
بسم الله الرحمن الرحيم

Medical Writing

BY:

Afagh Hassanzadeh Rad

B.S. in Midwifery

Ph.D. in Linguistics

THE IMPORTANCE OF PUBLISHING PAPERS IN ENGLISH

- 1) English remains the most commonly used language for medical publications
- 2) Most of the higher impact factor journals are published in English
- 3) Publications in English improve visibility of the author and institution and can be vital to one's academic promotion

YOU HAVE ONLY ONE CHANCE TO MAKE A GOOD FIRST IMPRESSION.

- An analogy is the "presentation" of a meal.
- While one meal may taste just as good as another, the one with the better presentation is likely to be judged superior.
- In a manuscript the "presentation" is in the writing style, neatness (correct syntax, lack of misspelled words and typographical errors), and quality of images, tables, and references.

- Close attention to detail (such as spell checking) can improve the look of the paper and thus its perceived quality
- Once the author(s) have chosen the journal, the preparation process begins. The authors should carefully review the "instructions for authors" for the particular journal.

INSTRUCTIONS FOR AUTHORS

- instructions include
- how to format the abstract
- maximum allowable word counts and images
- how to prepare images (i.e., jpeg or tiff)
- need for a cover letter
- and disclosure forms.
- The author MUST follow these instructions carefully to prevent outright and immediate rejection.
- Although violation of these rules generally does not mean the manuscript cannot be resubmitted, it will likely result in delays.

APPROACHES TO WRITING A MANUSCRIPT

- There is no exact order that must be followed
- Some authors start at the title page and work down through each section (Introduction, Methods, Results, Discussion, Conclusions).
- Some authors write an abstract first and expand the document for each section. This may be the easiest and most practical way to begin, especially if an abstract was prepared for presentation at a scientific meeting.
- some authors start with the Methods and Results sections and move to other sections later.

ABSTRACT

- The abstract is the only part of the paper that is published online
- abstract constitutes a very important section of your paper.
- potential reviewers only see the abstract when invited by an editor to review a manuscript.
- The abstract is indexed by search engines, make sure that it has words that a researcher in the same field will be using while searching for articles online.

INTRODUCTION

- Short review
- Shortcomings of the existing reports
- Aim of the study
- provide the reader with a brief overview of your topic and the reasons for conducting research.
- Regarding word count, introduction typically occupies 10-15% of your paper
- After reading the introduction, the reader must have a clear idea of what to expect from the rest of your research paper.

METHODS

- Study design
- Full description of patients/materials
- Full description of methods
- Ethical considerations
- Statistical analysis

should provide a clear description of the experimental procedure

RESULTS

- Presentation of data
- This section should highlight significant or interesting findings along with P values for statistical tests.
- Use similar decimals
- Be sure to include negative results
- Use tables and figures to show the results.
- Mention the tests used to compare results in groups.

DISCUSSION

- Introduction to discussion
- Discussion of the results
- Address similarity and differences
- Advantages of the study
- Limitations of the study
- highlight potential limitations of the paper. You will be criticized by the reviewers if you don't discuss the shortcomings of your research.
- Recommendations of authors

conclusion

A research paper should end with a well-constructed conclusion.

Summarize your main findings and evidence for the reader.

Do not present any new arguments in your conclusion. You can raise some open questions and set the scene for the next study.

This is a good place to register your thoughts about possible future work.

ACKNOWLEDGEMENTS

- There is no standard way to write This section
- It allows you to thank all the people who helped you with the project.
- You can take either formal or informal tone; you won't be penalized.

GENERAL STYLE POINTS

- Avoid writing excessively long Introduction and Discussion sections.
- Use organized and well-designed tables to present your data.
- Use high-quality illustration (Fig. 1) and figures.
- Briefly state the results in an understandable manner and then refer the reader to tables.
- Only use the word significant when it applies to data based on the p value ($p < 0.05$). Do not write "X provides significant benefits for the patient."
- Avoid using "I or we." "we have shown X to be....." instead write "The results showed that....."

