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Original article

Author attitudes to professional medical writing support

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Abstract**Objective:**

To understand academic/clinician authors' perceptions regarding the value of professional medical writers.

Research design and methods:

An online survey of academic/clinician authors was conducted to understand the value of professional medical writer support in the development of publications (abstracts, posters and manuscripts). Responses were collected anonymously. The survey used a negative-to-positive, 6 point scale to evaluate respondents' opinions and experiences of working with professional medical writers, and multiple choice to indicate in which areas professional medical writers added value.

Results:

Responses from 76/260 authors were received (Europe, $n = 57$; 75.0%; North America, $n = 16$; 21.1%; Asia-Pacific region, $n = 3$; 3.9%). The majority of respondents were either clinicians ($n = 45$; 59.2%) or academic researchers ($n = 25$; 32.9%). A total of 82.9% (63/76) of respondents felt that it was acceptable to receive professional medical writer assistance with their publications, and 84.0% (63/75) valued the assistance provided. The services most valued (>50 responses) were editing and journal styling, conformity with reporting guidelines (e.g. CONSORT) and manuscript submissions. Fewer respondents (25–49 responses) valued management of timelines and co-author reviews, scientific/technical writing assistance and expert guidance on authorship requirements/good publication practice. The least valued service was the scientific expertise of the professional medical writer (3 responses).

Conclusions:

Respondents to this survey were generally accepting of medical writing assistance and valued many aspects of the role, in particular editorial support. The survey was small, however, and potentially biased towards authors with experience of working with medical communication agencies. Although many medical writers come from a scientific background and have relevant expertise, this was not perceived as a value. It would be beneficial to educate authors and journal editors regarding medical writers' scientific expertise and role.

Introduction

Guidelines for publications with contributions from professional medical writers (PMWs) aim to ensure that their input is transparent, ethical and avoids conflicts of interest¹. Good publication practice (GPP) for communicating company-sponsored medical research², along with other professional guidelines from organizations such as the International Society for Medical Publication Professionals³, the European⁴ and the American⁵ Medical Writers Associations and the European Association of Science Editors⁶ are representative of current practices surrounding the ethical involvement of PMWs in pharmaceutical industry-supported publications¹. Published studies have shown that professionally written papers are likely to be accepted more quickly⁷,

are more compliant with reporting guidelines⁸ and are less likely to be retracted for misconduct⁹ than those written without professional writing support.

The changing professional environment should be driving a shift in non-industry perceptions of PMWs, not only in terms of their acceptability, but in the value they can add in terms of reporting standards, compliance with GPP, scientific expertise and overall quality of the publication¹⁰. However, there is still much discussion in the contemporary publication ethics literature of ghost writers^{11,12}, ghost authors¹³ and guest authors¹⁴, which is often based on past publication practices and which does not consider the progress that has taken place within the profession since the publication of the original GPP guidelines in 2003¹⁵.

While there have been many opinions expressed on the subject of medical writing support, feedback from those authors who have current experience of working with PMWs is notably absent. We conducted an online survey to evaluate academic/clinician authors' perceptions regarding the acceptability and value of using PMWs in the development of publications (abstracts, posters and manuscripts).

Research design and methods

Survey population

All account teams within Caudex Medical's UK office were asked to provide a list of all academics/clinicians with whom they had worked within the last 2 years (1 September 2010–31 August 2012). No exclusion criteria were applied. Personalized invitations to participate in the survey were sent by an individual known to the contact. Respondents were asked about their experiences with PMWs in general, not just those working with the agency conducting the survey. Responses were collected anonymously. Ethical approval was not sought for this survey, as it has no impact on medical practice or patient care.

Survey

The survey was designed using the online tool SurveyMonkey (<http://www.surveymonkey.com>) and was open from 13 to 27 September 2012. Survey questions (Supplementary Appendix 1) underwent an internal validation process and were evaluated for respondent characteristics (region and authorship role), acceptance and acknowledgment of the role of PMWs, experience of working with PMWs (quantity and quality) and the perceived value of the assistance provided by PMWs (overall and value in specific areas).

Rating questions were measured on a negative-to-positive, 6 point Likert scale. Interim response points were

unlabeled. Contextually relevant descriptive terms such as 'Totally unacceptable'/'Totally acceptable' and 'Not at all valuable'/'Extremely valuable' were used to label each extreme on the scale, depending on the question.

Respondents were asked to indicate the areas in which they felt PMWs added value to the publication process from a multiple-selection list. The final question on the survey was an open question to capture any other aspects of respondents' experience with PMWs.

