



Vrije Universiteit Brussel



# Writing an article for international peer-reviewed (bio)medical journals

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# Writing an article

Content of the reader

See our website:

[www.endoflifecare.be/ZrL](http://www.endoflifecare.be/ZrL)

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1. Before the writing
2. The writing
  - a. outline with tables
  - b. writing a first draft
  - c. internal review by co-authors
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  - e. abstract
  - f. choosing the journal (+ alternatives)
  - g. language revision
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# Index

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# How to write articles

## 2. The Writing

### **a) outline with tables**

### **b) writing a first draft**

- Style → uniform requirements....
- IMRaD: Introduction, Methods, Results, Discussion
- Acknowledgements & Appendix
- Length?

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# Introduction

See: *“Uniform Requirements...”*; & *“Twelve steps to developing an effective first draft of your manuscript”* & *“Writing it up: a step-by-step guide to publication for beginning investigators”*

1. What’s your paper about? (be clear in first 3 sentences)
2. Context or background and motivation  
(avoid naming authors)
3. Why? i.e. justification
  - Existing research, state of affairs

i.e.: What is already known (and what is not)
4. Specific aim or research aims and questions, or tested hypotheses
  - *Best in form of simple questions*
  - *Primary and secondary objectives (incl. specifying analyses of subgroups beforehand)*

## Methods

Rule-of-thumb: *only information that was available at the time the plan or protocol for the study was written; all information obtained during the conduct of the study belongs in the Results section.*

- *Selection and description of participants*
  - *design (first sentence) and mode of selection (in detail! With numbers)*
- *Technical information*
  - *Procedure*
  - *Measures*
- *Statistical information*
  - *Enough detail to enable others to reproduce and reach the same results*
  - *Quantify*
  - *Explain statistical terms, and abbreviations/symbols*
  - *Report Software used*
  - *!!! See also: “Reporting Statistical Information in Medical Journals” !!!*



## Results

- logical order of text and tables/figures
- avoid unnecessary repetition (tables vs text)
- specify statistical methods used for the results where appropriate
- avoid non-technical use of technical terms like “random”, “normal,” “significant,” “correlations,” and “sample.”
- avoid interpretation and suggestive terms (eg. surprisingly few)

# Discussion

- See “The case for structuring the discussion of scientific papers” (BMJ, 1999;318:1224–5)

## Proposed structure:

1. Statement of principal findings
2. Strengths and weaknesses of the study
3. Strengths and weaknesses in relation to other studies, discussing particularly any differences in results;

**i.e.: What this study adds**

4. Meaning of the study: possible mechanisms and implications for clinicians or policymakers

**i.e.: What are the implications?**

5. Unanswered questions and future research

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  - e) **abstract**
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  - g) **language revision**
  - h) **submitting your article**
    1. style of the journal
    2. the covering letter
    3. conflicts of interest

# Writing an informative abstract

- See “*Writing informative abstracts for journal articles*”
- Elements:
  - Objectives
  - Methods: design, setting, participants/respondents, most important outcome measure(s), analyses
  - Results:
    - Most important numerical results with precise CI
    - Results with least bias (eg. adjusted rather than raw)
    - Report results that relate to the objectives (even if they’re not statistically significant)
  - Conclusion
    - Avoid clichés such as “more research is needed.”
    - If there are implications, name them
- Short (+/- 250 words)



Vrije Universiteit Brussel

RESEARCH GROUP



Thank you  
Questions?

