

A case study from Pakistan: Improving medical publications in non-English speaking countries

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Abstract

Copyediting is crucial for enhancing the quality and credibility of medical manuscripts in Pakistan. Although English is an official language used in government and education, many researchers are not native speakers, leading to linguistic inaccuracies in publications that can cause misinterpretation and critical errors in medical understanding. Pakistan publishes approximately 70 to 90 medical journals, with about 86 recognised by the Higher Education Commission of Pakistan. However, these journals often face challenges such as inadequate peer-review processes, limited editorial oversight, and resource constraints, affecting their international recognition. Specialised copyeditors are seldom employed; editorial tasks are usually handled by board members who may lack proper training. Financial constraints hinder investment in professional editorial services and training. While there is a rise in freelance copyeditors offering cost-effective and scalable solutions, their expertise remains underutilised locally. Collaborating with these freelancers can help Pakistani medical journals meet global standards. Other strategies are also discussed to elevate the quality of medical publications in Pakistan.

The medical literature is essential for communicating research, discoveries, and innovative treatments. Specialised areas such as medicine require precise language and comprehensive editing to ensure clarity and accuracy. Globally, copyediting of medical manuscripts faces challenges such as language barriers, scarcity of expert editors, and the need for high publication standards. In Pakistan, these challenges are compounded by specific conditions in the medical publishing landscape, emphasising the fundamental need for clarity, precision, and detail in the publications. Copyeditors play an indispensable role in scientific and medical publications. They facilitate the conveyance of research outcomes in a manner that is both comprehensible and precise, thereby enhancing a journal's credibility and strengthening readers' trust.

Language challenges in Pakistan

English is one of Pakistan's official languages, and it is extensively used in government administration, legal proceedings, and higher education. Approximately 49%–58% of Pakistanis have some level of English proficiency, encompassing both native and second-language speakers.¹ However, achieving linguistic accuracy and clarity poses a challenge, increasing the risk of misinterpretation or miscommunication, which can lead to critical errors in medical understanding and application.

Scope of medical publishing in Pakistan

Pakistan publishes a significant number of journals across various academic fields, totalling approximately 2874 across all disciplines. There are approximately 70–90 medical journals, with approximately 86 recognised by the Higher Education Commission (HEC) of Pakistan.² Some of these journals are indexed in international databases, such as PubMed, Scopus, and Web of Science, enhancing their global visibility. Although many Pakistani medical journals are peer-reviewed and cover a wide range of specialties, their standards vary considerably.³

Some meet international benchmarks, but others face challenges, such as inadequate peer-review processes, limited editorial oversight, and resource constraints.⁴ Factors such as limited funding, lack of training in editorial practices, and language barriers contribute to these issues, affecting the credibility and international recognition of the published work.³

The English language is commonly used in scientific publications in Pakistan. However, this is not the first language used by many researchers. This can lead to difficulties in manuscript preparation and can increase the likelihood of grammatical errors. The scarcity of professional editorial services and developmental editing support further affects the quality and quantity of scholarly output. This context highlights the importance of enhancing editorial services to improve the quality and international standing of medical publications (Figure 1).

Current state of copyediting in Pakistan

Employing specialised copyeditors is uncommon in many developing countries, including Pakistan. Instead, these tasks are typically handled by editorial board members, who often lack specialised training in copyediting and proof reading. This deviation from global practices leads to a scarcity of formal structures and private companies dedicated to medical editing, making it challenging to uphold consistent standards and quality. Financial constraints limit investment in specialised software and training, which could enhance the quality of manuscripts. Moreover, the high costs associated with article processing charges for open access publications in international journals can be prohibitive for researchers.

The varied standards of medical journals in Pakistan affect the credibility and international recognition of published work.³ This affects how the global medical community views the medical research emerging from Pakistan. Talented editors and researchers may seek opportunities abroad due to better professional prospects,

depriving the local scene of much-needed expertise. Limited access to advanced editing software and plagiarism detection tools further hinders the maintenance of the integrity and quality of medical literature. Sociocultural factors may influence research topics, affecting the diversity and relevance of the medical literature in a global context. Keeping pace with rapid advancements in medical science requires continuous updates to editorial practices, which may be challenging given the resource, training, and expertise limitations.

