Editorial

JMCJMS

Promoting medical student research in Nepal

Shankar PR Editor, JMCJMS

The South Asian region (which includes Nepal) has a quarter of the world's population and suffers from weak public health systems with a staggering disease burden and health research is important to obtain information about and find solutions to these health problems [1, 2]. The 10/90 gap in health research highlights the fact that only 10% of research and funding is directed towards 90% of the world's burden of disease and initiatives to reduce the gap are important [3]. However in a recent article Paraje and colleagues have highlighted the fact that despite various initiatives the proportion of research taking place in the South-east Asia region increased only marginally during the period from 1992 to 2001 [4]. A recent article examined health research output from Nepal [5]. The authors concluded that during the period from 1996 to May 2007 a total of 631 research articles met the authors' inclusion criteria. Only 11% of the research was published in Nepalese journals with the majority being focused on urban areas. Only 41% of articles had a Nepalese first author and child health, maternal health, reproductive health and HIV/AIDS were common research topics. The authors concluded that the number of research articles from Nepal was small and concentrated on limited areas.

A long term strategy for promoting health research is targeting medical students early in their careers [6]. In developed nations many initiatives have been undertaken to promote student research contributing significantly, in many cases to the total research output of an institution. Research significantly improves students' writing skills and helps them in critically appraising a research article. It also helps them secure better residency positions. However finding time in a demanding academic schedule is difficult and certain authors are concerned that students may work as junior labourers with little role in designing the study or in the critical thought process [6].

In South Asia student research is weak and a study conducted in an Indian medical school concluded that 91% of interns reported no research experience in medical school [7]. The authors also mention that student research is a part of the overall national research infrastructure and as research by faculty is also low due to various reasons, students find it difficult to engage in research. The authors mention certain strategies to increase student involvement in research. Among these are strengthening the research infrastructure, reducing the brain drain of faculty role models, incorporating research in the medical curriculum, making a community research project mandatory for students, providing elective slots for research and incentives for student researchers. Certain medical student organizations in India

promote student research. Among them are Indian Forum for Medical Students' Research (INFORMER, <u>http://www.informer.org.in/</u>), the annual medical students' international conference (http://www.medsicon.org/) and the Indian Medical Student Association (IMSA, www.imsa.in). In Pakistan certain organizations are the Pakistan Medical Students' Research Society (PMSRS, http://pmsrs.com/), and the Asian Medical Students' Association Pakistan Chapter (http://www.amsapakistan.org/). In Nepal, the Nepal Medical Students' Society (NMSS, http://www.nmss.org.np/) and the Mountain Medicine Society of Nepal (MMSN, http://mmsn.org.np/) promote medical student research.

In a previous article I and my coauthors examined various challenges involved in initiating and strengthening medical student research [8]. In a recent article I detailed different medical student research journals [9]. In Nepal though to the best of my knowledge no medical student journals have been started different medical journals like the Journal of the Nepal Medical Association, Kathmandu University Medical Journal, Journal of the Institute of Medicine, Journal of College of Medical Sciences, and the Janaki Medical College Journal of Medical Sciences among others accept medical student articles. Nepal Journals Online (NepJOL, www.nepjol.info) is an excellent link to various journals published in Nepal.

In Nepal most medical schools have a community diagnosis program which familiarizes students to community-based research, research methodology, collecting and analyzing data and writing a research report [10, 11]. The data from community diagnosis research projects could be published in scientific journals and can contribute to the District Development Profile data. Community diagnosis reports by different student groups can be brought together as an online resource guiding other students, the community and policy makers. Publishing interesting case reports and presenting the same in various conferences and other fora could be another option for students.

A recent article had examined the patterns and trends of medical student research [12]. The authors concluded that the three most common areas of research were Psychiatry, Internal Medicine and Medical Education. Review articles, cross-sectional studies and case reports were the commonest types of articles. About 59% of these articles had however not been cited subsequently. Medical education and student opinion about curricula, learning environment and other issues could be an important area for student research. Students can also contribute to research being conducted by faculty members though one of the challenges is ensuring students play an important role in the critical thought process and do not only work as junior laborers.

The last twenty-five years have been a significant period for health research in Nepal [13]. Medical students are increasingly aware of the importance of health research in their future careers and faculty members are increasingly involved in research. I am confident that health research conducted by medical students in Nepal will improve both in terms of quantity and quality.

Dr P Ravi Shankar

Xavier University School of Medicine #23, Santa Helenastraat, Oranjestad Aruba, Kingdom of the Netherlands. E-mail: <u>ravi.dr.shankar@gmail.com</u>

REFERENCES

- 1. Sadana R, D'Souza C, Hyder AA, Chowdhury AM. Importance of health research in South Asia. BMJ. 2004;328(7443):826-830.
- 2. Low WY. Promoting public health research and collaboration in the Asia-Pacific region. Asia Pac J Public Health. 2009;21:125-127.
- 3. Global Forum for Health Research. Equitable access: Research challenges for health in developing countries (A report on Forum 11). http://announcementsfiles.cohred.org/gfhr p ub/assoc/s14796e/s14796e.pdf.
- 4. Paraje G, Sadana R, Salmela R. Collaboration and "visibility" of health research in the Western Pacific Region. Asia Pac J Public Health. 2009;21:128-136.
- Simkhada PP, Baral YR, van Teijlingen ER. Health and medical research in Nepal: a bibliometric review. Asia Pac J Public Health. 2010;22:492-500. doi: 10.1177/1010539510371020.
- Aslam F, Shakir M, Qayyum MA. Why medical students are crucial to the future of research in South Asia. PLoS Med. 2005;2(11):e322.
- Chaturvedi S, Aggarwal OP. Training interns in population-based research: Learners' feedback from 13 consecutive batches from a medical school in India. Med Educ 2001;35:585–589.
- Shankar PR, Chandrasekhar TS, Mishra P, Subish P. Initiating and strengthening medical student r esearch: time to take up the gauntlet. Kathmandu Univ Med J (KUMJ). 2006;4:135-138.
- 9. Shankar PR. Medical student journals. Xavier Times 2014; 4(3). Available from: <u>http://www.xusom.com/Pdf/NewsLetter/Xav</u> <u>ier%20Times%20e-</u> <u>Newsletter%20Vol%204%20No%203%20JU</u> <u>N%20Final.pdf</u>
- Marahatta SB, Sinha NP, Dixit H, Shrestha IB, Pokharel PK. Comparative study of community medicine practice in MBBS curriculum of health institutions of Nepal. Kathmandu Univ Med J (KUMJ). 2009;7:461-469.
- 11. Vaidya A, Pradhan A, Joshi SK, Gopalakrishnan S, Dudani I. Acquaintance with the actuality: community diagnosis programme of Kathmandu Medical College at Gundu village,

Bhaktapur, Nepal. Kathmandu Univ Med J (KUMJ). 2008;6:128-134.

- 12. Wickramasinghe DP, Perera CS, Senarathna S, Samarasekera DN. Patterns and trends of medical student research. BMC Med Educ. 2013;13:175. doi: 10.1186/1472-6920-13-175.
- Shankar PR. 1990-2014: A period of growth for health institutions and health research in Nepal. Public Health Perspective Nepal Newsletter. Published 8th May, 2014. Available from:

http://www.phpnepal.org/index.php?listId=7 42#.U2t0AYH0Ako