Conveying Science: Original Studies Versus Case Reports

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The art of conveying scientific discovery in medicine has evolved significantly in style and content over the past three centuries. In past centuries, the experience of physicians was conveyed through elaborately described observations of a patient's presentation, response to treatment, and changes observed as time elapsed. This tradition continues to be practiced in the medical literature through case reports.

The reports of yesteryears were of a personal nature as they described findings of the treating physician with specific patients. This frequently was reflected in the style of writing and presentation of facts. Over the centuries, medical research progressively developed to emulate scientific research in other fields, with observations based on a group of patients rather than a single patient. These original studies offer medical knowledge less hampered by the bias inherent to anecdotal experience.

Despite this development, reports of single case observations, known currently as "case reports," continue to find receptive audience and readership in the medical literature as they provide actual experience of physicians very similar to what readers face every day. These case reports make more sense to physicians because they are easy to understand and logical in their conclusions, albeit highly anecdotal.

Case reports serve to provide the experience of a single patient. Grouping of observations to lend a greater scientific impact resulted in reports of a series of cases. This scientific fine tuning of case reports' usefulness has been routinely used in reporting the unique side effects of

medications. The *British Pharmacopeia* of several decades ago masterfully provided brief case reports of wanted and unwanted effects of medications through similar series of case reports. They were informative and quite enjoyable to read.

Pediatric Cardiology, the first journal to publish exclusively in the field of heart disease in children as well as congenital heart diseases in children and adults, has published throughout its 35 years of existence an extensive list of such case reports, mostly during the first two decades of its existence. However, the increasing number of original studies conducted and submitted to *Pediatric Cardiology* over the past several years has forced the publication of increasingly fewer case reports, despite the rising frequency of issues per year and pages per issue, currently case reports occupy less than 10 % of its page budget. This had led us to adopt a new policy of restricting publication to original and review studies and to abandon altogether the long tradition of case report publication.

Focusing entirely on original studies and review articles is a development shared by many mature journals in their fields. We believe that the valuable experience conveyed through case reports continues to be important but difficult to achieve in view of the increasing demand for and reliance on original studies. The ability to publish case reports may once again be possible once medical publications become entirely electronic with less regard to page budgets and cost of print issues.

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