide adequate education for pharmacy students and other trainees. Pharmacists, managers, and directors are well aware of the stress and turmoil that often precedes accreditation reports and site visits. Such events frequently require completion of self-assessment questionnaires, submission of documents (such as policy and procedure manuals), and measurement of the efficacy of existing or new services. While few would argue with the goals of accreditation or its necessity, many pharmacists preparing for accreditation may express concern about their skills and abilities to fully deal with reviewers' needs or anticipate their concerns.

Competence Assessment Tools for Health-System Pharmacies (2nd edition) by Lee B. Murdaugh provides pharmacists in institutional settings with an opportunity to evaluate their processes, staff, and initiatives systematically and comprehensively. Originally developed to help pharmacy directors and staff meet the accreditation standards of the Joint Commission on Accreditation of Healthcare Organizations (Joint Commission), this manual includes a series of templates, resources, job descriptions, and other tools that may assist facilities and practitioners preparing for accreditation.
Although the Joint Commission’s mandate is only for American health care facilities, the general principles described in this manual are also relevant to pharmacists in Canada.

Competence is defined in this manual as “the condition or quality of being well-qualified, fit or capable”. Murdaugh clearly establishes the need to contrast competence with more static measures (including educational attainment or experience). Throughout the manual, the need to demonstrate competence through action, rather than by simple reliance on traditional indicators, is clearly emphasized. Numerous competence assessment tools are presented, conveniently subdivided according to pharmacy-practice specialty. Of particular interest are tools that may be used to assess the competence of pharmacy technicians, for instance in technician-checking-technician distribution systems.

Instruments for assessing competence in areas as diverse as pediatrics, geriatrics, psychiatry, and oncology are provided for evaluating the skills of pharmacists working with special patient populations. Each instrument consists of a variety of cases and questions, frequently in multiple-choice or short-answer formats. While such assessments are common and seem to possess adequate face validity, broader competence issues are left to clinical-observation report forms that are also included in the manual.

When taken together, the written and performance-based assessment instruments provided in this manual are clear and comprehensive reflections of hospital pharmacy practice, both in Canada and the United States. Despite the author’s explicit mandate to provide support for pharmacy directors facing Joint Commission accreditation, the tools developed are broadly applicable to the practices of most institutional pharmacies. It is unclear, however, exactly how such tools could best be applied in the Canadian context. From one perspective, the manual consists of nothing more than a series of tests and assessment forms, similar to those frequently found in structured undergraduate pharmacy practical-experience programs for senior-level students. Additional information related to the development of policies, procedures, and job descriptions is thorough and systematic, but an overall picture of how to assess competence at a departmental level (as opposed to an individual-practitioner level) is somewhat lacking.

This manual may be of interest to pharmacy administrators facing accreditation and to those interested in providing staff pharmacists with opportunities for self-assessment and professional development. As a tool for preparing for accreditation within Canadian health care facilities, this manual could be an important complement to existing tools and processes. It also provides an interesting and clear review of key areas of pharmacy practice within institutions. The software version of the assessment tools described (but not reviewed), which may be of interest to some, would allow for more permanent documentation of the measurement of competence. Overall, Competence Assessment Tools for Health-Systems Pharmacies may be a useful tool for some practice settings, despite its emphasis on American accreditation standards.

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