

Publish and perish?

Making original research mandatory in medical institutions without building research infrastructure is unrealistic

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In June 2017, the Medical Council of India (MCI) made publishing original research in indexed journals a prerequisite for appointments and promotions of teaching faculty in medical colleges. Recruitment, tenure and promotions are often linked to research publications in the developed world but making this mandatory in India is a bad idea.

Research advances scientific knowledge and saves lives. The pressure to publish motivates clinicians in academic institutions to prioritise research over other professional roles. Research productivity enhances careers and confers scientific recognition and prestige. It provides scientific capital to institutions and reinforces the pressure on faculty to publish or perish.

The consequences

Many commentators have noted that the emphasis on quantity over quality has led to a flood of poor quality research. In 2005, John Ioannidis in *PLoS Med* stated that most research findings could be proven to be false. In a 2009 report in *The Lancet*, Iain Chalmers and Paul Glasziou estimated that around 85% of research funding was being wasted across the entire spectrum of biomedical research. They found that most research publications neither advance scientific knowledge nor have practical clinical applications.

Research eats into the time that faculty have for clinical care, teaching and mentoring students. This deprives students and patients of the experience of senior faculty. It also contributes to stress and burnout in those left to deal with heavy teaching and clinical workload. The disproportionate emphasis on publications to define success in academic medicine influences the culture of medical education, and the aspirations of students graduating from such institutions.

In a recent editorial in the *Indian Journal of Medical Ethics*, Sunita Bandewar and others estimate that medical college teachers in India, though lacking funding, infrastructure or protected time, will produce around 15,000 papers a year if they follow MCI requirements. This is a field in which fabrication, falsification, plagiarism and misrepresentation will thrive. The numerous “predatory” journals that India hosts will publish them for a fee and flourish, while health care and academic integrity perish.

The mission statement of the National Medical Commission Bill, 2017, is “to provide for a medical education system that ensures

availability of adequate and high quality medical professionals; that encourages medical professionals to adopt latest medical research in their work and to contribute to research”. What is lacking is a clearly articulated vision of the goals of medical education and the role of research in the context of the challenges and needs in India.

The purpose of medical education

A 2010 study in the *Annals of Internal Medicine* envisioned the basic purpose of medical education as caring for the national population, chiefly in primary care and in underserved areas. It ranked medical schools in the U.S. according to a social mission score wherein Stanford (19) and Johns Hopkins (20) ranked among the bottom 20 universities. As India continues “upgrading” district hospitals to medical colleges, and recognising for-profit private medical colleges, the NMC should reflect on whether this “academic” designation will detract from the social mission that medical education should serve.

In many European countries, notably the U.K., postgraduates and consultants are not required to conduct research, in training or for promotions. They are tested on their ability to interpret research publications critically. This promotes best medical practice and evidence-informed health care. The NMC should develop two streams of medical faculty: a

clinical cadre and a research cadre. The clinical cadre of consultants should be appraised on their clinical, teaching, and communication skills; audits conducted to improve services; and continuing professional development credits. The research cadre should be appraised on the quality, integrity, scientific rigour and impact of their research; clinical collaborations; and teaching and guiding research. In order to increase the value of research investments, the NMC should also adopt 17 invaluable research-based recommendations on reducing the “waste in biomedical research”, summarised in a series of papers published in *The Lancet* in 2014.

Some academic institutions in India do good research and this should be encouraged. Making original research mandatory now in other institutions, without investing in building research infrastructure and capacity, is ill-conceived, possibly unethical and certainly unrealistic.

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