Teaching Scholarship and the Clinician/educator

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There has been a concern in the pediatric academic community over the past decade about the dearth of career research scientists. There has been less attention paid to what appears to be decreased research production from clinician/educators (ie, those faculty who represent the largest numbers in any department and who see patients most of their day). Many of these physicians are general pediatricians. There are few published reports documenting this perception of decreased scholarly activities, but we have concerns if clinician-educators’ research production or scholarship have decreased, this will result in lack of promotion, decreased job satisfaction, and physicians leaving academia for outside employment.

The purposes of this article are the following: 1) to define clinician-educator and present existing documentation, although sparse, pointing to the lack of scholarship by this group, including general pediatricians; 2) to assess the implications of lack of recognition of clinician-educators by subspecialty peers, specifically poor job satisfaction and seeking other employment; 3) to examine an expanded definition of scholarship as documented by Boyer, differentiating between teaching excellence and teaching scholarship; and 4) a call-to-action to determine the extent of this perceived problem in scholarship in this group.

DEFINING THE PROBLEM

In the past decade, we have heard and read frequent calls for more pediatric research funding, greater efforts to increase the number of junior investigators, and increasing the number of departments carrying out pediatric research. Clinician-educators, who comprise the majority of faculty in most pediatric departments, have not been included in these concerns. By definition, they are “physicians whose primary responsibilities are patient care and education, and whose research represents only a minor portion of their academic contributions.” These are the faculty, many of whom are generalists, to whom we entrust...
the training of our future pediatricians and other physicians and who see large numbers of patients in our academic health centers (AHCs). These same faculty are often rated as the top teachers and are frequently cited by residents as outstanding role models.8,9 Yet they also produce less traditional research, an attribute valued by department and medical school promotion and tenure committees. This problem has been addressed previously in the literature but not specifically in pediatrics.7,10

The documentation of scholarly activities by clinician-educators is sparse. Sammons et al reported that, of all the randomized controlled trials published in the Archives of Diseases of Childhood from 1982 to 1996, only 28% were from general pediatrics.11 Kelly et al reported in 1999 that academic behavioral developmentalists spend only 6% of their time on research activities, presumably because of their large patient loads.12 In a 2009 publication, Margo et al examined the characteristics, scholarship, and support of clerkship directors from seven medical specialties and found scholarship efforts to be low.13 In a personal communication with the American Board of Pediatrics, the authors discovered that there are not specific questions regarding scholarship that the board addresses with junior faculty.14 Internal medicine and family medicine have acknowledged this problem (ie, the disconnect between tenure and promotion guidelines and clinical and academic responsibilities of clinician-educators).15,16

The questions of how much protected time and effort are needed to produce scholarship are addressed in these articles, with the concern that the busy clinician-educator either does not have enough time or does not know how to pursue scholarship with limited or no protected time.

**PROMOTION AND TENURE**

An emerging problem within the context of busy practices in today’s AHCs is that clinician-educators are less likely to hold higher academic ranks, are more likely to have non-tenured positions and are less likely to be promoted in a timely fashion as compared with peers who are invested in traditional research.17,18 The increasing number of women in the workforce contributes to the problem, as they are more productive academically later in their careers than their male counterparts, because of taking time to have and care for children.19,20 Pediatrics has led the way in creating part-time alternatives so that faculty can alternate greater and lesser academic efforts depending on other life forces. Because younger faculty are
seeking these part-time opportunities, offering temporal flexibility translates into a competitive advantage, building commitment and loyalty in individuals who have many decades of professional life ahead of them. Where teaching and educational activities are tied to the mission, values and vision of the institution, promotion is important for not only being recognized by peers but also being appropriately rewarded financially.\(^{21}\)

**JOB SATISFACTION AND FACULTY WELL-BEING**

The increasing turbulence of the environment has led to decreased time available for teaching and an increasing frustration with work.\(^{22}\) An increasing proportion of faculty have felt disconnected from the academic mission of the medical school and from inspiring scholarly role models.\(^{23}\) Developing an awareness of who they are, what they care about and why they care represents the beginning of a process that leads to meaningful work. In other terms, it is when one’s “passion, strengths and core values interact synergistically in one’s work.”\(^{24}\) Disengagement translates into lower productivity and declines in the learning environment. Moreover, faculty members who feel out-of-synch with their department are more likely to leave the academic setting. The costs of recruiting new and talented faculty are substantial and especially significant in times of economic distress.\(^{25,26}\) The high cost of faculty turnover can represent as high as 5% of the AHC budget. Therefore, it is important not only to recruit the best candidates but also to retain them through a supportive work environment.

It would seem logical that failure of clinician-educators to produce scholarship as defined by the mission, values and vision of the AHC would result in the following: 1) limited new knowledge to improve patient care or education, 2) perceptions of not being valued by leadership, 3) perceptions of not feeling part of the academic mission, 4) feeling “second-rate” to colleagues invested in research and a two-tiered system, and 5) having no job satisfaction. These can all lead to faculty lacking motivation, seeing themselves in a job and not a career path, and seeking higher-paying jobs outside the AHC where they have more control of their work environment.

**UNDERSTANDING AND BELIEVING IN A NEWER DEFINITION OF SCHOLARSHIP**

We propose a concept that addresses these issues. Traditional research as related to promotion and tenure began to change in the early 1990s when Ernest Boyer, president of Carnegie Foundation for the Advancement of Teaching, surveyed a large number of university faculty and discovered that faculty were not being promoted based on the activity in which they were primarily engaged (ie, teaching). This model in higher education parallels what is happening in academic medicine today; ie, clinician-educators whose primary role is to see patients and to teach trainees, and who are not being promoted by traditional standards based on these essential responsibilities. Having identified the need for a broader definition, Boyer articulated the following areas that scholarship encompasses: 1) teaching; 2) discovery, or “research”; 3) integration; and 4) application or practice.\(^{27}\) To be sure, rigorous evaluation of such innovations is necessary for such efforts to count as scholarly.\(^{28}\) A more detailed review of Boyer and Glassick’s work and its application to medicine has been published.\(^{29}\) It is unclear how many junior faculty, chairs, and promotion and tenure committees are aware of this “newer” definition of scholarship, but the understanding of the concepts and how they integrate with the job description of the clinician-educator is critical.

