
Reports issued in several countries have acknowledged the relevance of the social sciences to contemporary pharmacy and have called for increased emphasis on the social sciences in pharmacy education. In the United Kingdom, the Committee of Inquiry appointed by the Nuffield Foundation took such a stance in its 1986 report, commonly referred to as the Nuffield Report. Curricular changes currently under way in Britain have been stimulated by this committee’s conclusion that topics relevant to the professional role of the pharmacist, including social and behavioral science topics, require greater attention in the undergraduate pharmacy curriculum. In this context, Harding, Nettleton, and Taylor have written the first textbook to introduce sociology into British pharmacy. It is intended to address curricular requirements brought about by recent educational changes. Its existence may herald the establishment of social sciences within British pharmacy education; if so, it indicates a symbolically significant milestone.

This brief volume provides a selective introduction to medical sociology as applied to pharmaceutical service delivery. The authors present a preliminary chapter entitled “Social Science and Pharmacy” to introduce the volume. The following eight chapters focus attention on the two general areas of *patients* (their illness experience, illness behavior, and health status) and *pharmacy* (as a
profession and as a set of work activities). A closing chapter explores issues related to social science research methods. Based on its breadth and depth of coverage, the volume appears geared toward professional pharmacy students during their third or fourth year of undergraduate study.

Three aspects of the book require review: its coverage of sociology, its coverage of pharmacy, and its significance for British and non-British audiences. The authors state that their specific concern is with the application of sociological perspectives to pharmacy. (They contrast this with a more general behavioral science approach that might incorporate psychological, anthropological, and other perspectives.) Despite this focused purpose, however, the text gives little attention to many basic concepts and theories pertinent to medical sociology. As one would expect, European sociological traditions are emphasized. For example, substantial attention is given to effects of social class and lay culture on patterns of health and illness. Little attention is given to social roles, professional work, and other middle-range concepts that American sociology has found valuable for understanding health care.

This brings us to the question of the volume’s coverage of pharmacy. Subtitled “an introduction” to the field, the book can, on several bases, be described more accurately as presenting a selective view of sociology as applied to pharmacy. First, the authors give little attention to what many medical sociologists would refer to as the sociology of pharmacy. That is, there is meager description or analysis of the practice or the profession of pharmacy as social phenomena requiring systematic consideration. Second, while greater consideration is given to how sociological perspectives provide understanding of patients and health-related behaviors, this discussion remains at a very general level. Many topics immediately germane to pharmacy (e.g., drug prescribing, drug use, patient-pharmacist communication) receive only cursory examination. This suggests that the volume is of doubtful utility for many practicing pharmacists; they will find few direct connections to their practice circumstances and little concrete advice regarding patient care activities.

Obviously, many of the weaknesses identified above may result from international differences in traditions or trajectories of sociol-
ogy and/or pharmacy. Presumably, the authors' primary audience is pharmacists and pharmacy students in Britain. Review of this text by an individual working within that context is necessary to evaluate its worth to British audiences. An outsider's observation, however, is that the text makes at least two major contributions: it establishes the relevance of sociology to pharmacy and briefly delineates the field of study.

The book's significance for pharmacy audiences in the United States appears extremely limited. First, several characteristics that are hallmarks of pharmacy receive virtually no consideration. The role of the pharmacist as drug dispenser, pharmacist-physician interprofessional relations, and other subjects of widespread interest within pharmacy warrant examination. Unfortunately, little of the literature (European or non-European) addressing such subjects is recognized in the text or its references. Second, because the authors provide only a cursory description of the British health care context, it is unclear how materials presented relate to other societies. Thus, the text's usefulness, even within international comparative study situations, is uncertain. Finally, its selective explication of sociological theories, perspectives, and concepts argues against the text's use as a principal resource in undergraduate pharmacy teaching.

Overall, other materials available in the U.S. provide students with better coverage of both pharmacy- and sociology-related information. Social and behavioral pharmacy educators still may find Sociology for Pharmacists a useful teaching resource, however. It presents diverse examples that challenge students to interpret sociological data and to analyze alternate social explanations for health-related phenomena. These examples should provide educators wishing to engage students in active learning processes with numerous ideas for classroom presentations and innovative exercises.

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The ninth edition of *Pharmaceutical Calculations* is just as well done as the former editions. The text is a must for schools in which a traditional course is offered in pharmacy math. The reviewer also subscribes to the belief that every pharmacy practitioner should have a copy of a good calculations text for his personal library. One could purchase none better than this text. If a nontraditional course were offered (i.e., pharmacy math is integrated into other courses throughout the curriculum), this would still be the best source book for the student to buy and use.

Special attention was devoted to new material added to make the text more reflective of current practice. New material includes contemporary abbreviations, problems reflecting medication scheduling and patient compliance, material used with the International System of Units, revised problems related to dosing, drug dose-blood relationships, explanations of the use of dosing tables found in the literature, use of nomograms for the determination of rate of flow of parenterals, problems related to the understanding of clinical chemistries values, units of micrograms of drug activity; calculation of tolerance in compendial standards, expanded material on osmolarity, introduction of the becquerel unit (SI unit) for radioactivity in calculations involving radioactive pharmaceuticals, and a new chapter on business problems and prescription pricing. The appendix introduced in the previous edition, “Some Calculations Associated with Drug Availability and Pharmacokinetics,” has been revised and made into a new chapter in this edition. Some tables have been revised and updated, and several new illustrations have been added.

Many new practice problems have been added and older ones deleted from each of the chapters and appendices. Review problems have been updated and expanded. Many of the new problems have been obtained from the practice environment in community and institutional settings and thus reflect the direct application of pharmaceutical calculations to contemporary practice.

*Pharmaceutical Calculations* addresses the basic requirements of
the student readying himself for practice. The book continues to maintain a suitable balance between the applied and theoretical concepts. It is highly recommended.

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