Pharmacoeconomics & Outcome Researches in Nepal: The Way Forward

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There is a long history of pharmacoeconomics and outcomes research in the United States and other developed nations. Due to a huge proportion of budgets dedicated to health care and medicine, the scope of pharmacoeconomics and outcomes research is steadily increasing worldwide. Pharmacoeconomics is at a very preliminary phase in South Asia, especially Nepal, and related studies are lacking.

The curriculum of the four universities in Nepal that offer basic four-year pharmacy degrees now contains some components related to pharmacoeconomics and outcomes evaluations. The recent curriculum for some Pharmacy, Clinical Pharmacy programs and Post Baccalaureate, PharmD programs also includes content related to pharmacoeconomics and outcomes research, garnered from a literature survey conducted in the Medline database. However, there is not a single study from Nepal which was rigorously designed and measured pharmacoeconomics outcomes. This suggests a huge gap between the education system and practice in Nepal. This gap can be attributed to an elementary type of pharmacy practice, a lack of knowledge of pharmacoeconomics, and the absence of the term ‘pharmacoeconomics’ in the National Medicine Policy of Nepal.

In order to promote the concept of pharmacoeconomics and outcomes research in Nepal, all of the bodies (universities, government, professional associations, and payers) will need to focus on these very important concepts. Payers must advocate comparative effectiveness, government should include pharmacoeconomics in the National Medical Policy and Universities, and professional associations ought to bridge the gap between education and practice. The formation of a Nepal Regional Chapter will allow us to collaborate with ISPOR, which will increase knowledge, support technology transfer and encourage capacity building.

My attendance at the ISPOR 16th Annual International Meeting in Baltimore, Maryland provided me with many opportunities to view developments in pharmacoeconomics and outcomes research worldwide, especially the USA. The ISPOR Short Courses I attended enhanced my knowledge and will improve my teaching and research at the institutional level. I am currently collaborating with various organizations in Nepal interested in pharmacoeconomics and outcomes research in order to form a core group with interest in pharmacoeconomics and outcomes research, and plan to be actively involved in establishing an ISPOR Nepal Regional Chapter.

Pharmacoeconomics and Outcome Research: Current and Future Perspectives in India

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First of all, I am thankful to ISPOR for offering me an ISPOR Meeting Travel Scholarship Award. It gave me an immense opportunity to present my research poster presentation, and to learn new things by attending four Short Courses, the highly informative Plenary Sessions, participating in the ISPOR Medication Adherence and Persistence Special Interest Group meeting and ISPOR Asia Chapter Meetings, as well as attending the other sessions.

Scope of Educational Institutes in India for Pharmacoeconomic and Outcomes Research

Pharmacoeconomics research has become an essential tool in terms of resource utilization. The health care industry is facing a lot of problems with only a few ideas in the pipeline. The industry needs to address not only effective drug management, but also the wise and appropriate use of resources necessary to sustain the health care system.

The majority of research in India involves different segments of preclinical or clinical trials, with little or no inclusion of outcomes research [1]. One reason for this may be the lack of access to quality primary data. There exists a vast amount of data, but they are not suitable for secondary database research. Most of the research at the ISPOR poster presentation sessions was focused on database research based on either comparative effectiveness research or pharmacoeconomic research. I think the central point for future research in India should be developing proper databases to be used either for comparative effectiveness research or adverse event related research.

ISPOR – The Source for the Pharmacoeconomic Development in India

Currently, there are two ISPOR Regional Chapters in India - ISPOR India and ISPOR Manipal. The National Institute of Pharmaceutical Education and Research (NIPER) is currently India’s center for excellence in pharmaceutical education and research. For the last decade, NIPER has been contributing active research in the fields of pharmacoepidemiology and outcomes research, and plans to introduce a full-time two-year course for a Master of Pharmacy (MPharm) in Pharmacoeconomics and Pharmacoepidemiology degree [2]. Collaboration between existing and future ISPOR Regional Chapters and NIPER could accelerate the current research and produce quality projects useful for allocation and effective utilization of resources in India. There are also a few colleges in India involved in pharmacoeconomics research, like the new Indian Institute of Public Health (IIPH), JSS College of Pharmacy, and Nirma University. The formation of additional Regional Chapters in India that reach out to these professionals would increase the visibility of ISPOR, and offer more opportunities to share knowledge.

Secondly, there exists a variety of material and guidelines at the ISPOR website. I think there can be more productive use of the resources by students by not only reading and understanding the concepts, but also using them in practice. There should be activities like case studies and question series which will evaluate the understanding and utilization capabilities of the students. I have seen such activities at the ISPOR Student Research competition, which involved the assessment of the students’ knowledge through multiple choice questions. In a similar way, the open source material available on the website is classified in different categories and courses that can be developed as Continuing Medical Education (CME) credits. This would help improve the standards of learning of pharmacoeconomics and outcomes research not only in India, but worldwide.

The All India Council for Technical Education (AICTE) provides a list of 1,083 approved pharmacy colleges with a total of 62,797 undergraduate and 8,013 postgraduate admissions per year [1]. This knowledge base has been >
underutilized. In this era of webinars, students should start an ISPOR India Student Chapter. I met with the President of the ISPOR Student Committee who was very positive and encouraging. I am sure ISPOR can be helpful in making a very strong inter-institute relationship in terms of collaborative projects.

Although a beginner in this field, as a Cochrane author I have been fascinated by the Cochrane system for preparing and managing systematic reviews [3]. I would like to suggest a registry for cost–studies in three stages: 1) title registration; 2) protocol; and 3) publication of complete projects. Such a registry could be associated with clinical trials or systematic review registries so that unique studies involving pharmacoeconomic research can be linked. This database of economic reviews will assist evidence-based decision making by different stakeholders. Currently, data is available but it must be high-quality and user-friendly. I think ISPOR is the best resource for this project.

From my side, I have started my own group where research volunteers share and learn new things related to outcomes research and projects. One of our major aims is to develop the standards of the pharmacist’s role in India by doing clinical and economical reviews.

**Conclusion**

In short, ISPOR provided me a unique and refreshing experience. I will continue to use the knowledge gained from ISPOR by contributing to health outcomes research and trying to lift the standards in India.

**References**

3 The Cochrane Collaboration.