Writing skills in academic medicine

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Abstract

Writing for publication is an important part of academic physicians' work life. Many physicians do not write due to time pressure, lack of confidence or skill in their writing, or other barriers. This paper addresses common barriers to writing in order to support and improve writing productivity. Specifically, we provide tips on becoming a better writer, managing time, and overcoming procrastination and writer's block. We also suggest strategies for institutions to improve the writing productivity of their faculty through writing workshops, visiting writing consultants, and writing groups.

Keywords: Writing, Scholarship, Goal setting

Introduction

Writing for academic journals is the highest form of scholarship, the currency for academic promotion, and used by the world to document the careers of academic physicians. However, many clinical faculty members do not write as part of their daily jobs, much to the chagrin of program directors, department chairs, and the Accreditation Council for Graduate Medical Education (ACGME). Writing does not come naturally to many people, but is a skill that can be learned with practice. This paper will provide ways to increase and improve writing. We will also suggest personal habits that promote productive writing.

Practice writing

"Almost all good writing begins with terrible first efforts. You need to start somewhere." ~Anne Lamott, Bird by Bird: Some Instructions on Writing and Life

No one is born a great writer. Writing takes lots of practice. Faculty development programs can teach people how to structure papers, what to write about, where to submit, and what to do when your paper is rejected, but really
learning how to write involves writing a rough draft, editing it, and then editing it some more. Many people get caught up in the details of their writing and forget some of the basics.

- Why are you writing this paper?
- What are you trying to say?
- Is there one message that you want readers to come away with after reading your article?

Writing is about telling a story to people who you think will be interested in what you are saying. And stories often get better in the retelling.

Editing one's work is an intrinsic part of good writing, and information on editing can be found online. One site, Biomedical Editor (http://www.biomedicaleditor.com/), includes style guides, editing and proofreading tips, grammar tips with useful information on sentence structure and punctuation, and writing tips that discuss active vs. passive voice in medical writing.

One way to improve writing for medical journals is to shorten your paper before asking someone to complete a review. Page limits are part of the reality of medical writing and shortening generally makes a manuscript more readable and enjoyable. It also forces clarity of thought about your key points.

It is also critical to understand the rules of the game in writing for medical journals. The International Committee of Medical Journal Editors (icmje.org) provides recommendations for best practice and ethical standards in both the conduct and reporting of research and other material published in medical journals. They provide insights into the medical editing and publishing process, and practical information on roles and responsibilities of authors and manuscript preparation.

**Schedule a regular time to write**

Many people feel that unless they have a large block of time it does not even make sense to start on a writing project. It is uncommon in the busy schedule of an academic physician to have such a block of time. As such, working in smaller time increments should be explored. Regularly scheduled writing time may increase writing fluency and automaticity and will eventually make the process easier. It is good practice to schedule writing blocks on the calendar every week as immutable items, thereby setting aside time that is uninterrupted by e-mail, clinical concerns, resident questions, or meetings.¹²³ Having a regular time each week, even if it is just 1 hour, will enable faculty to become more comfortable with writing.⁴ Some writing experts recommend writing every day for as little as 20-30 minutes at a time.⁵ Daily writing provides consistency that can translate into idea generation and clarity of thought. As writing becomes more spontaneous it becomes easier to translate thoughts into words.

Writing exercises are frequently used as a way to get into the habit of daily writing and to overcome writer's block by both creative fiction writers and nonfiction writers. Internet sites such as writingexercises.co.uk or digitalwriting101.net provide examples of ways to stimulate writing.

Occasionally, it is possible to take mini-sabbaticals. Although data supporting sabbaticals is scant, there is some evidence that they provide an increased sense of well-being, reduce burnout, increase knowledge, and can improve academic progress through time for reflection, networking, and development of new research areas and ideas.⁶⁷⁸ Time spent with family during these opportunities is also an important component.⁹ The key to becoming a productive writer is to determine which of these plans works for you.
Finally, creating a writing space may be useful, one that contains a door that can physically and symbolically close off the rest of the world to allow dedicated space for writing. Author Stephen King wrote his first two novels in the laundry room of his double-wide trailer. His suggestions for this dedicated space include absence of any possible distractions such as phones, TV’s and even windows open to a view.

### Join a writing group

Peer writing groups provide support and structure for faculty in their writing endeavors and can help all involved increase productivity. Writing groups often meet monthly or every other month. Between sessions, members commit to achieving their writing goals and being accountable to their colleagues. Writing groups can be structured around similar interests or individual projects. In contrast to faculty development programs, which require time and monetary support, writing groups have the potential to be low-cost methods for individual faculty to work together on shared projects or simply provide a structure for individuals to work on their own projects in a group setting, with built-in accountability to their peers.