Reader: see our website  
[www.endoflifecare.be](http://www.endoflifecare.be)

Prof dr Luc Deliens  
dr Joachim Cohen

|                                   |  |
|-----------------------------------|--|
| Publicatieprotocol artikel 1      | <p>Versienummer:<br/>Datum: april 2006 Indiner: Lieve Van den Block</p>  |
| Data used                         | HAPP REGISTRATION STUDY YEAR 1   |
| Working title                     | END-OF-LIFE CARE TRAJECTORY DURING THE LAST THREE MONTHS OF LIFE: A POPULATION-BASED STUDY   |
| Research aim / research questions | <p><u>DUO PUBLICATION PART 1</u><br/><u>Onset</u><br/>Introduction to "need for epidemiological data, cross-setting, cross-populations":<br/>A challenge in end-of-life care research today is to find ways to gather systematic information at population level concerning the circumstances in which people die. Via mortality statistics we learn how many patients die, where and from what causes. Several large scale epidemiologic studies have been performed to study the number of deaths preceded by an end-of-life decision with possible life-shortening effect (e.g. euthanasia, non-treatment decisions, terminal sedation etc). However, population-based studies concerning the places of care and transfers between care settings and the (quality of) care delivered at the end of life, are scarce. Internationally, literature is limited to specific patient populations such as cancer patients, or to the experience of specific care settings such as hospices or intensive care units. However, gathering reliable epidemiological data is essential for the planning, organisation and implementation of health care services for terminally ill patients. Several authors have argued for the development of methods to assess and monitor the end of life.</p> <p>→ In this study we evaluate the potential of a sentinel network of general practitioners (GPs) in Belgium to identify a sample of deaths representative at a population level i.e. across settings and diseases. ...</p> <p>Introduction to "literature on care trajectories is extremely limited":<br/>Research concerning place of end-of-life care has focused primarily on place of death and its determinants [e.g.] while little attention has been paid to the places of care and possible transfers from one care setting to another during the last phase of life for the dying population as a whole. Studies that do investigate care transitions are focused on specific patient groups such as cancer or the elderly, or on single care transfers such as hospital admission of nursing home residents, readmissions to a hospital, transfers out of the emergency or other hospital departments, often without specific focus on the end of patients' lives. Tracking of "moving" patients throughout the health care system is difficult in our fragmented system in which separate loci of care often function in isolation of one another. One retrospective mortality follow-back survey of family members on the quality of care of the dying population in the US reported that 47% of the patients had one or more transitions in the last month of life. Transitions of patients at the end of their lives can be extremely stressful and posing specific challenges to the continuity of care. There is increasing evidence that both care quality and patient safety are jeopardized for patients undergoing transitions across care settings, because of a lack of coordination and communication between settings. In 2001, the Institute of Medicine has called for a greater integration of health care delivery across different settings in order to improve the quality of care transitions. However, before quality improvement efforts can be made in this area, it is important to understand the patterns of care transfers better, to characterize the frequency and timing of transitions and the patients at greater risk for a high number of transfers.</p> <p>Add References: Singer, Institute of Medicine (IOM), Morrison, Sahlgrensk, Klinkenberg, Coleman, Teng</p> <p>In this study we aim at describing:</p> <ol style="list-style-type: none"> <li>the patterns and prevalence of transfers between care settings during the last three months of patients' lives <ul style="list-style-type: none"> <li>Where do patients spend their last three months of life?</li> <li>How many transfers take place at the end of life?</li> <li>Where to are patients transferred?</li> <li>When do these transfers take place?</li> </ul> </li> <li>the factors related to being transferred <ul style="list-style-type: none"> <li>Which patients are transferred, where to and when?</li> <li>Related care characteristics (article 2?)</li> </ul> </li> </ol> <p>ZIE VRAGEN FIGUUR 1 betref incidentieschattingen, analytisch methode</p> |
| Methodology                       | The Belgian sentinel stations, a representative sample of general practitioners in Belgium, register weekly different health problems. They were instructed to report all deaths of which they personally signed the death certificates and all deaths of patients in their own practice (or group practice) of which they did not sign the death certificate but of which deaths they were informed later on. The GPs filled out an extensive questionnaire concerning the place of care, care trajectory and place of death of patients who were a part of their practice and who died non-suddenly.   |
| Proposed authors                  | <p>First author: Lieve Van den Block</p> <p>Other authors partly to be determined: Reginald Deschamps, Nathalie Rossu, Katrien Driessens, Luc Deliens -</p>  |

