



# AMWA – EMWA – ISMPP Joint Position Statement on Predatory Publishing

American Medical Writers Association, European Medical Writers Association, and International Society for Medical Publication Professionals

*The American Medical Writers Association (AMWA), the European Medical Writers Association (EMWA), and the International Society for Medical Publication Professionals (ISMPP) recognise the challenges to scientific publishing being posed by predatory journals and their publishers, which employ practices undermining the quality, integrity, and reliability of published scientific research. This joint position statement complements several other sets of guidelines that have helped define the characteristics of a predatory journal.<sup>1-5</sup>*

Predatory journals pose a serious threat both to researchers publishing the results of their work and to the peer-reviewed medical literature itself. These publications differ from legitimate open-access journals<sup>6</sup> in that predatory journals subvert the peer-review publication system for the sole purpose of financial gain with little evident concern for ethical behaviour.<sup>7</sup>

Organisations such as the World Association of Medical Editors (WAME), the Committee on Publication Ethics (COPE), the International Committee of Medical Journal Editors (ICMJE), and the Council of Science Editors (CSE) support good publication practices that are now widely recognised.<sup>6,8-10</sup> Predatory journals do not adhere to these practices but instead exploit the Gold Open Access publishing model (for which authors pay a publication fee).<sup>11</sup> To generate revenue, these journals intentionally misrepresent practices of editorial and peer review, methods of journal operation, article process charging, dissemination, indexing, and archiving.<sup>1</sup>

Harm to the scientific literature will be the ultimate result if predatory publishing proliferates. Legitimate research carried out with the best of intentions might be lost if it is not recorded, cited, or made accessible in the long term, and the scientific record is at risk of being corrupted.<sup>1</sup> But dangers to authors also exist in that their reputations can be damaged as a result of having their work published in predatory journals or being unknowingly “appointed” to their editorial boards. Furthermore, authors may find themselves trapped after they realise they have submitted an article to a predatory journal. There is a potential risk that some journals might not return submitted manuscripts or will publish a submitted paper even after an author has protested.

The large increase in scientific journals, including those that are predatory,<sup>12</sup> over the past 15 years can make the task of distinguishing predatory or “pseudo” journals difficult. However, online tools are available to help authors in this effort,<sup>1,8</sup> and certain characteristics have been identified as being typical of predatory journals and their publishers:

- publishers or journals sending emails that aggressively solicit researchers
- a journal name that sounds somewhat familiar – but is actually a devious permutation of a legitimate journal name
- a website that appears unprofessional, with poor graphics, misused language, dead links, and aggressive advertising
- no street address or in-country telephone number noted on the journal or publisher’s website, or a fake address/phone number provided

- a lack of journal indexing in a recognised citation system such as PubMed<sup>13</sup> or within a legitimate online directory such as the Directory of Open Access Journals (DOAJ)<sup>14</sup>
- promises of unrealistically quick peer review, or no information provided about a journal’s peer-review process
- article processing charges that are not transparent (and may be either very high or very low) or are payable on submission (that is, not dependent on the outcome of peer review)
- claims made of broad coverage across multiple specialties in medicine or across multiple subspecialties in a particular discipline
- a large stable of journals that have been started very recently and/or that contain no or few published articles, are inaccessible, or are of obviously poor quality
- an editorial board consisting of members from outside the specialty or outside the

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country in which the journal is published, or board members who are unknown to someone experienced in publishing in the field

- a submission system that is overly simple with few questions asked and no conflict-of-interest or authorship qualification information requested.

Authors should not purposely choose to submit manuscripts to predatory journals to augment their own record of publication, as has been seen more recently.<sup>15,16</sup> The conscious and deliberate submission of manuscripts to predatory journals is not ethical. Medical writers and editors, as well as researchers, have a responsibility to evaluate the integrity, history, practices, and reputation of the journals to which their research is submitted.<sup>8</sup> We encourage all authors to carry out due diligence by examining the reputation of the publications to which they submit, and send their work only to those journals that provide proper peer review and that genuinely seek to contribute to the scientific literature.

The scientific community must be made fully aware of the harm that publishing in predatory journals poses and understand how to avoid it. AMWA, EMWA, and ISMPP are committed to educating our members about predatory publishing and the responsibilities of medical writers and publication professionals in addressing this significant issue.