Challenges in publishing and English language editing

Scholars face growing pressure to publish their work in English,^{5,6} as publications in English are generally considered more prestigious.⁷ One significant issue that editorial board members face is English language editing and paraphrasing.⁸ With English being a second language for many in Pakistan, ensuring linguistic precision in medical manuscripts becomes daunting.⁹ These challenges can lead to misinterpretations or miscommunications, which could have grave implications in the medical field.¹⁰ Editors of medical journals tend to focus more on scientific soundness than language quality.⁵ Jawaid et al. analysed deficiencies in articles accepted for publication in the *Pakistan Journal of Medical Sciences* and found extensive grammar mistakes, inappropriate references, and unnecessary tables.¹¹ Aziz et al. examined English grammar issues in articles submitted to the *Annals of Abbasi Shaheed Hospital*. They identified errors such as the misuse of punctuation, incorrect tense and voice, and errors in article usage.⁴

Given the critical importance of avoiding grammatical errors, it is imperative for authors to thoroughly review their manuscripts.¹⁴ Authors might benefit from specialised training in manuscript preparation before submission.¹¹ Currently, no journals in Pakistan provide specific developmental editing services to improve the writing prowess of their authors.^{3,12-14} Developmental copyeditors play an important role in collaborating with authors, guiding them to refine their work by enhancing clarity, ensuring logical flow, and bolstering the overall relevance of their scientific manuscripts.¹⁵ This specialised form of editing goes beyond simple corrections; it explores the content structure, argument presentation, and effective communication of ideas, ensuring that the final product is both scientifically robust and reader-friendly.¹⁶

The rise of freelance copyeditors

While the Western world has seen a rise in specialised editing companies catering to the medical community, Pakistan has relatively few such institutionalised structures.¹⁷ Although some local freelancers and small companies offer medical editing services and international companies are accessible, these options may not be widely available or affordable for many authors in Pakistan.¹⁸ This gap presents both a challenge and an opportunity.

Despite the absence of dedicated companies, there has been a notable increase in freelance copyeditors offering their services in Pakistan.^{19,20} Freelancers have carved a niche on global platforms such as Fiverr and Upwork, becoming sought-after professionals because of their linguistic skills and domain expertise. However, their potential remains underutilised in the local medical publishing sector.

Collaborating with freelancers emerges as a cost-effective strategy that offers flexibility and

scalability. Journals can commission freelancers on individual projects, allowing them to scale up operations during periods of increased manuscript submissions and reduce engagement during lulls. This approach bypasses the financial burden associated with consistent full-time employment. Freelancers' familiarity with international editing benchmarks ensures that Pakistani medical journals can align with global standards. Integrating freelance professionals with in-house editorial teams can promote a more diverse and formidable editorial collective equipped to manage a vast array of manuscripts.

The role of the Higher Education Commission of Pakistan

Pakistan's HEC is crucial for overseeing and improving the quality of higher education and research, including in medical education. The HEC ensures that academic and research outputs, particularly those of medical journals, adhere to international standards. This includes

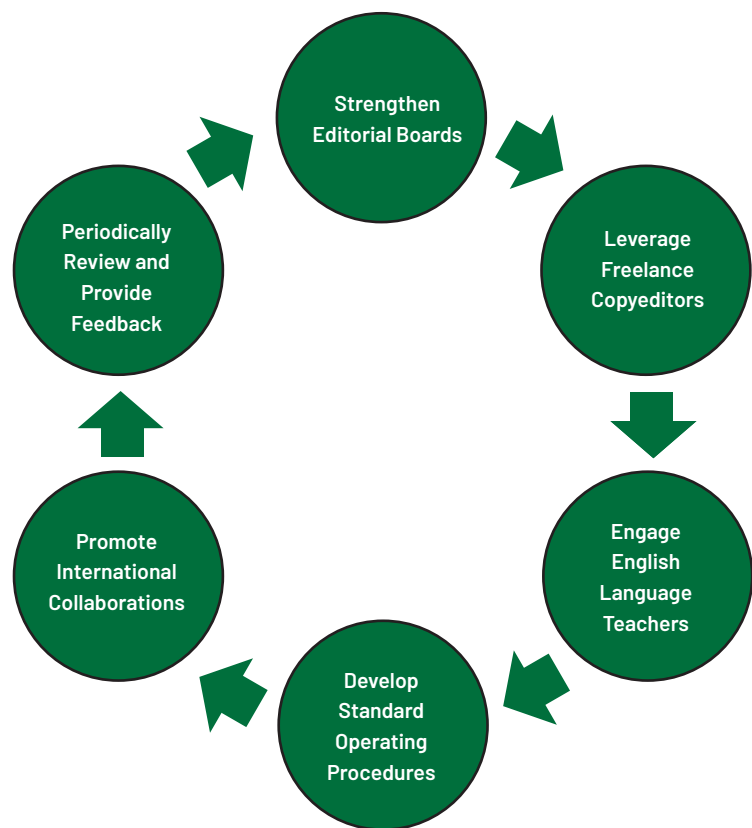


Figure 1. Recommendations for enhancing the copyediting of medical manuscripts in Pakistan



accrediting journals based on their credibility and reliability, supporting them by funding research, and providing training for editors through capacity-building programmes.²¹

The HEC should promote the use of qualified English language teachers (ELTs) in medical journals to enhance the quality of articles through collaboration with scientific peers. Developing training programmes with international editing associations can improve the skills of local journal editors. Offering grants or financial incentives to journals committed to high-quality copy-editing would encourage a general uplift in standards. Implementing mechanisms to periodically review the quality of copyediting and proofreading can maintain consistently high standards. Establishing partnerships with international editorial organisations

Developing training programmes with international editing associations can improve the skills of local journal editors.

would keep HEC updated with global best practices and innovations in medical editing.

