INTRODUCTION

Writing a scientific manuscript is an art of scientific manuscript. Its purpose is to report cases and practical experience of a literate clinician. In fact, it should be considered as a primary responsibility of the practitioners as it provides many extrinsic and intrinsic benefits to the writer. Medical writing may aid a personal satisfaction, recognition from peers, as well as helps in academic promotion and career advancement for a clinician.

In our part of the world, clinicians are less motivated towards medical writing; and despite the potential advantages, there are still low percentage of writers who are interested in writing. It may be due to shortage of time, lack of confidence in writing, and frustration in the process of publishing the manuscript. Being the second language, not many professionals are well versed in the English language as to be able to write an article. Most of them first convert their thought from Urdu to English and then write on the paper. This creates ambiguity in their work and for clarity, they need to have it revised by individuals well versed in English, which is not an easy task.

Scientific English writing has its own mannerism and cadence. Use of correct English grammar and spellings is a big task for a writer. Although the use of advanced versions of Microsoft Word helps correct many grammatical mistakes, but still there is a need of good English writing guidance.

Internationally, many articles and guidelines are available to correct common mistakes encountered in manuscripts, especially English grammar. But after an in-depth search of national data, the researchers did not find any article published on the topic, locally. Therefore, this study was planned with the objective to document English grammar problems seen in original articles, submitted for publication in Annals of Abbasi Shaheed Hospital and Karachi Medical and Dental College.
METHODOLOGY

This cross-sectional study was conducted at the Department of Annals of Abbasi Shaheed Hospital and Karachi Medical and Dental College from January 2013 to December 2014. The inclusion criteria were original research articles published in Annals of Abbasi Shaheed Hospital and Karachi Medical and Dental College, during the above period. The exclusion criteria were case reports, short communications, letter to the editor and editorials. The original articles constitute almost 70% of the medical journals. The sample size was calculated through Raosoft software, which calculated a minimum sample size of 27 manuscripts with the confidence interval of 95%, margin of error 5% and response distribution 50%. The number of articles published in the journal were 28 which were selected through convenience sampling. The data was calculated and evaluated by the chief editor and assistant editor of the journal. All the findings were recorded on a predesigned proforma, which included the following mistakes in the manuscripts: Abbreviation, use of inappropriate tense, active and passive voices, incomplete sentences, punctuation marks, wordiness, syntax, flow of thought process, inappropriate tenses, excessive/irrelevant/pointless sentences, wrong prepositions and articles, spelling mistakes, and lengthy sentences. The mistakes were evaluated in article title, abstract, introduction, methods, results, discussion, and conclusion section of the manuscripts.

The data was entered and analyzed on SPSS version 19.0. All the variables were computed and measured as percentage.

RESULTS

A total of 28 original research articles were evaluated. All the papers demonstrated mistakes in different portions of the manuscripts. The mean number of mistakes in June 2014 was 14.6 ±2.26, while the mean number of mistakes for December 2014 was 20.5 ±4.76 . The mean lowest number for the year 2013 issues was 1 ±6.18 for June issue, and highest was 13.3 ±3.0 for December issue, respectively. The number of mistakes identified in the manuscripts in descending order included punctuation marks, use of inappropriate tense, articles, prepositions, wordiness (excessive words), long sentences, spelling mistakes, flow of thought process, incomplete sentences and frequent use of abbreviations. (Table I).

The maximum number of punctuation mistakes were identified in discussion section (78.5%), inappropriate tense and voice in methods and discussion sections (71.4%), article in discussion (50%), preposition (39.2%), excessive / irrelevant / pointless sentences in conclusion section (28.5%), lengthy sentences in the methods (28.5%), spellings in methods (25%), flow of thought process in methods section (14.2%), incomplete sentence in introduction and methods section (10.7%), abbreviation mistakes were identified in methods section (10.7%), as shown in Figure 1.

DISCUSSION

This retrospective study revealed many common English language mistakes in the manuscripts. It was found that the use of punctuation marks was the major issue encountered in the manuscripts. It accounted for approximately > 70%, and mostly found in discussion part of the manuscript. It may be due to lack of understanding and critical review of the manuscripts before submission and ignorance of the use of correct punctuation marks. The American Sociological Association (ASA) style states that punctuation marks should be mentioned with single space and in the same

\[\text{Table I: Showing frequency of English language mistakes in manuscripts.}\]

