

Student research in a medical school in Western Nepal

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Abbreviations: MCOMS, Manipal College of Medical Sciences;

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Summary:

The number of researchers and research publications from South Asia are lower as compared to the developed countries. Student research projects are common in developed countries but are a rarity in this part of the world.

In the developing world initiatives to encourage student research are now being carried out. Medical student journals are being published and many medical journals have student sections.

At the Manipal College of Medical Sciences MCOMS the major emphasis is on applied research. Students have carried out drug utilization studies and studies in the community. They have also analyzed various educational initiatives from a student perspective and have written about social issues.

Student research should be strongly supported. Financial initiatives and consideration of student research during post graduation and assessments are required. Online discussion forums can help to encourage research. Medical student research projects can provide students with an opportunity to learn research methodology and the skill for critical analysis of published articles.

Introduction:.....

Nepal is a small developing country in South Asia sandwiched between two giants, China and India. The number of researchers in the developing countries of South Asia is low compared to the figure in developed countries. Nepal has 59 researchers per million inhabitants. (1) The United States (US) in comparison has 4,605 researchers per million inhabitants. (2) Health researchers from South Asia accounted for only 1.2% of all papers in the Institute for Scientific Information database during the period from 1992-2001. (3)

The Manipal College of Medical Sciences:

The Manipal College of Medical Sciences (MCOMS), Pokhara, Nepal admits students from Nepal, India, Sri Lanka and other countries to the undergraduate medical (MBBS) course. The college is affiliated to the Kathmandu University. The revised curriculum of Kathmandu University emphasizes problem-based, self-directed learning. (4)

Student Research:.....

Student Research in the Developed World:

Medical student research projects can provide students with an opportunity to learn research methodology and the skill for critical analysis of published articles. (5) Student research projects are common in developed countries. Two examples are the 'Critical Enquiry' elective at the Queen's University, Ontario, Canada (6) and the program

conducted by the department of Family medicine at the University of Colorado, United States. (7)

Student Research in South Asia and other Developing Countries:

In South Asia, medical student research is not well developed in most of the institutions. In a study done in India, 91% of interns reported that they had gained no research experience from medical school. (8) In Pakistan, more than two-thirds of postgraduates at one institution, reported reading scientific journals only once in six months or more. (9)

Other better examples include that of Croatia where during the period of undergraduate study, 23% of students were involved in research projects. (10) Students have also been involved in conducting case-control and community-based epidemiological studies in some of the medical colleges in India. (11) Similarly, in a medical college in Western Nepal, student research projects have been used as an aid to learning pharmacology. (12) These, though encouraging, are a rarity and represent only a handful of examples.

Representation of Students' Works in Journals.....

Medical Student Journals:

Medical student journals are a common phenomenon in developed countries but again a rarity in our part of the world. Some of these are the student BMJ (www.studentbmj.com), the New Zealand medical Student Journal (www.otago.ac.nz/nzmsj), the McGill Journal of Medicine (www.medicine.mcgill.ca/mjm/)

and the Journal of Young Investigators (www.jyi.org).

A good student journal from Asia called the Asian Medical student Journal is however, no longer online. Recently the Forum for Promoting Research (www.promotingresearch.com) has launched the 10/90 student journal.

Student Sections in other journals:

Other medical journals have started student sections. This is something which I personally welcome strongly. Students can publish with and learn from peers and senior doctors. PLoS Medicine (www.plosmedicine.org) has started a student forum. The Journal of Postgraduate Medicine (www.jpgmonline.com) now has a students section.

In Nepal, the Kathmandu University Medical Journal (www.kumj.com.np) and the Nepal Journal of Neuroscience (www.neuroscienceforum.org.np) has student sections.

Other journals which often highlight student work is the Journal of Pakistan Medical Associations' Students Section (JPMA - <http://jpma.org.pk>), the Journal of College of Physicians and Surgeons Pakistan (JCPSP - <http://www.cpsp.edu.pk/journals>) and the Journal of Ayub Medical College (JAMC - <http://www.ayubmed.edu.pk/JAMC>).