Recommendations for enhancing medical manuscripts

Editorial boards of universities and private medical journals in Pakistan are encouraged to collaborate with freelance copyeditors and ELTs to improve manuscript quality. This collaboration not only boosts the quality of the medical literature but also offers valuable employment opportunities to the freelance community. The recommendations include expanding editorial membership to encompass individuals with specialised copyediting and English language skills. Organising regular training sessions can enhance proficiency in English, paraphrasing, and technical editing among

editorial staff members. Employing qualified ELTs is essential to ensure thorough editing to meet international standards. Establishing dedicated firms specialising in medical literature editing could elevate local journals by improving the quality of their publications. Connecting freelancers and publishers through dedicated platforms can ensure a steady supply of skilled professionals for editing tasks. Developing transparent standard operating procedures is crucial for maintaining consistency and quality in the manuscript submission, editing, and publication processes.

Financial constraints and professional associations

Both the European Medical Writers Association (EMWA) and the American Medical Writers Association (AMWA) are well-established associations that offer support, resources, and training to medical editors and copyeditors.^{22,23} Membership benefits include free or reduced-price access



to tools, workshops, and networking opportunities that can significantly benefit professional career advancement. However, with annual membership fees of €130 for EMWA and \$199 for AMWA, the cost of joining these global associations is prohibitive for many professionals in Pakistan. The high relative cost, when converted to local currency, often exceeds the financial capability of the average copyeditor. While these associations cater to a global audience, their fee structures do not account for the economic disparities among countries. Implementing a subsidised fee structure based on individual countries' economic conditions would make membership more accessible to professionals in lower-income nations. Making resources more accessible and affordable through local associations or restructured global membership is vital. Partnerships with inter-

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national peers, including exchange programs and training, would further support skill development across diverse economic contexts.

Building awareness and local associations

Awareness campaigns should be initiated to highlight the importance of copyediting in medical literature. This can elevate the profession's stature and emphasise its significance. There is a pressing need to establish local copyediting and medical writing associations in Pakistan. This can provide affordable training, resources, and networking opportunities tailored to the Pakistani context. Implementing these recommendations will not only elevate the quality of medical manuscripts in Pakistan, but also position the nation as a credible and respected contributor to the global medical research community.

Medical journalism, copyediting, and English language teachers: A growing industry

The fields of medical journalism and copyediting in developing countries, including Pakistan, are undeniably on the rise. As more research emerges and global collaboration increases, there is a pressing need to ensure the quality of published works. This evolution offers a promising path for aspiring copyeditors and ELTs and reinforces the importance of their role in enhancing Pakistan's medical literature landscape. The insights gained by ELTs through collaboration with researchers regarding their research approach, execution, and writing could ease the editing workload. This allows these specialised editors focused on English instruction to perform their editing tasks more proficiently and effectively.²⁴ The expertise acquired through joint efforts could enhance the credibility of English teachers as intermediaries in scientific literacy and specialists in a field known as English for specific purposes (ESP).²⁵

Conclusion

The copyediting of medical manuscripts in Pakistan is currently in its early stages.

Despite ongoing hurdles, a clear upward trajectory is discernible in this industry. The emphasis on quality and linguistic clarity in medical narratives is more pronounced than ever before. Copyediting is valuable for scientific

fraternity for improving the quality of research reporting and expediting the publication process. With Pakistan steadily enlarging its research influence, involving specialised copyeditors is becoming increasingly essential to ensure that the nation's scholarly contributions are clearly articulated and accepted globally. Implementing these recommendations can substantially augment the stature of Pakistani medical manuscripts, cementing its role as a trustworthy and respected participant in international medical research.

Clear and concise language will help editors and reviewers concentrate on the paper's scientific content and thus smooth the peer review process. Therefore, integrating ELTs and freelance copyeditors into Pakistan's medical journal editorial services could be transformative. It will not only enhance the linguistic calibre of the output but also facilitate a level of excellence aligning with international benchmarks, consequently uplifting the global positioning of Pakistani medical research.

Disclaimers

The opinions expressed in this article are the authors' own and not necessarily shared by their employer or EMWA.

Disclosures and conflicts of interest

The authors declare no conflicts of interest.

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