- Spell out words used later and acronyms at first mention; then use the acronym for the remainder of the manuscript.
- Avoid excessive use of non-standard abbreviations.

BEGIN WRITING

- Sometimes we find it difficult to find the right phrase to start sentences. At such times, a useful strategy is to borrow the phrases of others and cite them.
- You can look at some sentences in various sections of a research journal as well and keep them in mind
- Summarize pervious studies
- butttttttt

Plagiarism.

- Plagiarism is always a risk when summarizing someone else's work.

avoid it:

- Take notes in your own words.
- Using short notes or summarizing key points in your own words forces you to rewrite the ideas into your own words later
- Rely primarily on paraphrasing, not direct quotes.
- paraphrase and cite them

WHY SHOULD YOU PARAPHRASE?

- "Paraphrasing" is expressing the meaning of someone else's words in your own words instead of quoting directly.
- By paraphrasing effectively, general readers can understand the content

STEPS FOR PARAPHRASE

- Step 1: Read important parts of the source material until you fully understand its meaning.
- Step 2: Take some notes and list key terms of source material.
- Step 3: Write your own paragraph without looking at the source material, only using the key terms.
- Step 4: Check to make sure your version captures important parts and intent of the source material.
- Step 5: Indicate where your paraphrasing starts and ends using in-text citation.

METHODS USED IN PARAPHRASING

- find synonyms and related terms.
- changing the voice of the sentence (active voice to passive; passive voice to active)

VERB TENSE

ABSTRACT.

- The verb tense chosen for the abstract should be based on the section of the text to which each sentence corresponds.
- The three most commonly used tenses are past, present, and present perfect.

VERB TENSE

Introduction

- the present tense: stating a fact widely accepted
- The present perfect tense: referring to a previous study with results that are still relevant, (a form of the verb 'have' plus a past participle, such as "have shown" or "has been shown"). This tense demonstrates that the action occurred in the past but still applies in the present.
- Past tense: referring specifically to the methods used in a previous paper:

VERB TENSE

Introduction

- At times, a combination of tenses is necessary:

"Robert et al. suggested [past] that DNA contained three helices, but subsequent work has SHOWN [present perfect] the existence of a double-helix structure."

VERB TENSE

Methods

Past tense to describe what was done.

Present tense for presenting diagrams and figures

VERB TENSE

RESULTS

Past tense for results obtained ·

Present tense to refer to figures, tables and graphs

VERB TENSE

- DISCUSSION.

Past tense to summarize findings, with present tense to interpret results

The past tense : referring to specific results or methods

The present tense: presenting conclusions

("based on the results, it is concluded that gene X is dispensable for ……").

The future tense: directions for additional research

VERB TENSE

Conclusion ·

A combination of tenses to highlight past research and future directions

REFERENCES

- an important part of a manuscript.
- You must ensure that the references are correct INCLUDING correct spelling, title, and names and correct correlation in the text
- The references must be in the format requested (for example: when there are more than six authors the first three are cited followed by "et al".)

EXAMPLES: GENERAL INTRODUCTION

- A common strategy used to study _ is to _
- This research constitutes a relatively new area which has emerged from __
- In the past several decades, _ have played an important role in _
- This is the field of study that deals with __
- There are three major theoretical and conceptual frameworks for ……

EXAMPLES: PROBLEM DEFINITION

- This seems to be a common problem in __
- This leads to important problems in __
- The main problem is that __
- There is a further problem with __
- One primary problem with _ is that _
- The foremost problems are the facts that __
- This seems to be a common problem in __
- This is a complex problem and to simplify it researchers require __
- These examples highlight the problem that __
- The main practical problem that confronts authors is __

