

Writing abstracts

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An abstract is a *short summary* of your research work.

A well-written abstract serves *multiple purposes* in scientific research.

In *publication* of work:

- By editors to direct your manuscript to the appropriate reviewers; *and*
 - By readers when deciding to read your paper;

In *conferences*, the abstract is used:

- By organisers when deciding on talk and poster allocations; and
- By attendees when deciding which sessions to attend and which posters to visit.

By *granting bodies* to:

- Direct your grant to reviewers!

Abstracts are really important

Tip 1 – read the guidelines



The Institute

build better institutions | translation | health research

30th TQEH RESEARCH EXPO 2021

Thursday 14 & Friday 15 October

ABSTRACT GUIDELINES

Tip 1A – get your
supervisors to read the
guidelines

Abstracts for TQEH Research Expo – the guidelines

A structured abstract

- please structure your text against the sub-headings *Introduction; Hypothesis/ Aims; Methods; Results; Conclusions*.
- Structured abstracts have several advantages. These formats were developed to assist health professionals in selecting clinically relevant and methodologically valid journal articles. The format guides authors in summarizing the content of their manuscripts precisely, facilitates peer-review, and enhances computerized literature searching.
- For Expo, a structured abstract will help judges in their assessment of your abstracts.

2000 characters + spaces

- about 250 words – use shorter words and the word count increases!

In continuous prose and using a standard scientific writing style

With strong definitional work

- Abbreviations should be kept to a minimum, remembering that the readers may not be experts in your field.
- Special or unusual abbreviations should be defined in brackets after the first use of the term.

What is a standard scientific writing style?

Publishing Connect Elements of Style for Writing Scientific Journal Articles



Stephen M. Griffies NOAA/Geophysical Fluid Dynamics Laboratory, Princeton, NJ, USA
and Associate Editor, *Ocean Modelling*

William A. Perrie Fisheries and Oceans Canada, Bedford Institute of Oceanography,
Dartmouth, NS, Canada and Editor-in-Chief, *Ocean Modelling*

Gaëlle Hull Elsevier, Oxford, UK

[December 2013]

Your language should be

Prose

(Continuous text arranged in sentences and paragraphs,
grammatically correct and non-metrical)

→ Accurate → Concise → Clear → Objective

Everything Should Be Made as Simple as Possible, But Not Simpler.

Attributed to Albert Einstein.

The aim of the game is to make your abstract easy to read

You need to consider **TENSE**

- Use **PRESENT TENSE** for known facts and hypotheses
 - The average life span of a honeybee **is** 6 weeks

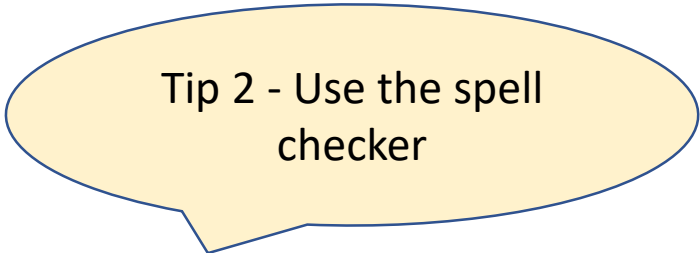
And

- **PAST TENSE** for describing experiments that have been conducted and the results of these experiments
 - The average life span of honeybees in our contained environment **was** 8 weeks.

Use the **ACTIVE VOICE**

It must arranged in **SENTENCES**

- Write direct and short sentences.
- Include only one piece of information / sentence
- Keep related words together
- Put statements in a positive form
- Use **plain language**



Tip 2 - Use the spell
checker

Tip 3 – Read your work carefully

PubMed.gov
US National Library of Medicine
National Institutes of Health

PubMed 24792780[uid]

RSS Save search Advanced

Display Settings: ☒ Abstract Send to: ☒

Clin Toxicol (Phila). 2014 Jun;52(5):525-30. doi: 10.3109/15563650.2014.913175. Epub 2014 May 5.

Evaluation of dexmedetomidine therapy for sedation in patients with toxicological events at an academic medical center.

Mohorn PL¹, Vakkalanka JP, Rushton W, Hardison L, Woloszyn A, Holstege C, Corbett SM.

Author information

Abstract

INTRODUCTION: Although clinical use of dexmedetomidine (DEX), an alpha2-adrenergic receptor agonist, has increased, its role in patients admitted to intensive care units secondary to toxicological sequelae has not been well established.

OBJECTIVES: The primary objective of this study was to describe clinical and adverse effects observed in poisoned patients receiving DEX for sedation.

