Veterinary Editors Meeting
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Mentoring Authors

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Editor, Croatian Medical Journal
Past President, Council of Science Editors
First published in 1992
In English
Indexed in MEDLINE since 1998
Indexed in ISI databases since 1999
Available from PubMed Central since 2007
Bi-monthly, primary electronic – www.cmj.hr
Submission ~500 articles
Rejection rate ~85%
Local journal, global science

Editorial

Life of Small Medical Journal – How Bibliographical Indexing and International Visibility Affected Editorial Work in *Croatian Medical Journal*

*Figure 1.* Total number of manuscripts submitted to the *Croatian Medical Journal* from 1992 to 2005. Arrows indicate indexing of the journal in the PubMed/Medline (1998) and Thomson Scientific databases (1999).
Local journal, global science

Figure 5. Submissions to the Croatian Medical Journal from Croatian (open circles) and non-Croatian (closed circle) affiliations. Non-Croatian origin of the manuscript was defined as at least one non-Croatian affiliation of the authors in the byline.

Figure 6. The fate of manuscripts submitted to the Croatian Medical Journal from 1992 to 2005: editorial rejection (full circles), rejection after review (open squares), and acceptance after review (open circles); gray line — all rejections (editorial + after review).
Working with authors
Editors as educators:

work with authors – author-helpful policy
mandatory course for students
continuing medical education course
discussions with policymakers
CMJ: working with authors

- Editor in Chief I
- Manuscript Editor
- Language Editor
- Copy Editing + Substantive Editing II: Accuracy of information
- Substantive Editing III: Language
- Substantive Editing IV: Fine detail, overall quality
- Copy Editing + Substantive Editing II
- Submission
- Editor in Chief II
- Production Editors
- Author
- Final proofs: all editors
- Printing and distribution
- Extramural Reviewers
1) Pre-review
2) Peer review process
3) After review, each accepted article is read by four editors:
   - check if all reviewers' comments are answered clearly
   - check if the data are clearly reported and if all necessary information is provided, edit the tables, and check the references for accuracy
   - language editing
   - improve the style of the manuscript.
Manuscript Editing

Four layers

- study (study design)
- manuscript structure (narrative)
- style (SSF, AMA, APA)
- language (English)

Layer 1: Study design

- Poorly performed vs. poorly presented study
- Results should issue from the methods applied
- Conclusion should provide the answer to the hypothesis tested
- Appropriate structure
The patients were randomized (Dr. XY, how were they randomized?) to receive either placebo or 12 μg/kg loading dose of levosimendan (Simdax®, Orion Corporation, Espoo, Finland) during a period of 15 minutes.
After 4 phone calls and 3 e-mails:

- **1st attempt:** The patients were randomized into two groups, each consisting of 12 patients. A random number was assigned to each patient to determine if the patient was to receive placebo or 12 μg/kg loading dose of levosimendan...

- **2nd attempt:** The patients were randomized into two groups by a single anesthesiologist on the day before surgery. One group received placebo and the other 12 μg/kg loading dose of levosimendan...

- **3rd attempt:** The patients were randomized into two groups by a single anesthesiologist who drew patients’ numbers from a hat on the day before surgery....
Study design

- Systematic review & meta-analysis
- Randomized controlled trials
- Cohort studies
- Case-control studies
- Cross-sectional studies
- Case report
Layer 2: Manuscript structure

• IMRaD

  Introduction

  Methods

  Results

  Discussion

Uniform Requirements for Manuscripts Submitted to Biomedical Journals, ICMJE http://www.icmje.org/
Result

Author: The measurements of the saponin+collagenase-treated human heart atrial appendage fibers respiration by oxygraphic method allows the assessment of the functional activity as well as integrity of mitochondrial outer and inner membranes in situ, i.e. without isolation of mitochondria (Fig. 1).

(Comment: The previous sentence does not describe the results presented in Fig. 1. Could you please describe the results presented in Fig. 1?)

Response: We obtained typical oxygraphic traces of mitochondrial oxygen consumption in saponin+collagenase-skinned atrium fibers (Fig. 1).
Results

- **Author:** Proximal anastomoses were performed by using partial side-bite clamping of the ascending aorta (Table 1).
  *(Comment: Table 1 shows clinical characteristics of the patients included in the study?).*

- **Author:** State 4 respiration rate (VAtTr) was measured after addition of atractyloside.
  *(Comment: Addition of atractyloside was never mentioned in the Methods...).*
Results

Author: We found slight increase in the non-phosphorylating, i.e. not related with ATP synthesis, State 4 respiration rate (VAtr) by 5-15% (it was more pronounced in presence of cytochrome c (VAtr+C)).

Comment: In which table or figure is this shown?