### Go to a writing workshop (or bring a workshop, program, or writing consultant to your institution)

Increasing faculty productivity is a common goal among academic medical departments, from surgery to emergency medicine, to family medicine. Since the ACGME requirements for residency scholarship were established, having faculty mentors available for resident projects has assumed greater importance. Several different faculty development venues have been demonstrated to increase faculty writing, from day-long retreats to monthly scholarship-focused sessions. Formal writing workshops can be helpful for junior faculty to help them get started on writing. The American Medical Writers Association developed a toolkit for new writers which may be helpful (http://www.amwa-dvc.org/toolkit/).

Bringing a consultant to your institution is another way to promote writing. An outside consultant often brings greater cachet than local faculty experts and makes it clear to faculty that the department has a commitment to scholarly productivity. Offering opportunities to faculty through part-time faculty development programs, including visiting professors, can provide needed mentoring and enhance writing skills and productivity.

### Set writing goals and be accountable to them

Regardless of the amount of time available for writing, having a "to-do" list for writing projects will enable each time block to be more productive. Writing lists of goals may actually increase productivity by unburdening the executive areas of the brain from having to chronicle tasks to be accomplished.

There are many different strategies for writing "to-do" lists. Some people like to use electronic lists on their computers, tablets or phone, while others prefer using a pen and paper to keep track of goals. Regardless of the type of "to-do" list that is used, some universal recommendations help improve their use. Keeping a list of specific (i.e., write introduction vs. write paper), detailed, and time-bound goals improves productivity and keeps projects on track.
Many productive writers have short-term (1 week) and long-term (6 months to a year) writing goals. Successful writers also keep to-do lists specific and measurable (due dates) in order to keep on track. Another tip involves taking the last 5-10 minutes of each writing session to list next steps in the process to save time at the beginning of the next writing session.

**Identify causes of procrastination**

"Never put off till tomorrow what may be done the day after tomorrow just as well." ~Mark Twain

The majority of the population procrastinates from time to time. For academic physicians, procrastination instead of writing can take many forms. Some people will answer e-mail or patient phone calls instead of writing a paper.

In order to address procrastination, the first step is to identify the reason for it. The procrastination equation can help explain the cause of procrastination. It is written as: \[ \text{Motivation} = \frac{\text{Expectancy} \times \text{Value}}{\text{Impulsiveness} \times \text{Delay}}. \]

Expectancy refers to the confidence you feel about being able to complete the project, and what you expect to get from it. If you think that you can do a good job on the task or that it will help your career when it is completed, then your expectancy would be high and you would be less likely to procrastinate. Value refers to both how much you enjoy doing the task and how important you feel it is. You may be more likely to procrastinate if you feel that the project does not have much inherent value, or a lower level of value. Impulsiveness refers to how easy it is for you to get distracted away from the task. The more you are distracted, the more you are likely to procrastinate. Delay refers to the fact that the farther away the deadline, the less motivated we are to complete it, so the more we procrastinate. Most procrastination can be described as an imbalance of these four traits.

Some common reasons for procrastination include being overwhelmed by the task (high delay), getting distracted (high impulsiveness), not knowing where to start (high delay), being afraid that you won't do a good job (low expectancy), and finding the task unpleasant (low value). Setting shorter deadlines for parts of a large project will help minimize procrastination. Several tips that can help overcome procrastination are shown in Table 1.

Perfectionism is a form of procrastination. Perfectionists won't ever finish or write the next section because they are stuck trying to find the perfect word or the best way to structure a paragraph. A perfectionist’s writing is never "good enough" and so it never gets finished, submitted, or shared.

Overcoming perfectionism in writing can be difficult but involves letting go of a product before you think it is "perfect". Set a hard deadline for yourself, after which you will not work on a paper anymore but will instead submit it.

**Overcoming writers block**

"Start writing, no matter what. The water does not flow until the faucet is turned on." ~Louis L’Amour

"If you get stuck, get away from your desk. Take a walk, take a bath, go to sleep, …whatever you do, don't just stick there scowling at the problem." ~Hilary Mantel
Getting started is often the most difficult part of writing. Writer's block is different than procrastination. In procrastination, the writer does something besides writing that is more enjoyable. In writer's block, the writer is planning to write, even has time blocked off, yet can’t think of what to write. Fiction writers describe sitting in front of a blank computer screen for hours as they wait to get an idea of what is going to happen to their characters.

Thankfully, medical writing is usually more straightforward. Some suggestions for overcoming writer’s block in medical writing focus on starting small and accomplishing parts of the paper that are easier for you. Sometimes, structuring more difficult sections, such as the discussion section of a paper by using subheadings (e.g., summary of findings, grounding in literature, limitations, future directions, conclusions) makes writing easier.

Other suggestions focus on addressing the underlying anxiety about writing that can contribute to writer's block. Writing without self-consciousness, in a scheduled way, can help get over the barrier of not knowing where to start. Tips for overcoming writer’s block are displayed in Table 2.

### Get to know your own writing style

The actual technique of writing can also vary based on personal preferences. Some people like to write outlines and insert details into the outline that evolves into text. Other people like to write rough drafts. Just getting something down on paper is the goal.