Data analyses

Data are presented using descriptive statistics only. Responses were dichotomized into negative if on the left half of the scale and positive if on the right half of the scale. There was no imputation for missing answers. Subanalyses by geography, role and previous experience with PMW assistance were conducted post hoc.

Results

Respondent characteristics

As no exclusion criteria were applied for participant selection, survey recipients may have been known to the agency in the context of publication support, meeting participation or other advisory capacity. A total of 260 contacts were approached to participate in the survey, of whom 76 (29.2%) responded. Most respondents were from Europe or North America (Figure 1a) and the majority of respondents were either clinicians or academic researchers (Figure 1b).

Experience of working with PMWs

Most respondents had at least some experience of working with PMWs (84%; 64/76), and overall, authors considered working with PMWs a positive, valuable experience (87%; 61/70).

Acceptance and acknowledgement of PMWs

A total of 83% (63/76) of respondents felt that it was acceptable to receive PMW assistance with their publications and 95% (72/76) believed that PMWs should be acknowledged for their work (Supplementary Appendix 2).

Value attached to the assistance of PMWs

The majority of authors (84%; 63/75) valued the assistance that PMWs could provide (Figure 2a). The extent to which authors valued different PMW services is summarized in Figure 2b. The services most valued (>50 responses)

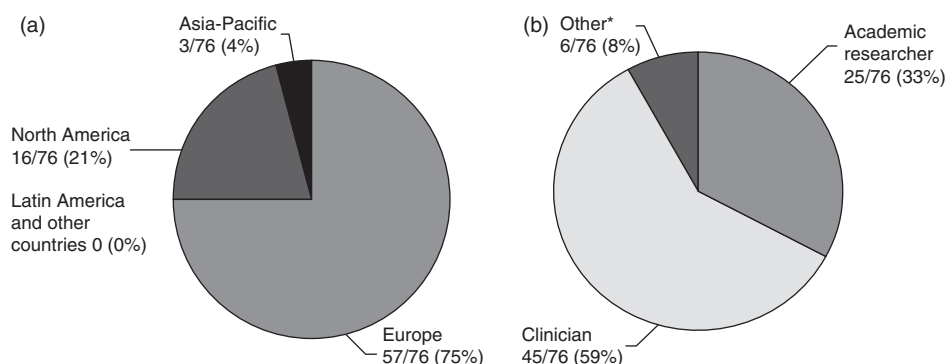


Figure 1. Respondent characteristics: (a) geographical location and (b) job description. Data are presented as *n* (%) (*N*=76). *Other roles: consultant/researcher/teaching, 1; clinical evaluator, 1; physiotherapist, 1; consultant clinical pharmacologist, 1; pharmaceutical, 1; unspecified, 1.