|                     |   |
|---------------------|---|
|                     | andere PG-leden: Johan Bilsen, Sabien Bauwens -?  |
| Journal             | NEJM, JAMA, Lancet, Annals of Internal Medicine, Archives of Internal Medicine<br>To be explored further  |
| Planning/timing     | April → Juni 2006   |
| Data and variables? | <p>N= all sudden and non-sudden deaths</p> <p>a Table 1: Sample characteristics and representativity of the sample<br/>HAPP response rate (practices versus number of sudden and non-sudden deaths) (incl. regional spread (biases)) AND HAPP sample versus national statistics (sex, age at death, main cause of death ICD-10, place of death...)</p> <p>b Table 2: Transfers<br/>Places: place of death, number of transfers, place of residence before and place of residence 3 months before death<br/>Timing of transfers linked to places?<br/>Clusters?</p> <p>c Table 3: Correlates of transfers<br/>Correlates of being transferred (once or more) or not (or transfer in last week/two weeks, or transfer out of hospital...)<br/>To be explored in analyses → correlates of clusters?<br/>Patient characteristics: age, sex, cause of death, preferences of patient...<br/>Care characteristics: specialist palliative care, number of informal and formal caregivers, quality of care...<br/>Bivariate and multivariate statistics (LR)</p> |

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### Differences in end-of-life decision-making among patients dying at home, in a hospital or in a care home,

#### Authors:

Because Joachim Cohen (PhD student Belgium) made this outline and will write the article in the context of his PhD thesis, together with Johan Bilgen, we propose the following authorship: Joachim first author, Johan second author, + one author of each participating country.

#### Aimed journal:

Not yet decided

#### Note:

This is a preliminary outline of the article, and some details might change in a future version. However, the outline should give a good idea of the concept of this article and which variables will be used in what manner. Till now we could only make analyses for Belgium, Denmark, Sweden and Switzerland, because sufficient differentiation to place of death out of the present database was not possible for the Netherlands and Italy. If there is any possibility to get or create reliable and more detailed data specifying place of death in these two countries, we will include them of course in the study.

#### **Background**

Various research: setting of end-of-life care affects philosophy of care, types and intensity of services, interpersonal interactions, caregivers skills, but also the patient outcomes <sup>1,2,4-6</sup>. E.g. Mitchell, Tenn et al.: less favourable dying experience in institutional settings than at home<sup>3</sup>. Dying in hospitals: larger distance between patient and caregivers and more frequently prolonged, painful and mechanically supported <sup>6</sup>.

In this line of thinking (setting involves a particular 'care-culture') → postulation: **place of dying influences the end-of-life decision-making.** However little scientific data on this subject.

#### **Aim**

To take a first step to investigating the existence of differences in end-of-life decisions and in the procedure of these decisions according to the place of dying (home, hospital or care home). Differences of this kind could identify focal points for further end-of-life care training and for directives of carefulness for different health professionals.

#### Research questions:

- **Are there differences in end-of-life decision-making in patients dying at home, in a hospital or in a care home?**
  - Do similar patients (same cause of death and same age) receive other end-of-life decisions, depending on where they die?

- Are there differences in the ethical circumstances surrounding the eld's
- **Suggest some explanations for possible differences**
- **Implications for health care workers and for future research**

#### **Method:**

Analysis of data Euxveld I <sup>7</sup>.

Only countries with sufficient information on place of death are retained.

#### **Results**

see tables 1-5

#### **Discussion points**

- Similar patients seem to receive other ELDs depending on where they die  
Reasons?
- Differences in decision-making process. Reasons?
  - role of GP, specialist
  - role of institutions
- Implications? Policy suggestions?