<table>
<thead>
<tr>
<th>English language</th>
<th>Article Title</th>
<th>Abstract</th>
<th>Introduction</th>
<th>Methods</th>
<th>Results</th>
<th>Discussion</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviation</td>
<td>00 (0%)</td>
<td>02 (7.1%)</td>
<td>00 (0%)</td>
<td>03 (10.7%)</td>
<td>00 (0%)</td>
<td>01 (3.5%)</td>
<td>00 (0%)</td>
</tr>
<tr>
<td>Incomplete sentences</td>
<td>00 (0%)</td>
<td>02 (7.1%)</td>
<td>03 (10.7%)</td>
<td>03 (10.7%)</td>
<td>00 (0%)</td>
<td>01 (3.5%)</td>
<td>00 (0%)</td>
</tr>
<tr>
<td>Punctuation marks</td>
<td>00 (0%)</td>
<td>11 (39.2%)</td>
<td>16 (57.1%)</td>
<td>13 (46.4%)</td>
<td>14 (50%)</td>
<td>22 (78.5%)</td>
<td>07 (25%)</td>
</tr>
<tr>
<td>Flow of thought process</td>
<td>00 (0%)</td>
<td>03 (10.7%)</td>
<td>03 (10.7%)</td>
<td>04 (14.2%)</td>
<td>00 (0%)</td>
<td>02 (7.1%)</td>
<td>00 (0%)</td>
</tr>
<tr>
<td>Appropriate tenses/voices</td>
<td>00 (0%)</td>
<td>18 (64.2%)</td>
<td>20 (71.4%)</td>
<td>19 (67.8%)</td>
<td>17 (60.7%)</td>
<td>20 (71.4%)</td>
<td>11 (39.2%)</td>
</tr>
<tr>
<td>Excessive / irrelevant / pointless sentences</td>
<td>00 (0%)</td>
<td>06 (21.4%)</td>
<td>04 (14.2%)</td>
<td>05 (17.8%)</td>
<td>04 (14.2%)</td>
<td>05 (17.8%)</td>
<td>08 (28.5%)</td>
</tr>
<tr>
<td>Use of preposition</td>
<td>00 (0%)</td>
<td>11 (39.2%)</td>
<td>10 (35.7%)</td>
<td>07 (25%)</td>
<td>04 (14.2%)</td>
<td>05 (17.8%)</td>
<td>07 (25%)</td>
</tr>
<tr>
<td>Use of articles</td>
<td>00 (0%)</td>
<td>12 (42.8%)</td>
<td>12 (42.8%)</td>
<td>12 (42.8%)</td>
<td>08 (28.5%)</td>
<td>14 (50%)</td>
<td>06 (21.4%)</td>
</tr>
<tr>
<td>Spellings</td>
<td>00 (0%)</td>
<td>03 (10.7%)</td>
<td>05 (17.8%)</td>
<td>07 (25%)</td>
<td>01 (3.5%)</td>
<td>03 (10.7%)</td>
<td>00 (0%)</td>
</tr>
<tr>
<td>Lengthy sentences</td>
<td>00 (0%)</td>
<td>01 (3.5%)</td>
<td>07 (25%)</td>
<td>08 (28.5%)</td>
<td>03 (10.7%)</td>
<td>07 (25%)</td>
<td>00 (0%)</td>
</tr>
</tbody>
</table>
font of the document. This was found to be lacking in this study in 78.5% of the manuscripts.

Another common mistake was the use of inappropriate tenses as well as active and passive voices in the manuscripts. It accounted for 70% mistakes and mostly in the introduction and discussion part. Many guidelines are available which guide for the use of appropriate tenses and voices in articles. Published articles in major journals also guide the authors for the use of different types of tenses in different parts of the manuscripts. The use of wrong active and passive voices is a common mistake encountered in manuscripts. In this study, the percentage of active and passive voice mistakes were 70%. The active and passive voices show whether the ‘subject’ is performing the ‘action’ or is ‘acted upon’, respectively. Authors using active voice are in favour of it as it shortens the length of sentences and formulate the sentences in a more comprehensive format for the reader to understand. Sentences using the active voice are more clear, simple and non-ambiguous thus it is a preferable choice for the editors and readers as well as by most major journals.

It is very important for the writer to understand the language requirements of the reader. The manuscripts should follow the specific guidelines and language requirements of the journal, too. A study conducted at Saint Louis University Medical Center in 2014, concluded that one-fourth of the errors occurred in medical publications usually changed the way of data interpretation. Many online guidances and tips are available which help the authors in writing a good and comprehensive manuscript.

In this study, the usage of articles (a, an, the) accounted 50% of the mistakes with the highest incidence in the discussion part. This is in consistent with the study conducted in 2013 by Kasperavicien, which demonstrated that higher number of grammatical mistakes were found in the usage of articles.

This study revealed that the use of prepositions accounted for approximately 40% of the writing mistakes in the manuscripts submitted in the Annals, and most frequently in the abstract section. Although prepositions are seemed to be a negligible word but are substantially meaningful words which if used incorrectly and inappropriately will change and alter the meaning of whole sentence or phrase. Many grammar books are available which guide and teach the readers for the correct use of prepositions.

Wordiness or overbosity (excessive words), long sentences and spelling mistakes account for 20 - 30% mistakes in the results and methods sections, respectively. The typographical errors may occur due to lack of attention during typing or fat finger syndrome. Use of irrelevant and pointless sentences not only distracts readers’ attention but also increases the printing cost and consumes time of the editor.

The limitation of the study was cross-sectional design and small sample size in evaluation of English grammar problems in only original published articles. As a regularly published journal comprises of approximately 70% original articles; therefore, they are considered to be the representative of major discrepancies and mistakes of the manuscripts. To overcome this limitation, further longitudinal studies can be planned in future to evaluate a large number of issues like editorials, case reports, review articles, letter to the editor along with original articles.

The overall objective of an author is to provide sufficient knowledge to the readers in a meaningful and simple way and not to impress them by his irrelevant writing. Recommendations, following the completion of this study, include that the editors must elaborate the guidelines to the authors with respect to English grammar requirements in the manuscripts. It has been recommended that author should consider the use of comprehensive and appropriate English grammar while formulating and writing a manuscript which will make the article understandable and standardized. It has also been recommended that workshops and seminars must be conducted in order to tutor the researchers about English grammar and its implications. Useful websites, blogs and softwares are easily available which help researchers to check and rectify English grammar mistakes in the manuscripts. Therefore, it is recommended that researchers must emphasise on correct English grammar and critically review the manuscripts before submission to a journal.

CONCLUSION

A large number of manuscripts revealed inappropriate use of punctuation marks, tenses, active and passive voices, followed by wrong usage of articles.

REFERENCES


11. Tompason A. How to write an English medical manuscript that will be published and have an impact. Surg Today 2006; 36: 407-9.