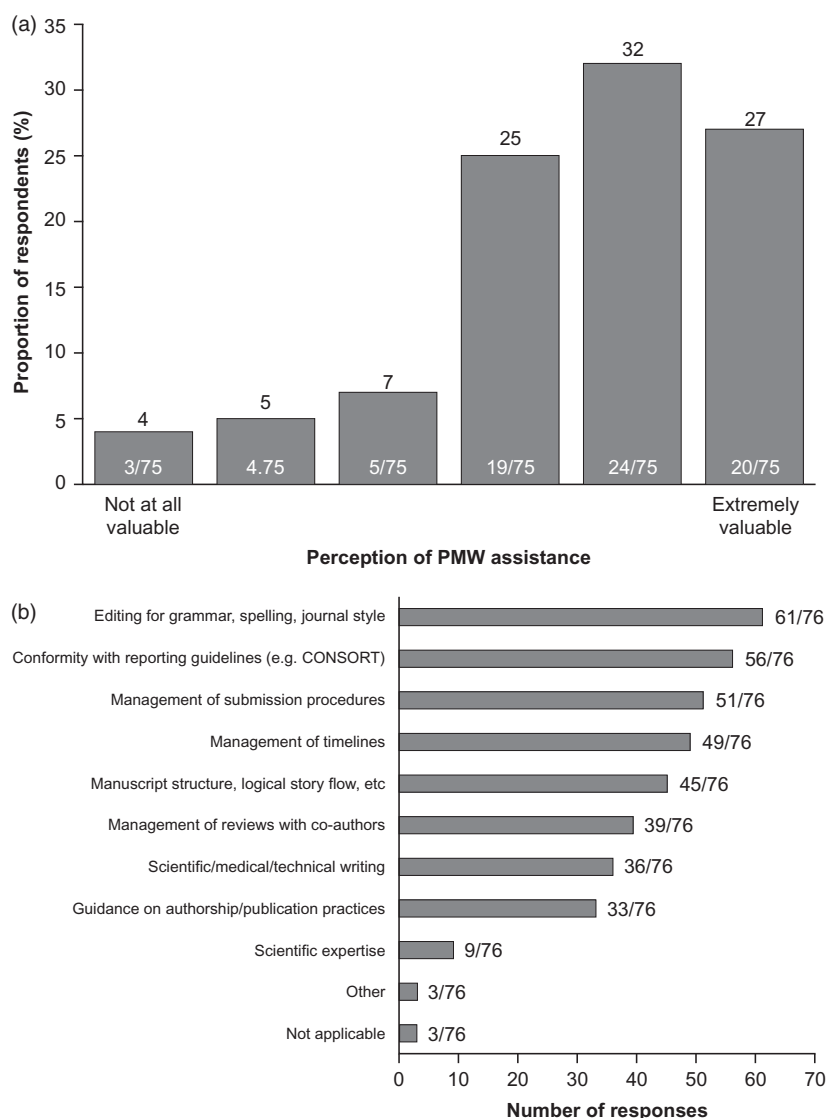


Figure 2. Authors' perception of the value that professional medical writers add to the preparation of publications: (a) overall value added and (b) value added to specific areas of the publication process (questions 5 and 6). Strength of perception was rated on a 6 point Likert scale from not at all valuable to extremely valuable.

were editing and journal styling, conformity with reporting guidelines (e.g. CONSORT) and assistance with manuscript submissions. Services valued by fewer respondents (25–49 responses) were management of timelines and co-author reviews, scientific/technical assistance and expert guidance on authorship requirements/GPP. The least valued service was the scientific expertise of the PMW.

Open question

Authors' responses to the open question 'Is there anything you would like to tell us about your experience of working with professional medical writers?' fell into four key areas.

- *Acknowledgment*: Three respondents agreed that PMWs should be acknowledged according to the value of their contribution, in the same way as authors' contributions are acknowledged.
- *Author contribution*: There was the feeling that some of the authors' ideas may not be fully understood by the PMWs, but that this could be resolved by good communication.
- *Practical*: PMWs were considered to be 'good for groundwork', particularly the drafting and editing of manuscripts, and dealing with the technicalities of submission.
- *Influence over content*: A few respondents were concerned that PMWs might have a remit to deliver a particular message; one author thought this issue might be addressed through a formal contract between authors and PMWs. In general, most of the respondents thought that the interpretation of results was the domain of the main authors alone.

In addition, some authors' comments revealed a misunderstanding of the International Committee of Medical Journal Editors authorship criteria⁶. The full text of the open question responses, along with the full data set, are available online (Supplementary Appendix 3).

Post-hoc subanalyses

There were few differences in attitudes to PMW support depending on geography, and clinicians seemed to be more accepting of support than academics (87% [39/45] vs 76% [19/25]). Of those with prior experience of working with PMWs, 95% (21/22) thought the practice was acceptable, compared with 77% (41/53) of those with less experience. With respect to the services offered by PMWs (Supplementary Appendix 4), again there was little difference between survey respondents based on geography (North America vs Europe), but clinicians seemed to appreciate the facilitation of manuscript development (timelines, management of reviews, guidance on publication practices) more than their academic colleagues.

Those with frequent experience of using PMW support also appeared to be more appreciative of these services compared with those with less experience.

Discussion

The majority of survey respondents in this study considered that PMW support for the development of their publications was acceptable and should be acknowledged. This is encouraging in light of recent developments with regard to GPP guidelines and calls for transparency around the role of PMWs^{16–19}.

The service areas most appreciated seemed to cluster in the publication management services, rather than the scientific expertise of the writer. Often, these can be the aspects that are most elusive to authors as their experience across a broad range of congress and journal requirements may be limited, and they do not have the time or inclination to focus on logistics of publication management. PMWs working with reputable communications agencies will have generally received training in reporting guidelines²⁰, publication requirements²¹, GPP² and be familiar with researching journal requirements, so have considerable expertise in the mechanics of getting research published¹⁰. PMWs may also be assisted by experts in publications management to prepare schedules, track reviews, ensure co-author involvement, and editorial experts in grammar, consistency, style and journal requirements.

