

# How to Write an English Medical Manuscript That Will Be Published and Have Impact

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## Abstract

English has become the international language in our world of learning. Yet to write a medical manuscript in a second language that is so difficult to master is a challenge for many doctors whose native language is not English. My aim is to convey that it need not be such a challenge if you follow a few simple rules based on the concept of “simplicity = clarity = effective communication.” Your aim is to publish important research findings and contribute to medical advancement; however, your paper will have impact only if the readers can understand it easily.

**Key words** English manuscript · Clarity · Effective communication · Native language · Active voice

Although the content of the medical manuscript is often very specialized and complex, there is no need to write about it in a complex way. Unfortunately, many scientific writers are under the misconception that long, obscure words and complicated terms will make their paper “impressive.” This could not be further from the truth. Many medical manuscripts are rejected by editors because of their unnecessary complexity and repetition, which make them almost impossible to read. On the other hand, simple words and terms make a paper clear, concise, and easy to read, thereby achieving the ultimate aim of every author: effective communication.

One of the most important things to bear in mind as you write your English medical manuscript is the plainer the English, the greater your chance of pub-

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lication. Editors who read many papers each week will always favor those they can understand and read easily.

Here are 12 simple but effective tips for success:

## 1. Write only one thought per sentence.

Write simply, just as you would speak when explaining something to a colleague. Check long sentences to see if you can split them into two or three short, clear sentences. Remember, many readers (and editors) of medical journals are non-native English speakers, just like you.

## 2. Use paragraphs wisely to group related thoughts and to make your paper easy to follow.

Try to put key words or ideas at or near the beginning of important sentences.

## 3. Eliminate unnecessary words.

Instead of:

“Measurements were performed to evaluate the levels of CEA in the serum.”

Write simply:

“We measured the serum CEA levels.”

Instead of:

“No instances of either postoperative death or major complications occurred during the early postoperative period.”

Write simply:

“There were no deaths or major complications during the early postoperative period.”

Instead of:

“The 28 patients were divided into two groups consisting of a treatment group ( $n = 18$ ) and a nontreatment group ( $n = 10$ ).”

Write simply:

“The 28 patients were divided into a treatment group ( $n = 18$ ) and a nontreatment group ( $n = 10$ ).”

#### **4. Avoid redundant words and phrases.**

Many words are “absolute” in their meaning and should not be modified. It is a very common mistake to add redundant words to words that already have a clear, strong meaning. Such words do not need to be and should not be modified in an attempt to stress their meaning. Their meaning is already clear.

Look at these examples:

White *in color* = white

Definitely proven = proven

Oval *in shape* = oval

Past history = history

Join *together* = join

Basic essentials = essentials

In *order* to = to

Entirely eliminate = eliminate

Very unique = unique

Absolutely essential = essential

Quite certain = certain

#### **5. Always try to choose the shortest, clearest word or phrase.**

Long and obscure words and phrases will confuse readers, not impress them. Do not be afraid to use “I” or “we,” instead of “the author(s).” (Table 1).

#### **6. Write confidently, using the active voice whenever possible.**

Many years ago, doctors traditionally wrote their papers in the passive voice. This is a practice of the past. Today, the editors of medical journals prefer the active voice. The active voice is easier to read, and to write!

**Active voice:** the subject performs an action.

“We performed this study to compare the efficacy of drug A with that of drug B.”

“We think that drug A is better than drug B.”

“Our findings show that drug A is better than drug B.”

These sentences sound positive and confident. Their meaning is clear and they are easy to read and understand immediately. This is what today’s editor wants to see.

**Passive voice:** the object is acted on by the subject.

“A study was performed by our department to compare the efficacy of drug A with that of drug B.”

“It is believed that drug A is better than drug B.”

“The superiority of drug A compared with drug B is shown by the findings of this study.”

These sentences sound like you do not want to say you were involved. They are clumsy and difficult to read.

#### **7. Avoid ambiguity.**

“Ambiguity” means “two or more possible meanings,” generating uncertainty.

Using the active voice will help you to avoid accidentally creating ambiguity. On the other hand, using the passive voice to make long sentences full of unnecessary words will often create ambiguity.

Look at these examples:

Incorrect: “The tissue samples were examined by a blinded observer under a microscope.” (The observer must have been very small!)

Correct: “A blinded observer examined the tissue samples under a microscope.” (or “The tissue samples were examined under a microscope by a blinded observer.”)

Incorrect: “The patient was with the nurse when she fell.” (Who fell?)

Correct: “When the patient fell, she was with the nurse.”

“When the nurse fell, the patient was with her.”

**Table 1.** Words and expressions to avoid in medical writing

Instead of	Choose	Instead of	Choose
a certain amount of	some	has the capability of	can
a considerable number of	many	in a satisfactory manner	satisfactorily
as a consequence of	because	in case	if
ascertain	find out	in the near future	soon
decreased number of	less	in our opinion	we think
exhibit a tendency to	tend	in spite of the fact that	although
in excess of	more than	is indicative of	indicates
in the author’s opinion	I think	not later than	by
facilitate	allow/help/enable	subsequent to	after
fatal outcome	death	take into consideration	consider
first of all	first	whether or not	whether
greater number of	more		

Incorrect: "He only took the medication once." (Was he the only person to take the medication once or did he take the medication only once?)

Correct: "He took the medication only once."

#### **8. Use the same grammatical structure in each sentence (parallel structure).**

Instead of:

"We conducted this study to evaluate X and we also measured Y."

Write simply:

"We conducted this study to evaluate X and to measure Y."

Instead of:

"We gave 10 rats drug X, 10 rats received drug Y, and 10 rats were given drug Z."

Write simply:

"We gave 10 rats drug X, 10 rats drug Y, and 10 rats drug Z."

#### **9. Ensure that verb tenses are consistent and correct.**

In the Materials and Methods and Results sections of your manuscript, use only plain past tense.

For example:

"Group A consisted of patients treated with drug B."

"We used Smith's technique."

"We found that drug A inhibited tumor growth."

"Only two rats died."

In the Introduction and Discussion sections of your manuscript, you must mix verb tenses. This may seem confusing, so follow these basic rules:

Use present tense for facts and for your answers.

For example:

"It is well known that . . ."

"Our findings show . . ."

Use plain past tense for your results or for those of a particular study.

For example:

"All of the group A rats died."

"Smith reported that . . ."

Use present perfect tense for collective results.

For example:

"Several experimental and clinical studies have shown that . . ."

#### **10. Avoid unnecessary repetition of facts and data throughout your manuscript.**

Be careful not to repeat the same information over and over in different parts of your text, especially the Discussion. No matter how important your findings are, your manuscript will become difficult to read and risk rejection if the data are too repetitious.

#### **11. Always write your Abstract last, after you have analyzed your findings and defined their meaning.**

#### **12. The title is the most important word construction in your whole paper, so write a good one.**

Your title will have many more readers than your paper, so make them want to read further!

Keep your title short and specific.

Put the most important key words at or near the beginning.

Make your title dynamic: entice the reader to read further.

Never use abbreviations in a title.

Instead of:

"A Comparison of the Effectiveness of Mesh Repair Versus That of Suture Repair for the Correction of Incisional Hernias"

Write simply:

"Mesh Repair Versus Suturing for Incisional Hernias"

If you follow these 12 simple rules for writing a medical manuscript, you will increase your chances of publication by capturing the editor's interest with a carefully planned manuscript that is written in clear, concise English.