### **Short Communication**

## Practical Problems Faced by the Non-English Speaking Medical Graduates in Writing Scientific Research Articles and their Judicious Solutions

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### **Background**

"In literature when nine hundred and ninety-nine souls ignore you, but the thousandth buys your work – this is called enormous popularity"

- Arnold Bennet (1867-1931)

Every year, thousands of international medical graduates (IMGs) apply for clinical residency positions in different specialties across the United States. In addition to the challenges they face ranging from travelling long distances to the United States, the language barrier, inadequate resources, the lack of awareness about ground realities and cultural gaps; the most significant challenge confronted constitutes an ever-rising need to score higher on the United States Medical Licensure Examination (USMLE) in comparison to the American medical graduates. Despite being the crème' a la crème in their respective countries, the problem doesn't end here. In order to verify the "readiness" of a candidate before inducting into a residency training program, an international medical graduate is expected to possess at least a few months of US clinical and research experience on his resume so as to prove he is conditioned enough for entering into the American System. Merely having research experience without any publication against their name leaves the candidate unaccredited. Therefore, the challenge for such residency applicants skyrockets because not only they have to find a research position, a job or a training slot but they are also expected to publish research papers in relatively reputable journals in a limited time frame with much restricted resources. In this short piece, we will highlight some challenges faced by the non-English speaking international medical graduates in writing a good quality research paper.

With no prior training on scientific writing and not possessing any published research paper to their credit significantly dims the prospects of IMGs to breakthrough into the mainstream National Residency Matching Program as well as reduces their chances to acquire an academic position, should they choose to pursue an academic path like a career in research or teaching. In this editorial, we will highlight what we believe are some of the major causes of difficulties for International Medical Graduates in writing and publishing research papers in English language and subsequently have them accepted in scientific peer-reviewed journals. We will conclude with the proposed solutions to this problem faced by these potentially highly competitive future doctors and scientists.

### Why International Medical Graduates Find It Difficult to Write and Publish A Research Paper?

There can be many reasons for the proposed question but in our opinion, it is a coalescence of the following factors:

# Lack of familiarity with the language can be considered as one of the major causes of the aforementioned problems

A large percentage of medical graduates apply for the clinical residency positions from the countries where the official language of communication is not English. It is evident that to live and work in the United States, one has to not only be familiar with the English language but also express fluent command in speaking, listening, writing and reading proficiency. Therefore, in order to apply for the US residency training, the IMGs not only have to publish a paper but also have to ensure that the paper they write and publish is in English language. In contrast, some medical graduates from the countries where the education system is English actually possess an edge over the students from medical schools where the medium of instruction is other than English. However, even the latter also have extreme difficulty in writing adequate paraphrasing needed to write an opinion piece. It is quite natural when one does not speak or understand the Basic English, he or she will definitely have difficulty understanding the grammar and writing high Standard English rules.

### Lack of writing training and guidance at the medical school or high school level

Many countries do not have a concept of teaching the research methodology as a part of the curriculum or "Scientific writing" as a course in undergraduate curriculum. In fact, it is not even included as an optional course. The issue is compounded by the fact that there is no structured training program offered for the doctors at the postgraduate level. Thus, the students are deprived of developing and improving their academic writing skills.

### Less opportunities for research in many developing Countries is one of the major causes of the problem

Many developing countries have little or no funding designated for research. The lack of research opportunities leads to less chance of jobs and hence, inadequately trained workforce is produced. Such ill-prepared scientists are neither accustomed to the concept nor to the culture of article writing.

### Lack of skills and knowledge about writing and publishing leads to burn-out & discouragement

When such healthcare professionals can't write a paper successfully or when their paper is rejected they are discouraged by it and quit the efforts. Onwere in his article quoted, "A lot of efforts are made to accomplish medical research; however, when it comes to publishing this hard work, most of the researchers either lose the steam or get disinterested. Poorly prepared manuscripts and multiple rejections by various journals further dampen their spirits. Lack of novelty in research, poor research design, inappropriate methodology, errors in selecting proper statistical tools and techniques, inadequate training of scientific writing, grammatical and syntax errors and various other flaws are major contributory factors leading to the preparation of a poor manuscript. The enthusiasm and the joy of writing diminish with repeated rejection of manuscripts even in authors with good potential".1

### Lack of self-belief is another major factor leading to the problem

It is quiet natural to have a lack of belief in one's capability of doing something when one has not done the same thing in the past. Therefore, many students take up the task with this preconceived notion that they lack the skill and ability to write the paper. Without actually realizing that research writing is primarily a skill and can be learned by anyone, and it is not an art a scientist is primarily born with, regardless of the academic background, the previous level of experience or clinical expertise.<sup>2</sup>

#### How to Solve the Problem?

Learn all four components of the English language. This includes, English speaking, listening, writing and reading. There are many things a student can do to learn these skills. Nowadays various online English learning courses are available online. In fact such training could be acquired for free on YouTube and through various webinars. Another solution could be applied at the high school or the university level. The medical schools and universities need to teach academic writing to the students. The education system at high school level should encourage the acquisition of such courses and encouragement should be provided to students regarding learning the principles of academic writings.

Everyone is responsible for his own success and therefore, it is the responsibility of the student to earn extra credits on academic writing and browse through as many academic papers as possible to improve not only the academic writing but also the current application of such principles.

Lack of belief can be treated by writing as much as possible and keep publishing it and do not be discouraged by the rejection. In fact, the rejection should be considered as a learning experience. Because it teaches a student about the academic deficiencies on his part and how to improve his writing credentials and learn the art of academic writing.

The art of preparing a manuscript can be acquired only by following certain basic rules and technical aspects, besides the knowledge and skills.<sup>3-12</sup> If students judiciously utilize those

basic principles of writing, there is no way that they cannot write and publish their own research paper. The healthcare workers need to understand that the research article writing does not require you to necessarily be a part of a team of scientists working in a research lab and you must have to do a clinical trial first to be able to write article. It can easily be learnt while sitting in the comfort of their homes, by joining any online academic writing or research training course and buying various books on the principles of the English language, writing in style and writing academic papers.

#### Conclusion

One of the major problems faced by the International Medical Graduates coming to the US to apply for the residency program in the specialty of their choice is the expectation of writing and publishing a research paper in the English language by many residency programs in the United States. Writing and publishing a research paper is difficult for the majority of the IMGs because of various reasons like the unfamiliarity with the English language, lack of research training in their home countries etc. However, writing a research paper is a skill like any other professional skill and it could be learned by a sheer dedication and determination. Variety of English language and research training opportunities are available online at economical rates and in various instances totally free of cost on the websites like YouTube and Coursera. Students can learn these skills by taking such courses and buying various books and master them with relentless practice.

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