In a survey undertaken in 1997, a sample of 812 US-based corresponding authors of published articles were asked about their attitudes towards medical writing assistance²². Only 38% of that sample said they were willing to use medical writing services, and 79% (612/773) of respondents said that medical writing assistance should be acknowledged in the published article. Our questions were different, but 83% of respondents (63/76) thought that PMW support was acceptable (not quite the same question as being willing to use medical writing assistance) and 95% (72/76) thought that medical writers should be acknowledged. The differences in responses to these questions may be indicative of an increased awareness of publication ethics and medical writing as a profession in 2012 compared with 1997, or an artifact of our sample being selected from individuals likely to have had contact with PMWs. The apparent lack of appreciation of the scientific expertise of PMWs is, at face value, disappointing, as communication agencies tend to have a high proportion of staff with higher scientific degrees. A typical PMW is a PhD-qualified scientist who has chosen not to pursue a research career, but has the relevant analytical skills to do so, and has a flair for, and received training in, science communication. The lack of perceived value of scientific expertise could be due to several factors. There may simply be a lack

of understanding that scientific expertise is required to be able to work on publications: an introduction to a manuscript for example, is often a review of the current literature in a particular field that requires scientific understanding to construct. On the other hand, the interpretation and discussion of the data are the responsibility and remit of the named authors, so this skill is one that authors do not recognize as being needed from a supporting PMW. Indeed, some of the free text answers to the open question alluded to the fact that the authors should take responsibility for the content of the manuscript, the clarity of the concept and the interpretation of data.

PMWs assist with the way the findings are reported and the clarity of expression, and this does not qualify them for authorship. Authorship is not that well understood across academia, and journal criteria for authorship can be confusing^{23–25}. The most well known criteria for ascribing authorship in biomedical articles are those of the International Council of Medical Journal Editors, or ICMJE²¹. The function of the PMW is to facilitate development of the publication, working with the named authors^{16,26,27}. They are rarely involved early enough in a project to meet the first criterion (conception, design or acquisition of data), they usually meet criterion 2 (drafting or revising the work), they are not responsible for approving the work (criterion 3) and can therefore not be held accountable for the work (criterion 4). This is why, in the majority of cases, PMWs are acknowledged. Failure to acknowledge their involvement is ghostwriting; forcing authorship on them when they do not qualify is gift (or guest) authorship; and failure to permit authorship when they do qualify is ghost authorship. None of these practices is ethical, and all are in contravention of the guidelines/position statements mentioned earlier^{3–6}. Unless a PMW truly meets authorship criteria, their writing assistance should merit an acknowledgment, not authorship credit.

Most research papers call for more research to be done. In this case, we believe it would be helpful for authors and journal editors to understand the background, scientific and publications expertise of PMWs, and perhaps the medical communications industry professional associations could educate about the credentials and skills of medical writers. For example, in a recent survey of medical publication professionals, 38% of medical writing agency respondents were aware of their company being asked (within the last 12 months) by an author or sponsor to do something that they believed would contravene ethical guidelines, and after intervention by the agency, the request was withdrawn or amended in 92% of cases²⁸. Specifically regarding authorship practices, 33% of industry respondents and 46% of agency respondents had, within the last 12 months, recommended to a lead author that a co-author should be removed from an abstract or manuscript in development for failure to meet authorship criteria²⁸.

Since the conduct of this study, the Patient Protection and Affordable Care Act (Section 6002 of which is the Physician Payments Sunshine Act) has been enacted in the USA. This law may impact on the decision of US-registered physicians to participate in publications that are developed with the assistance of PMWs, as such support is considered by some (but not all) pharmaceutical companies to constitute a reportable transfer of value to an individual. Interestingly, authors do perceive the role of PMWs as valuable, which could be taken as acknowledgment of the need for this value to be declared.

Limitations

The study sample was small and limited to authors in contact with one particular medical communications agency. Due to the nature of the sample, it was biased towards respondents who had experience with agencies. It would be interesting to compare the findings of this study with a similar survey of authors with no experience of medical communication agencies. There was internal inconsistency in some of the responses, as some authors who stated they had no experience with PMWs still commented on direct experience questions.

Conclusions

Overall, respondents to this survey were accepting of medical writing assistance and valued many aspects of the role, in particular editorial support. More value was placed on the role PMWs play in the process/mechanics of publication, rather than their scientific expertise. Authors' additional feedback revealed that while they appreciated close interaction with PMWs, there were still misunderstandings about the role and value of PMWs; this suggests that academic/clinician authors do not fully understand the support that PMWs can bring to the publication process.

Transparency

Declaration of funding

This study was not funded.

Declaration of financial/other relationships

J.M.M and G.P.B. have disclosed that they are employees of Caudex Medical (part of the McCann Complete Medical group), a company that provides professional medical writing services funded primarily by the pharmaceutical industry. Both authors are active members of the International Society for Medical Publication Professionals. J.M.M. has disclosed that she is a member of the Global Alliance for Publication Professionals.

CMRO peer reviewers on this manuscript have no relevant financial or other relationships to disclose.

