Letters to the Editor

The mentor–mentee relationship in academic medicine

Keywords:
Mentor
Mentee
Education
Exploitation

In the world of academia, the power of a good mentor can be quite potent. Research mentors inspire, teach, and/or create opportunities for those they mentor (e.g. projects, staff positions, promotions, grants). Previous authors have developed “mentor guidelines” [1,2], while Tobin [3] identified seven key roles of the successful mentor – teacher, sponsor, advisor, agent, role model, coach, and confidant. Characteristics of the mentor–mentee relationship were described in a commentary in JAMA, outlining honesty, explicitness and an eventual separation as key features to successful mentorship [4]. Conversely, a lack of appropriate mentorship has been recognized as a deterrent to research activities by junior faculty members and trainees [5]. Not too long ago there was evidence demonstrating that the number of clinician-researchers applying for major research grants from the National Institutes of Health (NIH) was declining, which led to a formal NIH-commissioned Panel in an attempt to reverse this trend [6]. The Panel suggested that research mentors had a large role to play, and that partial salary support for mentors by the NIH would be helpful. Many high-profile programs, such as the Department of Medicine at Brigham and Women’s Faulkner Hospital in Boston, have since initiated successful mentorship programs [7]. The mentor–mentee relationship may also be beneficial to the mentor, both in terms of increased job satisfaction and increased productivity.

However, mentoring also brings the potential for negative consequences [8]. Mentees may make a poor choice in mentor and be stuck with a “dud”: the abilities and/or work ethic of a poor mentor may result in a tremendous amount of time, energy, and even finances being lost by the mentee. Ironically, having a mentor that is “too good” may have negative consequences as well. Mentees may not receive due credit for their work, or may not find themselves able to separate from their mentors.

Finally, given the power differential between mentors and mentees, there is potential for “abuse”. Previous literature has been published on unprofessional and unethical behavior of senior staff “role models” toward trainees clinically [9], but similar poor behavior may occur in a research setting.

Clearly, the relationship between mentors and mentees can be complex. We examined the mentor–mentee relationship in the medical academia through a large international survey, examining the prevalence of mentorship among publishing academics, the length of and difficulty in ending the relationship, and the incidence of abuse. This survey was part of a larger survey, where the corresponding authors of every fourth original research report published in JAMA (2001–2003), BMJ (1998–2000), CMAJ (2001–2003), or Lancet (1998–2000) were identified and contacted via email survey. Sixty-five percent of those contacted responded (127/195), and the responses yielded some interesting results (the full survey and results, including selected comments from respondents, can be found online at www. ____ - link to supplementary online material).

The majority of respondents claimed to have had a specific research mentor, while 25% denied having had one. Given that respondents were successful researchers, publishing as corresponding authors of original research manuscripts in high-impact medical journals, specific research mentors do not appear to be an absolute prerequisite to research success. For example, an entire department may collectively act as a “mentor” to a junior faculty member. Others may find research more intuitive, or learn the basics from the literature.

Among respondents who did have a specific research mentor, the publishing relationship between the research mentor and mentee was quite variable. A significant proportion (14%) reported having had a specific research mentor, yet not publishing with their mentor. Such a mentor may still prove invaluable, as a source of information, advice, and other forms of aid. The majority (86%) did report publishing with their mentor, anywhere from 1 manuscript to over 100 manuscripts. In fact, over 50% of those reporting publishing with a mentor published 6 or greater manuscripts.

The issue of mentor–mentee separation appeared problematic. Separation from the mentor is a natural stage in what we would refer to as the progression of scientific “maturity”. Fourteen percent of respondents claimed to have published 26 or more manuscripts with their mentor, and nearly 5% claimed to have published 51 or more manuscripts. Without publications that did not include the research mentor as a co-author, it may prove difficult for a promotions, hiring, or awards committee to assess evidence of an ability to perform research independently, which would therefore be detrimental to the mentee’s application and career.

A significant minority reported having encountered difficulty in separating from their mentor (12%), and requiring 6 years or more before this separation (13%). Several respondents (2%) continue to work with their mentor, and 1 respondent has not published since their separation. Those reporting difficulty in this separation may have found it easier had they changed location: approximately 45% of respondents continued to work within the same department as their mentor.

It is reasonable to assume that many mentees remained within the same research field as their research mentor, and therefore it seems logical that they continued to collaborate, out of convenience. We would therefore suggest current mentees to consider the benefits of moving (either for additional training or work) away from their mentor at some point. This is a common recommendation made to graduate students. Given the large proportion of respondents working in the same center as their mentor, we would suggest that many respondents may not realize they have not yet fully separated from their mentor.

We found evidence that mentor abuse does occur, primarily in one of three ways. The first type of abuse is likely more controversial, in that many readers may not consider it “abuse”. It relates to exploitation of...
the mentee in terms of a prolonged mentor–mentee relationship. As mentioned above, a significant proportion of respondents published 26 or more manuscripts with their mentor. We would argue that it is a part of the mentor’s role as a mentor to separate from their mentee, if not willingly on the mentee’s part, then forcefully on the mentor’s part. The mentor should realize that such a separation is necessary in the academic “maturing” process of their mentee, developing and cultivating research ideas on their own. Furthermore, if the mentee does not feel able or confident in developing their own ideas independently, such a separation is the best way by which to force them to learn.

The second, and a less subtle form of mentor abuse, is mentee “exploitation”. Approximately one in twenty respondents claimed to have been “obliged” by their mentor to inappropriately include them as a co-author on a manuscript. One can imagine how difficult such a situation might be for the junior mentee trying to resist, given the mentee’s attempt to establish him/herself in the mentor’s field. The mentee, aware of the guidelines for authorship by the International Committee of Medical Journal Editors [10] will likely also be aware that the senior mentor may be resentful if refused his request, which may in turn affect the mentee’s future success. Within the survey, one question was included which was intentionally subjective — how many respondents felt that their mentor had “taken advantage” of them, in any way. Again, approximately one in twenty responded that they believed their mentor did take advantage of them. In two of these cases, the complaint was related to exploitation of the mentee for undeserving publications on the part of the mentor. In one case, the mentee claimed that the mentor unfairly pursued projects that the mentee had begun after separating (or attempting to separate) from the mentor. And in the two remaining cases, one mentee claimed that the mentor exploited them in terms of performing work beyond what should have been expected, while the other mentee claimed that the mentor unfairly took credit for their work and was derogatory toward them when the mentee presented. This represents the third type of mentor abuse identified — undue, open hostility, in a situation where the mentor has the advantage of seniority.

Despite evidence that mentor abuse is very real, and more common than we had expected, it is encouraging that the majority of respondents nonetheless now mentor themselves (82%). Even more encouraging (but perhaps somewhat suspect) is that 100% of respondents claim to never have required authorship on one of their mentee’s manuscripts.

Given the importance of mentors, we would suggest that some sort of mentor “training” would be beneficial, particularly in large, academic centers. Such training would define what an effective mentor does and does not do. It would include instruction that if the mentee cannot separate from the mentor by their own accord, the mentor must at some point end the relationship. It would also stress the importance (and definition) of authorship, and the detrimental effects of honorary co-authorship, advising the mentor to refuse offers of unmerited authorship.

Strengthening the quality of mentorship should help ensure a bright future for the next generation of medical academics. Our survey sheds some light on the current state of mentorship and how this relationship should be fostered, maintained and, in our opinion, ended at some point.

Statement of conflicts of interest

The authors have no conflicts of interest to disclose.

References


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