



Medical Research in India

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INDIA

BEST MEDICAL EDUCATION

in the world

India has the best and the worst medical education in the world, according to a review of the world's largest database of peer-reviewed literature. Four medical colleges in India are among the top 10 global institutions that published the most research between 2004 and 2014, while around 60% of the country's 579 medical institutions have published no research in a decade. Only 25 (4.3%) institutions published more than 100 papers a year and, among them, accounted for 40.3% of India's total research output of a little over 100,000 papers in the decade. Over 57% or 332 of the medical colleges did not have a single publication during this period while over 90% of NBE-affiliated colleges in Karnataka and Kerala had none. Moreover, states that have the largest number of private medical colleges produce very little of research publication.

India's total research output — including original articles, reviews, case reports, and reports of conferences and symposia — was 101,034 papers between 2005 and 2014, according to the journal *Current Medicine Research & Practice*. All the institutions surveyed were either recognized by the Medical Council of India (MCI) or the National Board of Examinations, the two bodies that regulate medical education in India. In comparison, the annual research output of the Massachusetts General Hospital was more than 4,600 and the Mayo Clinic was 3,700. The All India Institute of Medical Sciences, with more than 1,100 annual publications, ranked third.

The author is the winner of Best Doctor award (private sector), 2017 awarded by Government of Kerala

A handful of institutes, a majority of them publicly-funded, account for the bulk of research output from medical institutions in India. At the other extreme, nearly 60% of institutes did not have a single publication over a decade. Overwhelming clinical burden leaving little time for academic activities is often cited as the reason for this state of affairs. This is belied by the fact that the most prolific Indian publications come from institutions that also deal with the largest numbers of patients. This is also true of many of the world's great hospitals, which along with providing a high standard of patient care are also leaders in publication.

It said lack of guidance and absence of role models among seniors, who themselves have published little, were major factors as was inadequate institutional support in the form of funds and infrastructure. To bring medical education across states at par, India needs to incentivize quality research, which is an indicator of an institute's quality of education and clinical care. The few attempts to encourage relevant and applied research are not enough. The MCI's 2015 guidelines require at least four

research publications for the post of an associate professor and eight for the post of a professor.

China, which was at India's level 10 years ago, has emerged as the fifth leading nation in terms of its share of the world's scientific publications. It has done so by systematically investing a larger proportion of its GDP on R&D and by incentivizing medical universities, hospitals and institutes through monetary awards to authors with manuscripts published in prestigious journals, pointed out the study.

The policy of increasing the number of doctors by liberally allowing the creation of new medical institutions mainly through private funding and enhancing seats has not been an unqualified success with what is generally perceived as a fall in standards of medical education "which has now become a business venture for many politicians and is accompanied by widespread corruption both in its entry and exit processes", the study said, while calling for an overhaul of the medical education system.

FOUR INDIAN INSTITUTES ON GLOBAL LIST

Four medical colleges in India are among the top 10 global institutes that have published the most research between 2004 and 2014

1.	Massachusetts General Hospital, US	46,311
2.	Mayo Clinic, Rochester, US	37,633
3.	AIIMS, Delhi	11,377
4.	Peking Union Medical College, Beijing, China	10,102
5.	PGMIR, Chandigarh	8,145
6.	Tokyo Medical University, Japan	4,856
7.	Christian Medical College, Vellore	3,742
8.	Faculty of Medicine, Univ of Geneva, Switzerland	3,600
9.	Sanjay Gandhi PGIMS, Lucknow	3,499
10.	Aga Khan University Hospital, Karachi, Pakistan	2,332

(SOURCE: CURRENT MEDICINE RESEARCH & PRACTICE)