# Uniform requirements

Zie: <http://www.icmje.org/>

**Of** *“The Uniform Requirements for Manuscripts Submitted to Biomedical Journals Recommended by the International Committee of Medical Journal Editors\*”, CHEST / 129 / 4 / APRIL, 2006*

- Rules for ‘redundant and duplicate publication’
- Format:
  - double spaced
  - IMRaD (+ abstract + acknowledgments + references)
    - Title page
    - Abstract en Keywords
    - Text (IMRaD)
    - References
- Maximum amount of comprehensible information and viable scientific contribution in the minimum space
- Ethics, patient rights, privacy

## References

See: *“The Uniform Requirements ...”*

- *report original research (no secondary)*
- *no abstracts or unpublished papers (unless ‘in press’)*

*How?*

- *correct*
- *ANSI style of National Library of Medicine*
- *citation in order of appearance in text*
- *abbreviation of titles according to Index Medicus.*

**DIFFERS BY JOURNAL**

**TIP: Use Reference Manager**

## Tables

**See: “*The Uniform Requirements ...*”**

- Data in tables or in text
- Clarifications in footnotes: \*,†,‡,§,||,¶,\*\*,††,‡‡
- Refer to each table in the text
- Permissions and acknowledgements
- Clear titles for tables:
  - Who, what, where, when (possibly how?)

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## Length

- Most journals: +/- 3000 words
- Good to find focus relatively soon (i.e. slim down ideas).

In other words: what is most important contribution, what is secondary, what can best be mentioned/dealt with in another paper

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  - e) abstract**
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  - g) language revision**
  - h) submitting your article**
    - 1. style of the journal
    - 2. the covering letter
    - 3. conflicts of interest

# Writing = deleting

- Look at prescribed length
- What is necessary to tell your story clearly?
- Focus on not more than 3 objectives
- One idea per paragraph

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"OKAY, NOW YOU HIT THE 'DELETE' BUTTON."



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## How to choose a journal

See text: *“Where should you publish your manuscript”*

- order by impact factor within domain
- number of publications on theme
- who reads journal / chance for citations
- what do you consider good journals
- speed and frequency of publishing

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# Submitting your article

- Consult author guidelines of journal, eg:  
[http://resources.bmj.com/bmj/authors?resource\\_name=Authors](http://resources.bmj.com/bmj/authors?resource_name=Authors)
- Checklist: surviving peer-review  
(e.g.. *“How to survive peer review”*)
- Covering letter:
- Reporting conflicts of interest
  - See uniform requirements ... & *“Reporting Conflicts of Interest, Financial Aspects of Research, and Role of Sponsors in Funded Studies”*

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3. The revision (*response to reviewers*)

## Revising an article

- Try to split up all comments in separate points
- Answer to every point (even if it's positive)
- Try to agree now and then with the reviewer
- Search for compromises
- Mention page and line numbers clearly

**BMC Public Health**

**Manuscript number : 6882150711339996**

**Manuscript title: Using death certificate data to study place of death in 9 European countries: opportunities and weaknesses**

| <b>Reviewer comments</b>   | <b>RESPONSE</b><br>[with indication of the changes made in the manuscript; all references to <b>pages and lines</b> are related to the resubmitted revised manuscript (" <b>track changes</b> " version)]   |
|--|---|
| <b>REVIEWER 1:</b>   |   |
| 1. This study examined the feasibility and potential of using information of place of death reported on the death certificates for end of life related studies in nine European countries. It is essential to assess the comparability of information based on death certificate across countries before real comparisons of the differences in choice of place of death across countries. Some suggestions were listed below for the authors. | We appreciate that the reviewer agrees to the importance of our research topic  |
| 2. The authors cited too many references. Please select just one or two important reviews with regard to place of death to support the arguments in introduction. The authors should also cite some death certificate related comparability studies across countries.  | <p>We have followed this suggestion and deleted a number of references cited in the introduction:</p> <p>On p. 4, line 6 we deleted 9 references (with regard to place of death as a parameter of quality of end-of-life)</p> <p>On p. 4, line 7 we deleted 4 references (with regard to preferences for place of death) and kept the important review by Higginson and Sen Gupta 2000)</p> <p>As requested by the reviewer we also</p> |



# How to write articles

## 1. From a research question to data

- hypothesis
- literature review
- research question
- designing research protocol
- collecting data

## 2. From data to a research question

- looking in the data
- research question
- analysis