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References

- Lotery AJ. Authorship and the role of medical writers. *Eye* (London);2012;26:1
- Graf C, Battisti WP, Bridges D, et al. Research methods & reporting. Good publication practice for communicating company sponsored medical research: the GPP2 guidelines. *BMJ* 2009;339:b4330
- Norris R, Bowman A, Fagan JM, et al. International Society for Medical Publication Professionals (ISMPP) position statement: the role of the professional medical writer. *Curr Med Res Opin* 2007;23:1837-40
- Jacobs A, Wager E. European Medical Writers Association (EMWA) guidelines on the role of medical writers in developing peer-reviewed publications. *Curr Med Res Opin* 2005;21:317-22
- American Medical Writers Association. AMWA code of ethics. Available at: http://www.amwa.org/amwa_ethics [Last accessed 14 April 2014]
- EASE Guidelines for Authors and Translators of Scientific Articles to be Published in English. Available at: <http://www.ease.org.uk/publications/author-guidelines> [Last accessed 3 June 2014]
- Bailey M. Science editing and its effect on manuscript acceptance time. *J Am Med Writ Assoc* 2011;26:147-52
- Jacobs A. Adherence to the CONSORT guideline in papers written by professional medical writers. *Med Writ* 2010;19:196-200
- Woolley KL, Lew RA, Stretton S, et al. Lack of involvement of medical writers and the pharmaceutical industry in publications retracted for misconduct: a systematic, controlled, retrospective study. *Curr Med Res Opin* 2011;27:1175-82
- Chipperfield L, Citrome L, Clark J, et al. Authors' Submission Toolkit: a practical guide to getting your research published. *Curr Med Res Opin* 2010;26:1967-82
- PLoS Medicine Editors. Ghostwriting revisited: new perspectives but few solutions in sight. *PLoS Med* 2011;8:e1001084
- Bosch X, Ross JS. Ghostwriting: research misconduct, plagiarism, or fool's gold? *Am J Med* 2012;125:324-6
- Wislar JS, Flanagan A, Fontanarosa PB, DeAngelis CD. Honorary and ghost authorship in high impact biomedical journals: a cross sectional survey. *BMJ* 2011;343:d6128
- Flaherty DK. Ghost- and guest-authored pharmaceutical industry-sponsored studies: abuse of academic integrity, the peer review system, and public trust. *Ann Pharmacother* 2013;47:1081-3
- Wager E, Field EA, Grossman L. Good publication practice for pharmaceutical companies. *Curr Med Res Opin* 2003;19:149-54
- Woolley K, Gertel A, Hamilton C, et al. Don't be a fool – don't use fool's gold. *Am J Med* 2012;125:e21-2
- Woolley KL, Gertel A, Hamilton CW, et al. Time to finger point or fix? An invitation to join ongoing efforts to promote ethical authorship and other good publication practices. *Ann Pharmacother* 2013;47:1084-7
- Woolley KL. Coincidence? Publications expertise boosts publication output. *J Surg Educ* 2014;71:7
- Shashok K. Ethical contributions to research articles by medical writers. *Anesth Analg* 2013;116:500-3
- Schulz KF, Altman DG, Moher D. CONSORT 2010 statement: updated guidelines for reporting parallel group randomised trials. *Trials* 2010;11:32
- International Committee of Medical Journal Editors. Recommendations for the conduct, reporting, editing, and publication of scholarly work in medical journals. Available at: <http://www.icmje.org/recommendations/> [Last accessed 14 April 2014]
- Phillips SG, Carey LA, Biedermann G. Attitudes toward writing and writing assistance in peer-reviewed articles. *AMWA J* 2001;16:10-16
- Gasparyan AY, Aivazyan L, Kitas GD. Authorship problems in scholarly journals: considerations for authors, peer reviewers and editors. *Rheumatol Int* 2012;33:277-84
- Marušić A, Bošnjak L, Jerončić A. A systematic review of research on the meaning, ethics and practices of authorship across scholarly disciplines. *PLoS One* 2011;6:e23477
- Wager E. Do medical journals provide clear and consistent guidelines on authorship? *Medsc Gen Med* 2007;9:16
- Hamilton CW. Don't get spooked! How to collaborate with a professional medical communicator (and avoid ghostwriting). *Arch Immunol Ther Exp (Warsz)* 2010;58:255-61
- Das N, Das S. Hiring a professional medical writer: is it equivalent to ghostwriting? *Biochem Medica* 2014;24:19-24
- Wager E, Woolley K, Adshead V, et al. Awareness and enforcement of guidelines for publishing industry-sponsored medical research among publication professionals: the Global Publication Survey. *BMJ Open* 2014;4:e004780