



## Medical writing in India

by Roopa Basrur

When I attended the EMWA meeting at Manchester last year, many were surprised. What was a medical writer from India doing at a meeting for European medical writers? Was there that much medical writing being done in India? Was the 'fear' described at the outsourcing discussion at the Malta conference last year justified? How many medical writers are there in India? To the credit of my well read fellow writers, no one asked if I rode to work on elephant back!

India, as most people are aware, possesses a geographically, socially, linguistically and culturally diverse milieu on a scale unlike that of any other country. With the recent information technology (IT) and outsourcing boom, its long-languishing economy has been given a boost, giving rise to a growing middle class and creating new job opportunities for its people. The pharmaceutical industry has developed along with IT and is flourishing. As a result of drug regulatory authorities amending rules on clinical research in India over the last five years, a large number of global clinical research organisations (CROs) have entered the Indian market. All this has naturally increased the need for quality medical writing in this so-called third world country. Here, I have tried to collect a few snapshots of the different types of medical writing in India.

In 2004, one of India's premier medical teaching institutions played host to the "Journal of Postgraduate Medicine (JPGM) Gold Con: 50 years of Medical Writing", probably the first international conference on medical writing in the country [1]. Of course, I immediately signed up and attended the conference in Mumbai, where leading local and international figures in the medical writing and editing world presented such topics as choosing the right journal, publication ethics, statistical errors in medical writing and open access. Although the conference was driven by the academe, I met writers from major pharmaceutical companies, medical communications firms and CROs, in addition to doctors interested in research and publication.

Much of the medical writing in India originates from academic institutions, rather than the pharmaceutical industry. As in other parts of the world, here too, many doctors like to see their work published, some to enhance careers, and others for the love of research and writing. In 1992, it was estimated that Indian doctors wrote over half of the articles that came from third world countries, most of which were perhaps never read by international readers [2]. "A majority of the articles by Indian authors, published in Indian or international journals, come from just eight to ten top academic institutions", says Dr Sanjay A. Pai, Head of Pathology at a private institution. Dr Pai devotes as much as a quarter of his day to editing and writing. He sits on the editorial board of the *National Medical Journal of India (NMJI)* and the *Indian Journal of Medical Ethics (IJME)*, both indexed journals of repute.

A search through the Science Citation Index reveals that Indian journals account for a paltry 0.3% of the total number of science journals worldwide [3]. Dr Samiran Nundy says, "there are about 35 medical journals included in Index Medicus and probably four in the Science Citation Index, all with impact factors of less than one". Dr Nundy, a gastrointestinal surgeon at the Sir Ganga Ram Hospital in New Delhi, is on the editorial board of several journals including the *British Medical Journal (BMJ)*, and was the founding editor of the *NMJI*. He feels that papers published in India are generally of poor quality. This is probably because most authors who produce quality research target international journals as their first choice for submitting their work—for obvious reasons. Dr Pai echoes these thoughts, saying that the *NMJI* rejects about 75% of manuscripts it receives, mainly due to poor science content. Incidentally, journals such as the *BMJ* and the *Journal of the American Medical Association* reject over 90% of papers submitted to them, according to their websites.

Overall, the potential for good medical writing exists in India and, as awareness and opportunity are created, it is sure to improve. Training young doctors at the medical school level and life science graduates at university in the importance of good scientific research together with the ethics and technique of publication will go a long way towards promoting better medical writing.

So, what is the future of professional medical writing in India? As the pharmaceutical and clinical research industries flourish, the demand for quality writing is set to increase. The main advantage—one that makes many jittery—is the low cost of operations and salaries in India compared with Europe or the United States. India's strength also lies in its large number of English-speaking medical professionals. The medical education system is excellent, with premier institutes that approach Western standards.

However, the standard of English used varies widely and ranges from poor to excellent. India has 24 major languages and possibly thousands of dialects that are spoken by its one-billion people [4]. From what I have seen, most Indians learn English as a second language and 'Indian English' is known to be wordy and 'flowery' [5, 6]. General medical journals tend to receive articles of lower standards of English than journals such as the *IJME*, where contributors are well-versed in writing. In my interactions with local medical writers, mostly pharmacy or life-science post-graduates who are non-native English speakers, their language skills definitely need improvement. Increased exposure to Western writing and training will rectify this problem.

Dr Arun Bhatt, President of a CRO (ClinInvent Research International Pvt Ltd), finds the level of English used by

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medical scientists in India above average compared with current use in the country. He is involved with journal editing as well as medical writing in the clinical research industry, and feels that for Indian writers to be accepted internationally, they must acquire global regulatory expertise. It is likely that, in a couple of years' time, the number of medical writers with the requisite skills will increase and this trend will develop into a fully fledged industry. As a medical writer within an international CRO (ClinTec International Ltd), I have been involved in writing clinical study reports, manuscripts, protocols, subject information sheets, position papers and case report forms. "Most of our writing assignments at ClinTec International India are for major pharmaceutical companies in Europe, who have been highly satisfied with the quality and speed of delivery of our projects", says President and Founder, Dr Rabinder Buttar. Awareness of ICH-GCP, regulatory requirements and the International Committee of Medical Journal Editor's Uniform Requirements for Manuscripts Submitted to Biomedical Journals form part of the on-job training process.