Because clinician-educators spend most of their time seeing patients, the scholarship of teaching seems to be a reasonable academic area in which to excel. There sometimes is confusion about teaching excellence and the scholarship of teaching.\(^{30,32}\) The latter includes the teacher probing and even studying how well her students are learning, examining the factors that allow students to learn in more breadth and depth, developing new curricula to stimulate and inspire learners, looking for outcomes to measure student learning other than test results, and welcoming peer review of one’s teaching in the classroom and clinical setting. It also means preparing learners for the future, facilitating their personal development, and empowering them to acquire the now-critical career development and other skills that will enable them to succeed in and contribute to complex organizations.\(^{33}\) When one sees a problem in his teaching, like any good scientist, it would behoove that individual to study why the outcomes are not what they should be. This is the scholarship of teaching. This is not easy work, but the questioning and reflective process furthers academic excellence.\(^{34}\)

This career path emphasizing teaching must be recognized within the infrastructure of the department and medical school as important and valid for the educational mission. This means recognition by peers through the promotion process. One can best demonstrate these activities through an educator’s portfolio, which helps to explain one’s teaching activities quantitatively and qualitatively and addresses how one is achieving scholarly goals.\(^{35,36}\)

**CALL TO ACTION**

The first challenge is to identify the extent of the problem by asking the right questions and to look for solutions to fix it. Because there have been few published studies about the scholarship production of clinician-educators, perhaps the American Board of Pediatrics, the Academic Pediatric Association and/or the American Medical School Pediatric Depart-
ment Chairs can determine the extent of this problem. Faculty currently include scholarly activities in their yearly report to their chair, so these data should be readily available. In departments and institutions where educator portfolios (EP) are the norm, educational contributions to the department and medical school should be well-defined. Teaching faculty to keep educator portfolios to document their contributions to the department and medical school is critical.35

From an advocacy perspective, seasoned educators who are familiar with Boyer and Glassick’s criteria on scholarship need to assure that faculty members, chairs, and promotion and tenure committees are aware of this newer paradigm through varied educational means. Imbedded in this paradigm must be a reward system (ie, promotion, for clinician-educators to train students, residents and fellows and serve on and lead departmental and medical school committees and educational initiatives, such as ACGME surveys).

Mentoring new hires includes having them define in what area of scholarship they see themselves excelling. Good mentors who have a proven track record in scholarship can be of great value in counseling junior faculty in how to move forward in this area. Effectively helping trainees and junior faculty to develop insight into their strengths and potentials depends also on updating our approaches to mentoring beyond the traditional hierarchical dyad. For example, facilitated group-mentoring and “mentoring teams” can help junior faculty and trainees access advice about an array of issues that a single mentor cannot adequately address.37,38 This updating of mentoring practices also responds to medicine’s need for new models of mutuality and leadership based on shared authority. Moreover, all faculty can be assisted to improve their competencies of communicating across differences, thereby maximizing their impact in the limited time available for this activity. By offering more learner-centered mentoring, they will meet the younger generation where they are, which means offering them more supportive and frequent feedback and coaching than they themselves probably received. Fruitful coaching questions include, “What patient care issue is most important to you right now?” “What skills do you most want to improve?” “How will you develop the necessary expertise?” “What does success mean to you right now?” and “What are your goals and timelines?” Similarly, helping junior people to connect with individuals who can serve as scholarship mentors is critical because some of the best mentors will be at other institutions. Within the department, actions can focus on creating group-mentoring, with everyone improving their competencies of communicating across differences.

Chairs and senior faculty can effectively help faculty identify scholarship questions in the activities in which they participate every day and to guide them on how to collect data for their project while they are seeing their patients. Some departments have competitive, small start-up funds for new investigators to assist them in initiating projects.6-39 The return on investment is that these projects will result in outcomes worthy of publication and/or presentation through abstracts, Websites (MedEd Portal), book chapters, journal articles, and perhaps grant funding once a pilot study is published.

Moreover, demystifying organizational opportunities, identifying surmountable barriers, and working in a more collaborative climate can contribute to faculty success in this area. Many faculty members also need help thinking out-of-the-box in collaborating with others in the department, within the medical school, within the university, at national meetings, and around the region and the country. Collaborations with faculty in other disciplines are critical to scholarship, encouraging faculty to build their professional networks is key. An example would be joining forces with faculty from another department or school, such as the schools of education or business, who have similar interests. By collaborating with others who bring different skills, faculty can accomplish important projects with minimal or no funding and reasonable time commitments.

Given the often comparatively better salaries and lifestyle options in private practice/industry, pediatric departments need to model for the next generation the advantages inherent in academia, including all the opportunities to extend our knowledge.40 This process of recognizing the role teaching scholarship plays in the academic mission needs to begin in undergraduate education and carry through residency training and beyond. The articles quoted at the beginning of this commentary uniformly call for more resident and fellow education in research methodology, statistics, epidemiology and population-oriented needs. We should add teaching to that list.

The question inevitably arises: “Who has time for all this?” Yet what is at stake...
here is our future, and there is no better way to extend our legacy and impact than investing in our clinician-educators. The suggestions here will not only improve patient outcomes but also enhance the long-term productivity and career satisfaction of faculty.

REFERENCES


