

GENERAL SECTION

**TRAINING IN REFERENCE MANAGEMENT SOFTWARE – A PART OF NEW MEDICAL INFORMATICS WORKSHOPS IN PAKISTAN**

**M Jawad Hashim, M Faisal Rahim\*, Ali Yawar Alam\*\***

Section of Medicine, \*Shifa College Informatics Lab (SCIL), Department of Community Medicine, Shifa College of Medicine, Islamabad, Pakistan.

**Background:** Researchers in Pakistan can increase writing productivity, reduce errors in manuscripts and improve quality of their papers by hands-on workshops on bibliographic reference software. **Methods:** A workshop was conducted in an interactive tutorial format using an overhead projector to show screenshots of software at each step. Our Workshop included:<sup>1</sup> starting the Endnote program (www.endnote.com);<sup>2</sup> manually entering a reference of a journal article;<sup>3</sup> searching and importing references from PubMed;<sup>3</sup> inserting a reference in Microsoft Word document in a journal-specific format;<sup>4</sup> essentials of journal article formatting; and<sup>5</sup> the ethics of respecting other peoples of intellectual effort by proper citations and avoiding plagiarism. **Results:** A post-workshop test was administered to assess whether instructional objectives were attained. All the participants passed the post-workshop multiple choice questions and 85% rated the workshop as good, very good or excellent. **Conclusion:** A workshop on reference formatting in research writing is useful to promote high quality research work. We recommend holding workshops twice a year on research article formatting and reference software at medical colleges in Pakistan and other developing countries.

**Keywords:** Reference manager; training; medical informatics; research writing.

**INTRODUCTION**

Reference management software helps enter references to journal articles in a research paper in the appropriate formatting and sequence. This greatly reduces the burden on the writer to edit and proofread references, thus avoiding formatting errors.<sup>1</sup> In addition these software programs can connect via the Internet to PubMed for searching and retrieving references. Researchers in Pakistan can increase writing productivity, reduce errors in manuscripts and improve quality of their papers by hands-on workshops on bibliographic reference software such as Endnote.<sup>2,3</sup>

**MATERIAL AND METHODS**

We report our overwhelmingly positive experience in conducting an interactive workshop for faculty and staff at Shifa College of Medicine, Islamabad in June 2006. A two day workshop of 2 hours afternoon sessions each, was offered at our medical informatics lab using Endnote version X (www.endnote.com). The workshop was conducted in an interactive tutorial format using an overhead projector to show screenshots of software at each step. Written handouts were given outlining the functions of the program and as well as a step-by-step tutorial. About 20 participants (2 to 3 per computer) attended with 3 instructors facilitating.

Workshop included: starting the Endnote program; manually entering a reference of a journal article; searching and importing references from PubMed<sup>4</sup>; inserting a reference in Microsoft Word

document in a journal-specific format; use of templates for journal articles and their formatting; and the ethics of respecting other peoples of intellectual effort by proper citations and avoiding plagiarism.<sup>5</sup>

**RESULTS**

A post-workshop test was administered to assess whether instructional objectives were attained (Table 1).

All the participants passed the post-workshop multiple choice questions and 85% rated the workshop as good, very good or excellent.

**Table 1- Survey of workshop participants**

	Mean (median)
Number of articles written	4.5 (1)
Number of articles on PubMed	2 (0)
Year of graduation	1999 (2003)
Have you used Endnote before?	15% yes

**DISCUSSION**

Our results from this workshop indicate that medical college faculty can benefit from a hands-on, step-by-step training program on reference formatting. We found that keeping the workshop interactive with guidance from facilitators improved the learning experience.

We received multiple requests afterwards to repeat this workshop for people outside our college. We recommend holding similar workshops twice a year on research article formatting and reference software

at medical colleges in Pakistan and other developing countries. This will contribute to medical research and education in this region. We plan to conduct more workshops on reference formatting with additional training in research paper formats.

## CONCLUSION

A workshop on reference formatting in research writing is useful to promote high quality research work. Response from participants was very encouraging and requests for similar workshops indicate an interest and need for these skills.

## REFERENCES

1. Aronsky D, Ransom J, Robinson K. Accuracy of references in five biomedical informatics journals. *J Am Med Inform Assoc* 2005;12(2):225-8.
2. Endnote X. In. 10 ed. Carlsbad CA. Thomson Research Soft; 2006.
3. Eapen BR. EndNote 7.0. *Indian J Dermatol Venereol Leprol* 2006;72(2):165-6.
4. Gall C, Brahma FA. Retrieval comparison of EndNote to search MEDLINE (Ovid and PubMed) versus searching them directly. *Med Ref Serv Q* 2004;23(3):25-32.
5. Gollogly L, Momen H. Ethical dilemmas in scientific publication: pitfalls and solutions for editors. *Rev Saude Publica* 2006;40(spec):24-9.

---

**Address for Correspondence:** M Jawad Hashim, MBBS FAAFP, Assistant Professor, Section of Medicine, Shifa College of Medicine, Pitrus Bukhari Road, H8/4, Islamabad, Pakistan. Tel: 92 51 4446801 ext 3378  
Fax: 92 51 4435046  
E-mail: jawad.has@gmail.com