Response: We found a 5-15% increase in the non-phosphorylating (i.e., not related with ATP synthesis) State 4 respiration rate (Table 2). The increase was more pronounced in the presence of cytochrome c (Fig. 2).
The concentration of troponine T was 2.8±0.3 ng/mL and 2.5±0.3 ng/mL in the CCC group, 1.9±0.2 ng/mL and 2.2±0.3 ng/mL in the TBC group, 0.8±0.1 ng/mL and 1.0±0.1 ng/mL in the WBC group.

<Comment: There are two values of troponin T. What do they refer to?)

Response: The concentration of troponin T at 12 and 24 h after surgery was 2.8±0.3 ng/mL and 2.5±0.3 ng/mL in the cold crystalloid cardioplegia group, 1.9±0.2 ng/mL and 2.2±0.3 ng/mL in the tepid blood cardioplegia group, and 0.8±0.1 ng/mL and 1.0±0.1 ng/mL in the warm blood cardioplegia group, respectively.
Layer 3: Style

- Abbreviations (approved abbreviations; always expanded at first mention)
- Units (SI)
- Punctuation
- Terminology
- Spelling (American vs. British)
- Avoided/preferred expressions (diabetics, females, the elderly, the disabled...)
- References
Style

- **AMA Style** (American Medical Association Manual of Style: A Guide for Authors and Editors)
- **Scientific Style and Format** (Council of Science Editors)
- **APA Style** (Publication Manual of the American Psychological Association)
In CCC group, cardiac arrest was achieved with intermittent infusion of 1000 mL of cold (approx. + 4°C) crystalloid solution (1.000 mL Ringer’s solution, 24 mEq KCl, 9.5 mEq NaHCO3, 1.8 mEq CaCl₂) into the aortic root. An additional 500 mL solution with 18 mEq KCl was administered every 30 min or at resumption of electrical activity.

In the cold crystalloid cardioplegia group, cardiac arrest was achieved by intermittent infusion of 1 L of cold (4°C) crystalloid solution containing K⁺ (24 mmol/L), Na⁺ (110 mmol), Ca²⁺ (1.8 mmol/L), and Cl⁻ (160 mmol/L) into the aortic root. Additional 0.5 L of the solution were administered every 30 minutes or at the resumption of electrical activity.
Layer 4: English language

- Correct grammar and spelling
- Methods & Results – Past Tense
- Short words
- Short sentences
- Short paragraphs
It is known that, when affected with malignant diseases, cell metabolisms will change into different characteristics than the normal ones. According to the preceding studies conducted it was determined that energy production process of cells, having malignant transformation, is done through glycolisis rather than Krebs cycle and electron transfer system.

Malignant alteration changes cell metabolism. Malignant cells produce energy by glycolysis rather than by the Krebs cycle or electron transfer system.
Because, exposure to mobbing must be persistent we defined physicians who often and every days exposed to mobbing behavior as victims of mobbing.

The most of physicians who reported mobbing was type of person A. They has been more susceptible to the effects of stress and mobbing and most often feel anger as one indicator symptom of stress than physicians, who were type of person B.

This negativity might result with loss of affinity towards to the medical doctor profession at a whole.
Also the testaments and estate inheritance given to the lepers by wealthy individuals, found in the notary documents from old times, then written also the other traces of isolated diseased, which for the region of Croatia could be found till the middle of 20th century.

Although we are talking about an isolated institution which is the one of the latest in Europe, built in Metkovic in 1905, well, not very long time ago, preserved records of this leprosarium are exceptionally poor.
Minimum Knowledge

- Terminology
- Abbreviations and Units
- References
  - IMRaD

Introduction

Methods

Results

Discussion
Working with authors

- Working with authors pays off: they publish more, and their publications are more visible.
- Research: historical cohort study in the CMJ

Working with authors – research

- **Study sample:**
  - 47 journal authors who were individually tutored in scientific writing and data presentation by the editors of the CMJ during the 1991–1995 war years
  - 47 colleagues the authors identified as their academic peers at the time of tutoring.

- **Outcome measures:**
  - published articles in journals
  - citations to these articles
  - academic advancement (level of postgraduate education and advancement in the academic rank)
Results:

- Tutored authors published more articles in MEDLINE-indexed journals than their academic peers (median = 4, interquartile range = 1–9 vs. 1[0–5]; p = 0.0265).
- They received more citations to these articles (4 [0–16] vs. 1 [0–6]; p = 0.0275).
- They also made a significantly greater academic advancement, assessed as a score of their academic rank and research degree (2 [0–4] vs. 1 [0–2]; p = 0.0369).
Conclusions:

- Editorial tutoring of journal authors can positively influence their long-term academic advancement.
- Journals may have an important teaching role in local academic communities.
Public health role of journal editors:

“The community presents a natural work setting for an editor, not the laboratories or surgeries. The editor is a community worker and a teacher.”
Theme issues

Aging

Priorities in Health Care
Theme issues

DNA in forensic science

Poverty and human development
Work with young researchers

- workshops on writing in biomedicine, in collaboration with editors from other journals
- continuing medical education courses
Editors as educators:

Since, both in importance and in time, health precedes disease, so we ought to consider first how health may be preserved, and then how one may best cure disease.