EXAMPLES: GAPS IN LITERATURE

- There is no previous research using __ approach.
- As far as we know, no previous research has investigated __
- There has been less previous evidence for __
- Other studies have failed to __
- To the best of our knowledge, no study has yielded __
- No study so far has examined __
- Only a few studies have shown __
- However, __ has rarely been studied directly.
- Moreover, few studies have focussed on __
- In particular no study, has considered __

AIMS & OBJECTIVES:

- The aim is to develop more sophisticated methods for
- The aim of this work is to develop
- For the first goal, authors focused on two problems
- The aim is to investigate __
- The overall goal of this work is to __
- This project aims to develop an overarching framework to __T
- he aim of the experiment is to compare __
- The ultimate goal is to produce a __
- The objective is to devise and implement a system for _

DESCRIBING PURPOSE OF TESTING / METHODS USED

- In order to identify / understand / investigate / study / analyze X …
- To enable / allow us to … , we …
- To see / determine / check / verify / determine whether …
- To control / test for X, Y was done.
- So that we could / would be able to do X, we …
- In an attempt / effort to do X, we …
- X was done / We did X in order to …

DESCRIBING THE MATERIALS USED AND THEIR SOURCE

- The instrument used / utilized / adopted / employed was …
- The device was designed / developed / set up in order to …
- The system comes complete / is equipped / is fully integrated / is fitted with a …

REPORTING SOFTWARE USED

- The software application / program / package used to analyze the data was SoftGather (Softsift plc, London).
- The data were obtained / collected using.

- When referring to SPSS versions prior to the IBM acquisition, authors should cite '**SPSS Statistics for Windows, version x. 0 (SPSS Inc., Chicago, Ill., USA)**', but for versions beginning from 19, authors should cite 'IBM SPSS Statistics for Windows, version XX (IBM Corp., Armonk, N.Y., USA)' .

EXPLAINING HOW YOU GOT YOUR RESULTS

- To assess X / evaluate X / distinguish between X and Y, Z was used.
- X analysis was used to test / predict / confirm Y.
- Changes in X were identified / calculated / compared using …
- The correlation / difference between X and Y was tested.
- The first set of analyses investigated / examined / confirmed / highlighted the impact of …

REPORTING RESULTS FROM QUESTIONNAIRES AND INTERVIEWS

- Of the study population / initial sample / initial cohort, 90 subjects completed and returned the questionnaire.
- The response rate was 70% at / after / for the first six months and …
- The majority of respondents / those who responded felt that ….
- Over half / Sixty per cent of those surveyed / questioned reported that …

- Almost / Just under / Approximately two-thirds of the participants (64%) mentioned that
- Only / Just a small number / Fifteen per cent of those interviewed reported / suggested / indicated that …
- Of the 82 subjects who completed the questionnaire / took part in the survey / agreed to participate, just under / over half replied that ….
- In response to Question 1, most / nearly all / the majority of those surveyed indicated that …
- When the subjects were asked about / questioned on X the majority commented that ….
- The overall response to this question was surprisingly / unexpectedly / very / quite negative.

Stating what you found

- These tests revealed / showed / highlighted that …
- Strong / Some / No evidence of X was found …
- Interestingly / Surprisingly / Unexpectedly, for high values of X, Y was found ..
- There was a significant positive / no correlation between …
- On average / Generally speaking / Broadly speaking, we found values for X of …
- The average / mean score for X was …
- This result is significant only / exclusively at an X level.
- Further analysis / analyses / tests / examinations / replications showed that …

Stating what you did not find

- No significant difference / correlation was found / identified / revealed / detected / observed /
- highlighted between ….
- There were no significant differences between X and Y in terms of Z / with regard to Z / as far as Z is
- concerned.
- The analysis did not show / reveal / identify / confirm any significant differences between …
- None of these differences were / Not one of these differences was statistically significant.
- Overall / Taken as a whole / Generally speaking / With a few exceptions, our results show X did not
- affect Y.

