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Letter to Editor

Academic Recognition of Systematic Reviews and the Evidence-based Research Approach in Postgraduate Health and Clinical Sciences in Sri Lanka - Can the University of Peradeniya Take the Lead?

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One of the main ways to minimize waste in research and maximize the likelihood of research having an impact is to justify planned research based on an assessment of the global body of evidence already available. This requires identifying or conducting a systematic review within which the planned research question clearly addresses existing evidence gaps while summarizing and synthesizing existing knowledge. Such an approach ensures that research is evidence based. Evidence-Based Research (EBR) is the systematic and transparent use of prior research to inform a new study to answer questions that matter valid, efficient, and accessible (1-3). The EBR approach promotes i) well-defined research questions addressing the uncertainties within the current evidence base and ii) research questions answering the needs of end-users. If this is part of any planning of new research, only studies meeting research gaps and societal needs will be prepared and published, and thus redundancy will be avoided. In addition, the EBR international network promotes a more efficient production, updating and dissemination of systematic reviews (1-3).

However, as in many other countries (4), the EBR approach is still far from the norm in Sri Lanka. Barriers to using an EBR approach include lack of academic recognition of systematic reviews (5), underdeveloped systematic review methodological expertise, lack of access to citation databases and full-text papers only accessible through paywalls. Given the importance of the EBR approach, universities can play an essential role in removing barriers to its implementation. For example, universities could improve the academic recognition of systematic reviews in under and postgraduate programs (6).

With its academic and research diversity and more than 12000 undergraduate and 4000 postgraduate students, the University of Peradeniya can make revolutionary changes in promoting EBR in Sri Lanka.

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Promoting and supporting the use of systematic reviews would help staff and students' capacity to plan, design, conduct, analyze, and report systematic reviews.

Specific activities which will be helpful include, i) organizing lectures/ lunch talks for academic staff on the importance of systematic reviews, ii) training on systematic review methodology including train the trainer programs, iii) organizing annual workshops on systematic review methodology for academic staff members, research supervisors, and higher degree students, iv) obtaining access to the electronic databases and required software, v) organizing annual seminars for academic staff and supervisors on importance of systematic reviews in research projects, including higher degree programs, vi) training librarians on database search and on building systematic search strategies, vii) training of statisticians to support meta-analyses and meta-regression, viii) promoting systematic reviews as dissertation projects (or chapters within PhDs), ix) undergraduate and postgraduate level training through workshops/ seminars, x) encouraging conduct of systematic reviews in higher degrees, xi) establishing an EBR national center/ National Centre for Synthesis of Evidence and/or Cochrane affiliation at the University of Peradeniya, xii) promoting participation in international training and fellowships, and making international collaborations through the established EBR national center/ National Centre for Synthesis of Evidence and/or Cochrane affiliation. To make EBR a reality, the coordination between the faculty education units, higher degree committees, faculty libraries, higher degree advisory and faculty boards, heads, deans, the vice-chancellor, and the systematic review and national centers of evidence synthesis around the globe is required. While some practicalities such as database access and software access remain challenging, this proposal can be supported by internal and external resource personnel (international EBR Network, Cochrane teams (e.g., Cochrane Ireland), Evidence synthesis Ireland). Coordination through an International Advisory Group would assist in identifying the potential barriers, challenges and funding.

The benefits of the academic recognition of systematic reviews and evidence synthesis and the EBR approach include potential solutions to many obstacles in Sri Lanka in achieving excellence in scientific research and publications (5). More relevant and needed research will be performed using systematic reviews when justifying and designing new studies. The scarcity of high-quality systematic reviews submitted and published by the University of Peradeniya and Sri Lankan academics can be better managed. High-quality systematic reviews are essential in presenting the synthesis of evidence for better decision-making. Further, it will help the academic and research staff to develop their scientific writing skills, improve their methodological expertise and increase their networking capacity and collaborations. In the long-term, we as a university can have a national center for evidence synthesis, which could become a critical source of national and international research collaborations.

We leave below a statement published by The Lancet (2005) (7) and invite and encourage all the academic and research staff to take your lead in actively promoting and utilizing the systematic review and the EBR approach as a part of your research project/s.

“Unnecessary and badly presented clinical research injures volunteers and patients as surely as any other form of bad medicine, as well as wasting resources and abusing the trust placed in investigators by their trial participants. Those who say that systematic reviews and meta-analyses are not “proper research” are wrong; it is clinical trials done in the absence of such reviews and meta-analyses that are improper, scientifically and ethically. Investigators and organizations who undertake and coordinate reviews and meta-analyses now need the funding and recognition they deserve if public trust in biomedical research is to be maintained and resources used in an effective way” (7).

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