Fibre Optics and Dissemination of Information

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The picture featured on the cover of this issue depicts light being transmitted by fibre optics. Fibre optic technology is used to link computers within local area networks, is the basis of endoscopy, and has virtually replaced copper wire in long-distance telephone lines.[1] Fibre optic cable consists of hair-thin glass fibres (typically 0.125 mm diameter[1]). Currently, the purity of silica glass fibres is such that infrared light in the wavelength ranges of 0.8 to 0.9 m or 1.3 to 1.6 m can travel for 100 km or more without the need for boosting by repeaters. These wavelengths are efficiently generated by light-emitting diodes or semiconductor lasers and suffer the least signal attenuation in glass fibres.

As pharmacists, we depend on the efficient transmission and dissemination not of light, but of information. Having accurate, up-to-date information is critical to our work. Ensuring its availability is particularly tough in some instances, most notably for disease caused by the human immunodeficiency virus, where changes in therapy occur so rapidly that keeping up is often difficult. But keeping up and knowing what is right and true become impossible when information is withheld.

The 1990s brought dramatic changes to the pharmaceutical industry, mergers being the most obvious. However, during this period there was also a change in the way in which some companies handled and restricted information by means of the legal system. There are several examples. The case with the greatest Canadian coverage involved Dr Nancy Olivieri, Apotex, and the iron chelator L1 (deferiprone).[2,3] In a similar case, Knoll attempted to stop publication of a study of thyroxine bioequivalence[4] by invoking a confidentiality agreement. In that case, not only was the paper eventually published (after a period of 7 years), but it was accompanied by a 7-page editorial[5] and 2 letters to the editor from Knoll management.[6,7] Two other cases involved not research studies but reviews prepared by committees. In the first instance, Bristol-Myers Squibb went to court to prevent the Canadian Coordinating Office for Health Technology Assessment from releasing a report on the statins.[8] In the second case, AstraZeneca threatened legal action against an Ontario physician if guidelines solicited by the Ontario government were finalized and released.[9]

What is amazing is that these 4 cases represent but a small portion of all possible cases[10] and are known to us only because the parties involved disagreed. It would appear that financial considerations affect publication more than we care to believe. In a 1997 review of 2167 life sciences faculty, 20% of those surveyed indicated that publication of their results had been delayed from 6 months to 3 years to protect their scientific lead or to slow the dissemination of undesired results.[10] In an age when our capability as hospital pharmacists is often determined by our ability to find and interpret data quickly and efficiently, the withholding of study results and peer-reviewed analysis seems to encroach on freedom of speech and thereby to negatively affect patient care. This is a disturbing trend, but most pharmacists may not even be aware of it. However, consider the similarity between the development of provincial or national guidelines and presentation to the pharmacy and therapeutics committee within your hospital. Both processes may come to effectively the

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same conclusions, yet decisions by pharmacy and therapeutics committees have not yet been subject to court injunctions. Is this difference due simply to the size of the market each influences? Use of the courts to protect a biased financial interest, to the detriment of patient care, is a move against the efficient dissemination of information and something that should concern us all.

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