Highlighting significant results and achievements

- The most striking / remarkable result to emerge from the data is that …
- Interestingly / Curiously / Remarkably / Inexplicably, this correlation is related to ….
- Significantly / Importantly / Crucially / Critically, X is …
- The correlation between X and Y is interesting / of interest / worth noting / noteworthy / worth mentioning because …
- The most surprising / remarkable / intriguing correlation is with the …
- The single most striking / conspicuous / marked observation to emerge from the data comparison was …

- It is interesting / critical / crucial / important / fundamental to note that …
- We believe that / As far as we know / As far as we aware this is the first time that X …
- We believe that / We are of the opinion that / In our view the result emphasizes the validity of our model.
- This result has further strengthened our confidence in X / conviction that X is / hypothesis that X is …
- Our technique shows a clear / clearly has an advantage over …
- The importance of X cannot be stressed / emphasized too much.

- This underlines / highlights / stresses / proves / demonstrates just how important X is.
- The utility of X is thus underlined / highlighted / stressed / proved / demonstrated.
- This finding confirms / points to / highlights / reinforces / validates the usefulness of X as a …
- Our study provides additional support for / further evidence for / considerable insight into X.
- These results extend / further / widen our knowledge of X.
- These results offer compelling / indisputable / crucial / overwhelming / powerful / invaluable /
- unprecedented / unique / vital evidence for …

STATING THAT YOUR RESULTS CONFIRM PREVIOUS EVIDENCE

- Our experiments confirm / corroborate / are in line with / are consistent with previous results [Wiley
- 2009].
- The values are barely / scarcely / hardly distinguishable from [Li 2010] who …
- This value has been found to be / is typical of X.
- This is in good agreement / in complete agreement / consistent with …

- This fits / matches / concurs well with and also confirms our earlier / previous findings .
- This confirms / supports / lends support to / substantiates previous findings in the literature …
- These values correlate favorably / satisfactorily / fairly well with Svenson [2009] and further support the idea / role / concept of …
- Further tests carried out with X confirmed / corroborated / concurred with our initial findings.
- As proposed / suggested / reported / indicated / put forward by Dong [2011], the evidence we found points to …
- Our results share / have a number of similarities with Claire et al.'s [2012] findings …

STATING THAT YOUR RESULTS ARE IN CONTRAST WITH PREVIOUS EVIDENCE

- It was found that X = 2, whereas / on the other hand Kamatchi [2011] found that …
- We found much higher values for X than / with respect to those reported by Pandey [2000].
- Although / Despite the fact that Li and Mithran [2014] found that X = 2 we found that X = 3.
- In contrast to / contradiction with earlier findings [Castenas, 2009], we …
- This study has not confirmed previous research on X. However / Nevertheless / Despite this, it
- serves to …

- Even though these results differ from some published / previous / earlier studies (Cossu, 2001;
- Triana, 2002), they are consistent with those of …
- Kosov et al. noted that x = y. Our results do not support / appear to corroborate / seem to confirm
- their observation, in fact …
- Georgiev is correct to argue / propose / claim that x = y. However, his calculation only referred to
- the limited case of …. and our conclusion of x = z, would thus seem to be justified / justifiable /

EXPRESSING CAUTION REGARDING THE INTERPRETATION OF RESULTS

- Initially we thought that x was equal to y. However, a more careful analysis / closer inspection
- revealed that …
- These results / data / findings thus need to be interpreted with caution / care / attention.
- The conclusions of the review should be treated / interpreted / analyzed / read with caution.
- However, due care / careful attention / extreme caution must be exercised / paid in …
- Given that our findings are based on a limited number of Xs, the results from such analyses should
- thus / consequently / therefore be treated with considerable / the utmost caution.
- Other researchers have sounded / We should sound a note of caution with regard to such findings

OUTLINING UNDESIRED OR UNEXPECTED RESULTS

- As was / might have been expected, our findings were often contradictory …
- Contrary to expectations / Unlike other research carried out in this area, we did not find a significantdifference between …
- Our research failed to account for / justify / explain / give an explanation for / give a reason for the

ADMITTING LIMITATIONS

- We aware that our research may have two limitations. The first is … The second is … These
- limitations highlight / reveal / underline / are evidence of the difficulty of collecting data on ….
- It is plausible that a number of limitations may / might / could have influenced the results obtained.