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## References:

1. Laine C, Winker MA. Identifying predatory or pseudo-journals. World Association of Medical Editors. [updated 2019 Jun 18; cited 2019 June 18] <http://www.wame.org/identifying-predatory-or-pseudo-journals>.
2. Cabell's Blacklist Violations. [cited 2019 June 18] <http://www2.cabells.com/blacklist-criteria>.
3. Cobey KD, Lalu MM, Skidmore B, Ahmadzai N, Grudniewicz A, Moher D. What is a predatory journal? A scoping review. Version 2. F1000Res. 2018;7:1001.
4. Beall J. Predatory publishers are corrupting open access. *Nature*. 2012;489:179.
5. Beall's List of Predatory Publishers. [cited 2019 June 18] [http://openscience.ens.fr/ABOUT\\_OPEN\\_ACCESS/BLOGS/2017\\_01\\_23\\_Jeffrey\\_Beall\\_last\\_list\\_of\\_predatory\\_journals.pdf](http://openscience.ens.fr/ABOUT_OPEN_ACCESS/BLOGS/2017_01_23_Jeffrey_Beall_last_list_of_predatory_journals.pdf).
6. Open Access Scholarly Publishers Association – Code of Conduct. [cited 2019 June 18] <https://oaspa.org/membership/code-of-conduct>.
7. International Committee of Medical Journal Editors. "Fake," "Predatory," and "Pseudo" Journals: Charlatans Threatening Trust in Science. [cited 2019 June 18] [http://www.icmje.org/news-and-editorials/fake\\_predatory\\_pseudo\\_journals\\_dec17.html](http://www.icmje.org/news-and-editorials/fake_predatory_pseudo_journals_dec17.html).
8. International Committee of Medical Journal Editors. Responsibilities in the Submission and Peer-Review Process. [cited 2019 June 18] <http://www.icmje.org/recommendations/browse/roles-and-responsibilities/responsibilities-in-the-submission-and-peer-review-process.html>.
9. Council of Science Editors. Predatory or Deceptive Publishers – Recommendations for Caution. [cited 2019 June 18] <https://www.councilscienceeditors.org/resource-library/editorial-policies/cse-policies/approved-by-the-cse-board-of-directors/predatory-deceptive-publishers-recommendations-caution>.
10. Berger M. Everything You Ever Wanted to Know About Predatory Publishing but Were Afraid to Ask. [cited 2019 June 18] <http://www.ala.org/acrl/sites/ala.org/acrl/files/content/conferences/confsandpreconfs/2017/EverythingYouEverWantedtoKnowAboutPredatoryPublishing.pdf>.
11. Mizera K. What is Gold Open Access – useful links. [cited 2019 June 18] <https://openscience.com/what-is-gold-open-access/>.
12. Shen C, Bjork BC. 'Predatory' open access: a longitudinal study of article volumes and market characteristics. *BMC Med*. 2015;13:230.
13. PubMed. [cited 2019 June 18] <https://www.ncbi.nlm.nih.gov/pubmed>.
14. Directory of Open Access Journals. [cited 2019 June 18] <https://doaj.org/>.
15. Moher D, Shamseer L, Cobey KD, et al. Stop this waste of people, animals and money. *Nature*. 2017;549:23–5.
16. Sharma H, Verma S. Predatory journals: the rise of worthless biomedical science. *J Postgrad Med*. 2018;64:226–31.

# How to combat medical misinformation with a sound content strategy

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## Abstract

In our post-truth era of media and communications, implementing a sound content strategy can help your message reach the right individuals. It is time for experts and healthcare companies to lead the change as ethical and credible sources of knowledge. In this article, we provide insights about the importance of content strategy, and how collectively, we as medical writers must use our expertise to communicate complex concepts and motivate a change of opinion.

## Are we doing enough to fight back against widespread medical misinformation?

We live in an age where people are influenced by purposeful misinformation, “alternate facts”, and influencers’ articles across all media and communications. This deluge of “fake news” has delegitimised content for the general population to the point of meaninglessness. We have witnessed the rise and persistence of misinformation by popular social media influencers and celebrities, supported by biased or misappropriated scientific research.

## What is content?

Every piece of information and communication is content, and can span multiple forms of media from written articles, social posts, videos, podcasts, infographics, and more.

Using content for marketing purposes is a common practice among companies, telling stories to attract and retain customers. One of the earliest examples of content strategy was pioneered by Johnson & Johnson in 1888.<sup>1</sup> They published a manual that thoroughly explained how to prevent infections using antiseptic methods and provided information on their available products.<sup>2</sup> This example illustrates the three core principles of content strategy. Through the widespread use of the manual, they raised awareness of the problem, created a desire to address the problem, and more importantly, directed people towards their products as a solution.

Successful marketing campaigns are not limited to selling healthcare related products or devices. Many public health initiatives have their roots in marketing. This is exemplified with the current marketing efforts in support of mental health.<sup>3</sup> For many years, society had the erroneous perception that mental health issues could just be “dealt with” or people can “get over it”. In 2001, the Mental Health Foundation sought to challenge those stigmas and launched its first Mental Health Awareness Week in the UK. Breakthroughs made by this marketing campaign includes the recognition and support of mental health in the workplace. The public awareness garnered through the long running campaign has led to a commitment of £2.3 billion a year for mental health services by 2023/24 from the NHS.<sup>3</sup>

## Why does strategy matter?

### Content strategy

A guiding definition of content strategy is the planning and management of all



forms of media and communications for a specific project or purpose. The project can span from a single journal article, product ad campaign, public relations for a company, or organisations for chronic disease. The current need for many healthcare companies and organisations, is to establish trust, build awareness, and provide a clear action for the consumer to take.