In terms of local training, the *NMJJ* occasionally offers courses on improving medical writing. The Academy of Clinical Excellence has modules on clinical trial design as part of its diploma certificate courses [7]. The Christian Medical College at Vellore also conducts annual programmes on epidemiology and clinical trials, which cover many topics of interest to medical writers [8]. On the whole, however, very little formal training is available in India and most writers learn on the job. Multinational pharmaceutical companies and some CROs employ life-science (usually with pharmacy or microbiology backgrounds) and medical graduates or post-graduates from all disciplines (such as allopathy, homeopathy, ayurveda, dentistry and veterinary science). They train them in-house to write clinical study reports and other documents such as product reviews and drug profiles. Some pharmaceutical heavies such as Pfizer, Novartis, and GlaxoSmithKline (GSK) have medical writing teams based in India. The study reports or manuscripts are very often finalised by the relevant department at their head office in the United States or Europe. However, Ms Priya Pavithran, Assistant Manager, Scientific Writing at GSK, India says, "At the Clinical Data Management Centre India (CDMCI)—an integral part of GSK—writers undergo rigorous training, and are now contributing as much as our European counterparts, following experience gained over the last 10 years".

Medical writers are also employed by medical communications companies. Home-grown firms like Indegene Life-systems provide digital conference services, continuing medical education and information tools, among other products, to healthcare providers and medical professionals [9]. A number of websites offer medical information online targeted at the Indian professional and patient. Subsidiaries or partners of European or Asian medical communications organisations, such as CMP Medica, also operate in India. Medical writers here primarily cater to the communication needs of the local pharmaceutical industry by producing detailing aids, drug profiles, patient information booklets, training kits for sales personnel and newsletters. However, the marketing departments of most pharmaceutical compa-

nies still prefer to develop their own promotional materials, often with the help of an advertising agency. Several drug directories, produced by writers with strong backgrounds in pharmacy, are also published in India.

Finally there are entrepreneurs like Dr Bhawana Awasthy, an oncologist with clinical research and pharmaceutical experience who recently started her own medical communications organisation. She offers a full range of regulatory and writing services for the CRO and pharmaceutical industries, as well as co-operative groups [10]. Dr Awasthy would naturally like to see the Indian medical writing industry mature and gain international acceptance. She feels that although medical writing in India has the capacity to become an outsourced industry, there is plenty of work for everyone and this should not really be an area of concern to American or European writers.

The growth of freelance medical writing as a full-time occupation is probably not too far off. An Internet search for freelancers in India turned up a half dozen writers, mostly medicos. Another related field is that of mainstream newspapers and magazines, which use the services of freelance or in-house medical journalists who write features and reviews on Indian and international medical and pharmaceutical news. "Online content companies have access to a large network of writers who provide writing services comparable to their European counterparts", says Dr Nishi Viswanathan, Chief Content Coordinator at Chillibreeze [11]. This novel venture started in India in 2004 and today has around 50 medical writers, who mainly work from home, on its database.

Although slow to start, India should soon evolve into a unique centre for medical writing. "Indian medical writing has huge potential and its quality and quantity are going to increase greatly over the next five to ten years", in Dr Nundy's opinion. Only time (and some hard working medical writers!) will tell.

### Acknowledgements

I would like to thank Dr Bhawana Awasthy, Dr Arun Bhatt, Dr Rabinder Buttar, Dr Miki del Rosario, Dr Samiran Nundy, Dr Sanjay A. Pai, Ms Priya Pavithran, and Dr Nishi Viswanathan for their inputs and encouragement.

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### References:

1. www.jpgmonline.com/goldcon.asp (Accessed April 2006)
2. Sahni P, Reddy PP, Kiran R, Reddy KS, Pande GK, Nundy S. Indian medical journals. *Lancet* 1992;339(8809):1589-91
3. Basak SC. Science citation index (SCI) journals and journal impact factor (IF) in Pharmabiz.com. June 2005. www.pharmabiz.com/article/detnews.asp?articleid=28223&sectionid=46 (Accessed April 2006).
4. http://en.wikipedia.org/wiki/Indian\_languages (Accessed April 2006)
5. www.hinduonnet.com/1r/ss2002/08/04/stories/2002080400370600.htm (Accessed April 2006)
6. www.chillibreeze.com/articles/HowanIndianWritercanwrite-foraGlobalAudience.asp (Accessed April 2006)
7. www.aceindia.org/about.htm (Accessed April 2006)
8. http://cmch-vellore.edu/departments/services.asp?did=6 (Accessed May 2006)
9. www.indegene.com/Corporate/home.html (Accessed April 2006)
10. www.xcelerx.com/default.htm (Accessed April 2006)
11. www.chillibreeze.com (Accessed April 2006)