



# Should Research be Made Compulsory in Medical School?

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## Abstract

**Background:** Healthcare decision-making is mostly reliant on evidence-based medicine. Building and upgrading skills in scientific reasoning and thinking amongst medical students has now become an important part of medical education. But due to unforeseen reasons, medical students in developing countries have no or very little opportunities to develop research skills and become evidence based physician-scientist. Moreover, there is also an alarming decline in the current number of physician-scientists, which also threatens the progress of translational medicine in the upcoming era. The compulsion of research work in residency, has no doubt, increased the quantity, but the quality has subsided. The only way, to improve the quality of research and medical evidence based health care, is by inculcating various research programs in school and motivating the professors and subsequently, the medical students. Many schools around the world have started various research training programs and the results are astonishing. Hence we suggest, instead of making research compulsory, there should be a location and school based research program which can help in developing interest.

**Keywords:** Research, Medical Students, Medical School, Benefit

## Introduction

Health research plays a very important role in improving health care. Advances in disease surveillance, management and prevention, all rely heavily on quality research. Moreover, research influences health care policy [1].

With research, critical thinking skills of individuals are also greatly enhanced. In addition, research projects not only fosters analytical thinking and self-directed learning skills among students, but also improves their oral and written communication skills. Clinicians often incorporate the information from the clinical research trials into their own practices, which improves patient management and disease outcome [2].

For a long time, most of the developing world relied on western countries for their research findings and interpretation. However, this did not always help to curb the problems what the developing countries faced. Slow advances however, have been made in medical research in developing countries. Now, more funding, is also available [3]. Nevertheless, the quality of research is affected by lack of expertise in research skills. Problems are also seen in sharing and dissemination of results locally and incorporation of research findings in policy making either because of a lack of research findings understanding or its clinical implications by the health policy makers [4,5]. Moreover, medical students are also burn out with academic pressure, it becomes really difficult to work on research.

## Research Opportunities

Currently, Indian medical students have very limited opportunities to participate in research. Though short-term scholarships (STS) by Indian Council of Medical Research (ICMR) and Kishore Vaigyanik Protsahan Yojana (KVPY) provide research opportunities, there is no formal path for medical students in India to become physicians, scientists or academicians [6].

In the US, a special report was published in 2010, by The Commission on Education of Health Professionals for the 21st century, suggesting an urgent need of a new medical curriculum in order to raise its standards [7]. The outstanding American students generally apply at NIH funded Medical Scientist Training Program (MSTP) [8].

This program offers students with an opportunity to get a good feel for what a physician-scientist career entails through a funded MD/PhD. Also, different universities have different courses regarding to research activities in the United States [9-11].

In the U.K., students generally take a year course of Intercolated B. Sc. before entering into Medicine. This give them an experience of learning research [12-14].

The teaching fraternity in the western world is quite proactive and understands the need of research. They further nurture the students and motivate them to work on researches. Hence, it is appropriate to say that western

medical education system is more research oriented than that of developing countries.

So should Research be made as a compulsory subject in Undergraduate level as well? Well, compulsion will surely increase the numbers of publications, but the quality would be hampered.

Hence, I suggest that instead of making the research work as a compulsory subject, there should be ground level programs at Government, MCI, State University and Institutional level which includes offering funds for the research projects, encouraging the students by giving certificates and awards etc. Moreover, professors should take keen interest in teaching the students who really want to learn.

Furthermore, the academic journals should encourage the medical students to publish their articles without any article processing or publication fees. These steps will definitely be helpful in developing keen interest towards research among medical students.

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