Student Research at our Institution

At MCOMS for a variety of reasons, the emphasis has been on applied research. (13)

There are various examples of work done by students at our institution. A group of students have been actively involved in research. They had studied the morbidity profile and prescribing patterns among outpatients in our teaching hospital. Certain lacunae were observed and the authors' recommended prescriber education to encourage and strengthen rational prescribing. (14) A student along with me had explored faith healing practices in Western Nepal. (15) We concluded that a trained and motivated 'shaman' (faith healer) aware of his role and limitations can be an important agent for change in rural Nepal.

Pharmaceutical promotion is becoming increasingly aggressive in South Asia. The department of pharmacology conducts educational indicatives to teach students to critically appraise promotion. The educational initiative was described in PLoS Medicine's student forum. (16) Other similar initiatives are also being taken to promote a culture of research at our institution. (17, 18, 19, 20)



Other programs include the emergence of online discussion forums. In Nepal, there is an online student forum called

'Xenomed' (www.xenomed.com) which facilitates exchange of views and information among medical students. Recently, an online discussion group called Nepal Health Research Network (NHRN) (<http://groups.google.com/group/nhrn>) has been started and the group also includes medical students.

Future Perspectives

In our institution, like in many others in South Asia, medical student research is a voluntary activity pursued by interested students and faculty members. Summer and vacation research programs can be considered. Research into the health problems of Nepal should be actively pursued. Financial incentives should be given to students to actively pursue research. (21) A culture of publication in scientific journals should be created. Future doctors equipped with the skills to investigate health problems and suggest solutions are required.

Editor's Note

With respect to student research and the initiatives that are being taken by various institutions in the developing world, I would like to highlight some of the steps taken by the Aga Khan University (AKU) in Pakistan to act as a catalyst to promote further research in the region (<http://www.aku.edu>). During the first and second year of the medical study, students are now actively encouraged to pursue research electives at the institution as well as in other parts of the country. Along with this, several departments have made it mandatory to do one research project as a student group during

the rotation. These include the department of community health sciences and recently the department of Psychiatry. Work done by students has been published in one of the best journals of the world. This is highly encouraging and shows that medical students can perform very good and high quality research if given the opportunity. Hopefully, other institutions in the country and abroad would take an example to initiate similar programs to promote a culture of research in the region.

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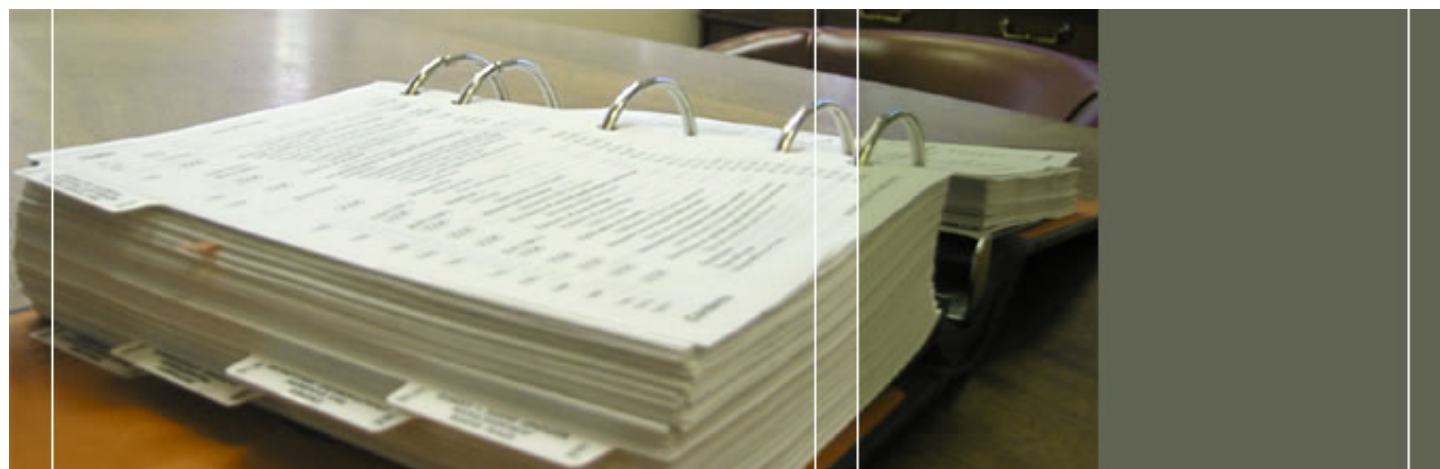
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