

Case Report

In Defense of the Case Report: Thoughts of an Academic Generalist

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Abstract

As more and more physicians opt for training in subspecialties, academic generalists have less and less opportunities to contribute to the medical literature, since most available research funding is allocated to basic science or to support large-scale prospective trials. Even case-controlled or retrospective cohort studies seem out of reach for the busy hospital-based teaching doctor. For them, case reports provide a way to learn, teach and publish.

Keywords: Case report; Academic medicine; Generalist

Case Presentation

According to the Merriam-Webster dictionary [1], an expert is defined as “someone who has or displays a special skill or knowledge derived from training or experience”. Moreover, a medical specialist is defined as “a practitioner or authority that devotes his attention to the study of a particular disease or a class of diseases” [2]. Multiple factors seem responsible for the increasing level of medical specialization: the public demand for special knowledge and skill, the geometric growth of data generation surpassing the ability of any single person to learn it, the emergence of new technologies requiring specific training, the generally unrestricted access of our patient population to the specialist, and the significantly higher payment to specialists in comparison to that of generalist, among others [2-5].

The impact of primary care includes managing and triaging undifferentiated symptoms, matching patient needs to healthcare resources, and assuring financial and geographical access to basic health interventions for the majority of the population [6]. Inserted in such a model, academic generalists are expected to care for patients while training the new generation of physicians. These full-time duties allow trainers to use the available educational resources to feed information to their trainees. But what would the trainers do if a new question has no evident answer? What if the review of the accessible literature wasn't enough?

To solve this dilemma let's first consider the many issues that put academic generalists in a relatively disadvantaged position. First, the number of generalists has decreased drastically in recent years [7,8]. Therefore, this already strained workforce would struggle to fulfill a research role. Secondly, there is no specific funding opportunity available to support generalists who prefer to keep their focus of research all encompassing, rather than centered on specific topics. This subsequently carries several problems: the largest funding institutions consider the researcher's expertise when allocating their grants; therefore, a clinician with questions pertaining to too many disciplines pays the price of his curiosity by decreasing the chance of being awarded with funds. Furthermore, out of the world of basic research, most of the scattered resources are placed on funding randomized trials, set at the top of the evidence pyramid [9].

Prospective research is then a virtually impossible task. To complete this vicious cycle, younger investigators will more likely prefer to join senior physicians with narrow expertise, increasing their own chances of being funded.

Retrospective research (case-controlled studies or retrospective cohorts) becomes then an alternative. However, beside the technical limitations of these investigational procedures [10,11], they also demand if not funding, time, a scarce commodity in the academic setting, where patient care is at the center of the attention.

Case reports and case series suit the generalist academicians' need to promote the advancement of science. Being that “all patients are interesting, but not all doctors are interested” [12], case reports provide the interested physicians with the opportunity to straightforwardly take the case, or at least some aspect of it, to a higher level of understanding. This tool is versatile, for it allows documentation of the common presentation of uncommon diseases, uncommon presentation of common diseases, peculiarities of patient management, some of them encountered by chance, and sets the stage for future research by promoting the development of new questions [13,14]. Even if the manuscript does not get published, the review of the literature required to support the case carries an educational value.

Scholarly activity adequately promoted and mentored in the academic setting [15], along with the emergence of new journals allowing paper-based or online publications of case reports, represents opportunities for the academic generalists to remain engaged with science advancement, and to inspire their trainees to follow their steps. In the voice of Dr. Herbert Fred, “to learn medicine, all you need is a patient, a medical library, and someone who knows more medicine than you do... Your knowledge will grow, but your educational journey will never end” [12]. Interested academicians will “know the patient through and through” [16], finding unique features in each of their patients. This uniqueness, the story of a particular disease in an individual patient, sometimes with a peculiar response to a treatment, is always worth telling [13,17].

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