Hospital acquired infection: principles and prevention

By G. A. J. AYLIFFE, B. J. COLLINS AND LYNDA J. TAYLOR. 1982. Wright PSG, Bristol. Pp. x and 147. £4.50.

The declared objective of this booklet is to give infection control personnel an insight into the basis of rational decision making in the management and prevention of hospital cross-infection. Intended to complement rather than replace standard textbooks, it concentrates on the practical questions that confront the infection control team whether in wards and operating theatres or in their dealings with hospital catering, laundering, cleaning or engineering staff. About half the book centres on the patient and half on the hospital environment.

The well-known studies of Professor Ayliffe and his colleagues at the Hospital Infection Research Laboratory at Birmingham qualify them uniquely for an undertaking of this kind. As might be expected, their practical advice on such topics as sterilisation, disinfection or hospital cleaning is solidly reliable, distinguishes the ritual from the rational, and is cost-conscious. If, however, the booklet is to occupy an important niche in the literature of hospital cross-infection, an array of blemishes that will put off potential readers calls for urgent attention. Ignoring a fair crop of misspellings and of singular verbs mismatched with plural nouns or *vice versa*, the text needs reassessment at several levels. Words or phrases are often used uncritically. For example, "False outbreaks of infection. . ." (p. 8) refers to cross-contamination of laboratory specimens, or the word "contradictions" (p. 48) to alternatives in management such as the use or non-use of masks. Far too many sentences are self-evident, confusing or plain wrong. What was intended can often be guessed, e.g., the missing words in "It is possible that malaria could be transferred in transfused blood but is very rare in Northern Europe and the USA" (p. 8) or in "It is unlikely that conventional masks will provide adequate protection, but may be advisable when dealing with severe diseases" (p. 37). In the sentence "Since more than one strain, e.g., *Salmonella typhimurium*, is not likely to be in a ward at the same time, identification other than of the species is usually sufficient" (p. 13), the final word was presumably intended to read "unnecessary". This slipshod writing abounds in the first half of the book.

Textual criticism apart, the reviewer found little to quarrel with in the content of the book, except possibly a certain light-heartedness in discussing the management of pulmonary tuberculosis, typhoid fever or salmonellosis in hospitals. In particular, many outbreaks of salmonella infection in hospitals have proved quite difficult to control.

In the sincere hope and belief that this booklet will in due course become a standard one, a number of additional comments are offered on this first edition. First, the text often reads as though compressed from longer teaching or nursing documents to the point where the meaning may be obscure to the uninitiated. In the first chapter, for instance, typing methods are described in some detail but not what "typing" means in this context. Several statements on nursing procedures also lack an adequate context, e.g., one on oral toilet (p. 54) that reads "It is a hygienic rather than an aseptic technique, since it does not significantly breach the body's defences, rather it enhances them."

Another general query concerns the illustrations and diagrams. These were probably taken from teaching material, but does a photograph showing a shaving brush alongside a saline drop-bottle really help, or one showing stacked washbowls? Will the diagram of a phage on p. 14 enlighten non-medical personnel? The linear graph on p. 73 purports to demonstrate the increase in airborne counts of *Staphylococcus aureus* during sweeping, but in the absence of any subdivision of the time scale is simply a diagrammatic statement, occupying half a page, that counts rise from 20 to 160 in 2 minutes.

Finally, the first paragraph of the preface leads one to expect a critical case-study approach to day-to-day hospital infection problems. This is attempted in the two chapters on nursing aspects, but the rest of the book is in the main straightforwardly didactic. In a later edition, some hints on how some of the uncertainties in the management of hospital cross-infection could be resolved might provide a greatly needed stimulus to original studies by infection control nurses.

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