Having a sound strategy clears a path for your message.

Content strategy includes identification of the problem, defining the communication goals, identifying the audience you need to reach, and planning all of the communications required to achieve the objective. This may seem like a major oversimplification, but these are the core

principles to keep in mind as a medical writer.

## The power of information

A medical, scientific, or clinical background and training is essential to content strategy and writing. Medical writers are in a unique position to understand the complexities of the problem at hand and strategise the types of content required to tackle the problem. Our core knowledge and innate ability to think critically are required





to clearly and accurately convey our message. The challenge is that we must hone our skills to tell a compelling story that resonates with our audience and gives them a reason to believe the science.

Some of us might wonder how can people believe things that were proven wrong by science so long ago, or how can certain bad advice be taken as ‘gospel truth’ when scientific research is at our fingertips. There is an abundance of scientific data in the literature, but these are hidden away from the typical lay-person with publisher paywalls and confusing jargon. For all good research out there, most people don’t see anything beyond bad science reporting in news headlines. Another challenge, no matter what our backgrounds are and how rational and logical we think ourselves, is that research shows that people make decisions primarily using emotions, and then use logic to back up those decisions,<sup>4</sup> in what is referred to as confirmation bias. That is why it is important to emphasise that the role of the medical writer is to bring the crucial information out and make a meaningful connection with your intended audience.

### Making a difference as a medical writer

The typical role of a medical writer may vary, but

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at its core, you are an educator to groups of potential decision-makers. The scale of decisions made by your audience is wide-ranging, which could include healthcare professionals like doctors, nurses, and scientists, or those outside of the clinical sector with industry business unit members, patient advocacy members, and the general public. Ultimately, you will be in charge of ensuring the message is clear and understood by each of these individuals. Your work informs everyone, whether it is an individual’s choice to get a vaccine, updating a hospital about the latest best clinical practices, helping venture capitalists invest in start-up healthcare companies, or brief legislative committees that are forming new public health policies.

The guiding principle is to never “dumb it down”. We aim to distil the core meaning of the principles of science to build trust and understanding. It remains crucial that you know your audience and can tailor your message to them, without distorting the facts. If you know your audience has a low degree of literacy or low technical fluency, don’t overcomplicate your message to reach them. No matter how technologically advanced media has become, building trust as a voice of knowledge remains a core tenant of medical writing.

With medical content strategy, we must also

remember to adhere to our ethical code and turn down or steer away from creating more misinformation. When it comes to content development, you may feel pressured to fabricate or exaggerate claims about the efficacy of certain products. Part of medical writing is to stand up for the scientific principles and not editorialise or stylise the data. This challenge has grown as you often must be prepared to fact-check sources and root out any potential agenda-driven biases that are inherent to the study design or source of funding. A good content strategy leverages your judgement on the validity of the scientific information and will screen out poor or deceitful sources.

Another key aspect of content strategy is for the most part, you are working on a two-way communication platform. Be mindful of what many of your audience members are saying and don’t hesitate to devise strategies that open direct engagement. You have the unique opportunity to understand at an individual level of needs and can help bridge any gaps in understanding. These can include accounting for having a respondent in social media posts, direct messages, and how to liaise with medical, legal, and regulatory personnel in the industry.

### The future of content strategy in healthcare

People are weary of fake news and perhaps post-truth has its days numbered. There is a growing sentiment out there for the truth and fair representation of facts. We must always strive for

transparency and honesty when developing our content. Content strategy and medical writing are about meaningful, understandable, and compelling messages to inform and persuade the lay audiences.

Overall, it must be stated that: You are a champion of knowledge in the medical field, you can be an advocate for changing practices, and you are an educator of scientific and medical communications for many decision-makers.

### Disclaimers

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

### Conflicts of interest

The authors declare no conflicts of interest.

### References

1. Content Marketing Institute. The History of Content Marketing. 2016 [cited 2019 Apr 29]. Available from: <https://contentmarketinginstitute.com/2016/07/history-content-marketing/>.
2. Johnson & Johnson. Methods of antiseptic wound treatment. New York: Johnson & Johnson; 1888. Available from: [https://openlibrary.org/books/OL24446970M/Modern\\_methods\\_of\\_antiseptic\\_wound\\_treatment](https://openlibrary.org/books/OL24446970M/Modern_methods_of_antiseptic_wound_treatment).
3. Mental Health Foundation. Mental Health Awareness Week. [cited 2019 Jul 19]. Available from: <https://www.mentalhealth.org.uk/campaigns/mental-health-awareness-week>.
4. Lerner JS, Li Y, Piercarlo V, Kasam KS. Emotion and Decision Making. *Annu Rev Psychol*. 2014;66:799–823.

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### WHY VOLUNTEER?

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