EXPLAINING AND JUSTIFYING UNDESIRED OR UNEXPECTED RESULTS

- This apparent lack of correlation can be attributed to / explained by / justified by …
- The reason for this rather contradictory result is still not entirely / completely clear, but …
- There are several possible explanations for this result / finding / outcome.

- These differences can be explained / justified / accounted for in part by …
- This happened / occurred / may have happened / may have occurred because we had not examined X
- sufficiently / in enough depth due to …
- The reasons for this result are not yet wholly / completely / entirely understood.

MINIMIZING UNDESIRED OR UNEXPECTED RESULTS

- Although performance was not ideal / perfect / optimal, we still / nevertheless believe that …
- This poor performance was not unexpected / surprising / very significant. In fact …
- This result was not expected / predicted / anticipated. However, the reason for this is probably / it is
- likely that the reason for this is / it is probable that the reason for this is that …

EXPRESSING OPINIONS AND PROBABILITIES

- To the best of our knowledge / As far as we know / We believe that no other authors have found that
- This factor may be responsible / is probably responsible / could well be responsible for this result.
- We believe that our method could be used / probably be usefully employed in…

ANNOUNCING YOUR CONCLUSIONS AND SUMMARIZING CONTENT

- In conclusion / In summary / In sum / To sum up, our work …
- Our work has led us to conclude / the conclusion that …
- We have presented / outlined / described …
- In this paper / study / review we have …
- This paper has investigated / explained / given an account of …

RESTATING THE RESULTS (CONCLUSIONS SECTION)

- The evidence from this study suggests / implies / points towards the idea / intimates that …
- The results / findings of this study indicate / support the idea / suggest that …
- In general, / Taken together, these results suggest / would seem to suggest that …
- An implication / A consequence / The upshot of this is the possibility that …

HIGHLIGHTING ACHIEVEMENTS (CONCLUSIONS SECTION)

- Our research / This paper has highlighted / stressed / underlined the importance of …
- We have managed to do / succeeded in doing / been able to do / found a way to do X.
- We have found an innovative / a new / a novel / a cutting-edge solution for …

OUTLINING POSSIBLE APPLICATIONS AND IMPLICATIONS OF YOUR WORK

- This study is the first step / has gone some way towards enhancing our understanding of …
- These observations have several / three main / many implications for research into …
- This work has revealed / shown / highlighted / demonstrated / proved that …

FUTURE WORK PROPOSED FOR THIRD PARTIES TO CARRY OUT

- Further work needs to be done / carried out / performed to establish whether …
- Further experimental investigations / tests / studies are needed to estimate …
- More / Additional / Further work on X, would help us to do Y.
- We hope / believe / are confident that our research will serve as a base for future studies on …

ACKNOWLEDGEMENTS

- This work was carried out / performed within the framework of an EU project and was partly sponsored by …
- This research was made possible by / benefited from a grant from …
- Support was given by the Institute of X, who funded the work in all its / its initial stages.
- We thank / would like to thank the following people for their support, without whose help this work

REFERRING TO TABLES AND FIGURES, AND TO THEIR IMPLICATIONS

- Table 1 compares / lists / details / summarizes the data on X.
- Table 2 proves / shows / demonstrates / illustrates / highlights that X is …
- Figure 1 presents / reports / shows / details the data on X.
- Figure 3 indicates exactly where X meets Y.

REFERRING BACKWARDS AND FORWARDS IN THE PAPER

- As was mentioned / stated / noted / discussed / reported in the Methods, …
- As reported above / previously / earlier / before …
- As mentioned / stated / outlined in the literature review …
- The above- / afore-mentioned X is …
- More details on this will be given below / in the next section / in the appendix.