Galen, AD 130–200
Mandatory graduate course on principles of research in medicine:

- scientific thinking
- asking research questions
- study design
- finding information in medicine
- structure of scientific article
- critical reading of articles
- responsible conduct of research
Work with future authors

- Medical students:
  - electives in research
  - Student *CMJ*
A naturalist’s life would be a happy one if he had only to observe and never to write.

Sir Charles Darwin
Evidence-based writing

Draws on research in:
- cognitive psychology
- graphic design and typography
- instructional design
- linguistics
- reading research
- rhetoric
Attributes of scientific communication

clarity
simplicity

→

accuracy
understandability
The basics of writing a paper: The importance of structure

• Structure is everything.
• Make sure that readers know where they are, where they are going, and why.
The basics of writing a paper: The importance of structure

Introduction  What did I want to do?
Method       How did I do it?
Results      What did I find?
And          
Discussion   What might it mean?
Evidence-based writing

Oh this is far too important to be readable
Evidence-based writing

**Gunning Fog Index:** a measure of the readability of textual material


**Interpretation:**

- Easy reading range is 6-10.
- The average person reads at the level 9.
- Anything above 17th level is difficult for university students.

<table>
<thead>
<tr>
<th>Type of Material</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children's books</td>
<td>6-10</td>
</tr>
<tr>
<td>Regular newspapers</td>
<td>12-14</td>
</tr>
<tr>
<td>Medical journals</td>
<td>14-16</td>
</tr>
<tr>
<td>Some other journals</td>
<td>16-18</td>
</tr>
<tr>
<td>Insurance policies</td>
<td>18-20</td>
</tr>
</tbody>
</table>
Evidence-based writing

Lexical difficulty index (Donald Hayes): American Heritage Word Frequency Book: ranks 87000 words by their frequency of use in textbooks, novels, magazines, and encyclopedias.

1st: “the”; 10,000th: “whooping”; neuron – 23,595th

Mother speaking to a child
Newspaper article
Nature research article

Evidence-based writing

Lex ratings:
- Nature: +35
- New Scientist: +7
- Time: +2
- US/UK newspapers: 0
- Ranger Rick: -18
- TV (prime show): -36
- Farmer talking to cows: -56

Organizing to show the structure: Make connections with a relevant title

- Readers bring their prior experience and knowledge
- Relevant title helps to make appropriate associations

Washing clothes

The process is actually quite simple. First you arrange things into different groups depending on their makeup. Of course one pile may be sufficient depending on ....
Write for the reader

Come quickly to the verb

• Long sentences are not necessarily less clear than short sentences.
• The length is not the problem, but complex syntax.
• When we read the subject of the sentence, we expect the verb to follow.
• The information between the subject of the sentence and the verb is poorly kept in working memory.
Write for the reader

Write a scenario – subject, active verbs

• Active sentences are often easier to understand than passive ones, especially if they tell about people.
• Each sentence does not have to be in an active form.
Write for the reader

Present numbers so that readers can understand them:

• Not too many decimal places.
• Show percentage for samples over 100; write fraction with the percentage and write only numbers for small samples.
• Be aware that people do not have good cognitive perception about large numbers (>1 000 000).
Write for the reader

Present numbers so that readers can understand them:

• Avoid Roman numerals (except for cranial nerves, clotting factors and world wars).

• Start with known facts or variables to the left of the table, add new numbers to the right.

• If you don’t put 0 in the graph, the reader may think that the effect is greater than it really is.
Scientific jargon:

From the time immemorial, it has been known that the ingestion of an “apple” (i.e., the pomme fruit of any tree of the genus Malus, said fruit being usually round in shape and red, yellow, or greenish in color) on a diurnal basis will with absolute certainty keep a primary member of the health care establishment absent from one’s local environment.
An apple a day keeps doctor away.
Scientific jargon:

A survey of the writer’s personal methodology in general inquiry has been carried out, and the results analyzed to determine components of the interrogatory technique. Six distinct forms of question were isolated, as tabulated below. It is claimed that responses evoked by these were responsible for the total quantity of knowledge acquired by the author (3).

I keep six honest serving men
(They taught me all I know):
Their names are What and Why and When
And How and Where and Who.

Thank you.

www.cmj.hr

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