Many people will wait a day or two before rereading a rough draft and starting to edit. Putting away a draft allows you to view it with fresh eyes. Similarly, reading the draft out loud makes it easier to see where to insert additional ideas or correct writing mistakes. Another technique involves dictating, transcribing, and then editing. It is important to explore which method works for you. Trying out different methods is also a way to keep the writing process fresh.

Different people write best at differing times of the day. If you work well in the mornings, block off some time before clinic or morning meetings to get writing done. If you work well in the afternoons, take some time later in the day to focus on your writing. You will get a lot more done if you plan to work at times when you are best able to focus.

Having friends or colleagues look at initial writing drafts is an excellent way to improve your writing as well as your scholarly productivity. Working in collaboration with others also enhances productivity. In a survey of faculty development fellowship graduates, there was a positive association between ever having published and the current number of collaborators and consultants. Interestingly, fellows who reported increasing the size of their academic networks with new mentors and peers, especially local mentors/advisors and productive local peers, reported more publications.

Preparing to have others review your work can be extremely helpful. This includes asking specifically for what you want from the review – comments on a particular section or clarity of writing.

### Don't get discouraged after a rejection

Most experienced writers have had their work rejected many times, sometimes from the very best journals in the country – so a rejection needs to feel like "business as usual" not as membership in an exclusive group. Rejection
rates from journals are high, up to 95% for some of the most prestigious journals. Because of this, it is best to have a second and third journal in mind along with the instructions for authors pertinent to that journal. In addition, developing an approach to rejection letters helps to overcome the inertia that accompanies the disappointment and frustration in having to submit to a different journal long after enthusiasm for the project has ended. It should be comforting to know that most papers initially rejected are eventually accepted if the authors pursue publication. In one study, of 350 manuscripts rejected by the *Annals of Internal Medicine*, 240 (69%, 95% confidence interval [CI]: 64% to 73%) were eventually published after a mean of 552 days.²³

Allowing a few days to cool off is often helpful, followed by a careful reading of the reviewer comments. Most often, following the suggestions offered will lead to an improved manuscript that has a better chance of success on the next submission. The paper should be reformatted for the new journal, sent for an internal review by coauthors and/or a local, experienced writer, and submitted to the new journal. It is best if this is accomplished within a month or two of the rejection both to prevent the paper from becoming lost in all of the other activities that seem to take priority and to prevent the data from become old and less relevant.²⁴

**Conclusion**

In summary, writing is an important part of academic life. Medical writing is a responsibility that we undertake as academic faculty to disseminate new knowledge and stimulate discussion and new ideas. Writing, however, can be so much more. It affords the writer an opportunity to tell an important story that must be heard, challenges the writer to create clear discourse, delights the writer when just the right word appears, and sometimes creates lasting memories on the part of the reader who is moved by the writer’s work, thoughts and message.

**Take Home Messages**

1. Writing is an important part of academic medicine.

2. Writing skills can be learned and with practice, most faculty members can become excellent, productive writers.

**Notes On Contributors**

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### Appendices

#### Table 1. Overcoming Procrastination

| Cause of procrastination          | Tips to overcome                                                                 |
|-----------------------------------|----------------------------------------------------------------------------------|
| Overwhelmed by the task           | • Break down large task into smaller tasks—for example instead of planning to write a paper, plan to write an introduction or methods section  |
|                                   | • Follow the 10-minute rule—tell yourself that you will write for 10 minutes. Most of the time, after 10 minutes are up, you are engaged in your work and will keep going |
| Not knowing where to start or having writers block | • Just start writing—if you can’t think of a good way to start, write the end or the middle  |
|                                   | • Make a detailed to-do list for the project with deadlines for each section |
| Being afraid you won't do a good job | • Try positive self-talk, telling yourself that your efforts will be appreciated, and that the writing won't be perfect, but that is the purpose of editing |
| Finding the task unpleasant       | • Make a deal with yourself that gives you a reward of something you enjoy if you finish the task, or even get part way through the task  |
|                                   | • It may not be as unpleasant as you think it is going to be, so just do a little bit |

#### Table 2: Overcoming writers block

- Can’t think of the perfect way to start a paper? Start in the middle or write the end
- Take a break. Go for a walk, a run, or a bike ride. Think about what you want to say in the paper. Try to develop some ways to say it in your head; then write them down
- Read good writing, either on topic or completely separate. Good writing inspires
- Work on your outline. Make it more and more detailed. Before you know it, you will have a lot of text
- Try dictating what you want to say; then transcribe it. You will end up with a rough draft
- Take some deep breaths and just start writing. No one’s first draft is perfect. But, just getting something down on paper, will make you feel better. Then you can edit. Set a timer for 15 minutes and just write until it goes off
- Give yourself some positive reinforcement (e.g., chocolate)
- Write with a group. Supportive co-authors will help make the process more palatable and pleasurable
- Start with the easiest part of the paper, or work on the tables or references, just so that you feel like you are getting something done
Declaration of Interest

*The author has declared that there are no conflicts of interest.*