

Good medical writing saves lives: The perspective of a former medic

Making the decision to leave medicine was the hardest of my life. What if all those years of study, thousands of pounds of debt and sacrifices I made were not wasted but instead prepared me for my most gallant career yet – medical writing? Believing the statement “good medical writing saves lives” is how I sleep at night. The objective of this essay is to substantiate this claim with evidence, so I can obtain some solace that the decision I made 3 years ago was justified.

Some of the first examples of how good medical writing saves lives come from the great physicians such as Hippocrates and Galen, who were the first to chronicle their medical findings and methods. This historic medical writing allowed the emerging knowledge to be perpetuated and developed into what we know as modern medicine. It served as the progenitor for all medical teaching and the number of lives it has saved is unquantifiable.

Medical writers today are tasked with translating the increasingly complex scientific research for myriad audiences. If this writing is of good quality, examples of how it can save lives may include effective drugs reaching patients quicker, more health care professionals learning about current research that affects their patients, and patients themselves becoming equipped with the knowledge to recognise the signs of life-threatening disease earlier.

Taking the first example above, what difference does good medical writing make to the availability of new drugs? To have a New Drug Application approved by the US Food and Drug Administration, a drug sponsor must submit a vast array of documentation about the drug’s pharmacology, the results of multiple animal and human studies, and how it is manufactured, processed, and packaged.¹ Medical writers are employed either directly or via an agency to prepare these materials. They are responsible for the interpretation of the data and conveying the key messages accurately and succinctly. Failing to scrupulously review the data could lead to, for example, missing a correlation of increasing levels of liver enzymes with higher doses of the drug, or misplacing a decimal point in a p-value of a significance test comparing the regression of tumours between the treatment and control group.

The rapidly advancing progress in the treatment of melanoma – considered the deadliest form of skin cancer – is an example of

how medical writers are instrumental in saving lives by ensuring the right drug reaches the right patients in a timely manner. Promising new immunotherapies and gene-targeted drugs are in the pipeline² and medical writers are optimising the development process at each stage: from preparing the regulatory documents for the US Food and Drug Administration, to assisting with the efficient publication of the research. Once approved, medical writers become involved in the delivery of a salient message to educate health care professionals involved in the treatment of melanoma patients. In addition, writing the patient education materials, including the potentially serious side effects of the drugs, empower patients to make informed decisions about their treatment. Once the drug is post-marketing, medical writers continue to play an important role in the surveillance of the drug’s safety and feeding this back to the relevant regulating bodies.

What happens when medical writing is of poor quality? Just as how good medical writing saves lives, poor medical writing can lead to the loss of lives. One of the most infamous examples being the measles, mumps and rubella (MMR) vaccine scare, engendered by the publication of erroneously interpreted data and this message being propagated by the media. In 1998 an article was published in the *Lancet* claiming that the MMR vaccine was responsible for the development of autism.³ These were picked up by reporters who sensationalised the message, while at the same time neglecting to report the more robust research published that completely disproved the link.⁴ Since this controversy, which peaked in media coverage in 2002, the fall in uptake of the MMR vaccine has correlated with the many outbreaks of measles and mumps, with the most severe being in Swansea where 800 people contracted measles and one person died.⁵

The work of good medical writers described in this essay alone will save hundreds of lives per year. Compare this to the estimate that a general practitioner will save approximately 4.71 lives per year⁶ and suddenly the medical writing profession draws gravitas and the size of the responsibility they bear swells. As the discontent of doctors in the NHS intensifies,⁷ perhaps more will choose to apply their knowledge by becoming medical writers; a profession reported to have a high level of satisfaction.⁸ This essay has described some of the ways in which good

medical writing saves lives: I may have traded my stethoscope for a keyboard but my passion and commitment to bring real benefit to patients has never been stronger and the responsibility I bear has never been greater.

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