METHODS: This was an observational case series with retrospective chart review of poisoned patients who received DEX for sedation at an academic medical center. The primary endpoint was incidence of adverse effects of DEX therapy including bradycardia, hypotension, seizures, and arrhythmias. For comparison, vital signs were collected hourly for the 5 h preceding the DEX therapy and every hour during DEX therapy until the therapy ended. Additional endpoints included therapy duration; time within target Richmond Agitation Sedation Score (RASS); and concomitant sedation, analgesia, and vasopressor requirements.

RESULTS: Twenty-two patients were included. Median initial and median DEX infusion rates were similar to the commonly used rates for sedation. Median heart rate was lower during the therapy (82 vs. 93 beats/minute, $p < 0.05$). Median systolic blood pressure before and during therapy was similar (111 vs. 109 mmHg, $p = 0.745$). Five patients experienced an adverse effect per study definitions during therapy. No additional adverse effects were noted. Median time within target RASS and duration of therapy was 6.5 and 44.5 h, respectively. Seventeen patients (77%) had concomitant use of other sedation and/or analgesia with four (23%) of these patients requiring additional agents after DEX initiation. Seven patients (32%) had concomitant vasopressor support with four (57%) of these patients requiring vasopressor support after DEX initiation.

CONCLUSION: Common adverse effects of DEX were noted in this study. The requirement for vasopressor support during therapy warrants further investigation into the safety of DEX in poisoned patients. Larger, comparative studies need to be performed before the use of DEX can be routinely recommended in poisoned patients.

PMID: 24792780 [PubMed - indexed for MEDLINE]

Tip 3A – Get your supervisors to read your work carefully

Context, 1-2 sentences

Hypothesis, 1 sentence

How you did your research, 3-4 sentences.

What you found, 3-4 sentences.

What your results mean, 1-2 sentences

Your abstract must be fit for purpose

Tip 4 - Don't leave
your abstract to the
last minute

FINAL words on the scientific abstract

Your scientific abstract is **SOLELY** for the purpose of presenting your work to other scientists.

A scientific abstract is NOT a Lay Abstract

The Lay Abstract that you submit at TQEH Research Expo is

Judged

and

You can win \$350

This is a non-competitive category - WHY

What is a Lay Abstract?

A short paragraph that describes your research to people who are not scientists

It requires a reader-centred approach

**Who is my reader?
Will they understand this?**

What is the purpose of a lay abstract?

Requested by granting bodies for:

- public release and for websites
- communication with non-scientific decision-makers (like the Minister?)

To talk to scientists and researchers in different areas – like the humanities

To communicate with philanthropists and potential private funders (like a charity or a company)

To tell the public what you do – for media, community groups, patients, consumer engagement.

(the skills required for a lay abstract are the same skills you need to use for HREC applications, patient consent forms, clinical trial protocols, AEC applications)

How does Cancer Council WA use plain language summaries?

- To decide what research to fund
- To let donors and supporters know how their money is being used
- For new fundraising and marketing activities
- To show the impact of what they are funding

Compared with a scientific abstract:

the audience is different
the content is different
the structure is different

It is not enough to reconfigure a scientific abstract into plain language

Scientific Abstract

*Introduction;
Hypothesis/ Aims;
Methods;
Results;
Conclusions.*

Lay Abstract

*Who you are/ what you do
What you have found
Why it is important for the reader
(And - If you have room, and last,
how you made this finding)*

Table 1 Writing checklist for lay abstracts or summaries

THE TITLE

-
- Check instructions for required elements, character limits, and other guidelines
 - Define the purpose of the summary to properly frame your message
 - Define your audience
 - Write down your assumptions (grade level, vocabulary, experience, interests)
 - Practice explaining your research to representatives of your audience
 - Ask audience representatives to explain it back to you
 - Write a headline and brief synopsis; expand on your brief synopsis if you have space
 - Avoid long and complicated words
 - Use shorter sentences (avoid choppy writing)
 - Use active voice
 - Organize to make your story clear
 - Read aloud and make adjustments
 - Check readability and reading level statistics
 - Adjust
 - Recheck
 - Review and feedback
 - From intended audience; revise
 - From peer scientists; revise
-

READ THE GUIDELINES!

THE PLAIN LANGUAGE MOVEMENT

KEEP TESTING

Testing new treatments for hypertrophic cardiomyopathy

Defining therapeutic targets in hypertrophic cardiomyopathy (renewal)


researcher

Hugh Watkins (lead researcher)

Oxford, University of

Start date: 01 March 2013 (Duration 5 years)

Application of a lay abstract

Professor Hugh Watkins and his team at the University of Oxford have had a key  understanding how certain gene faults can lead to hypertrophic cardiomyopathy (HCM). HCM is a disease of the heart muscle where the muscle wall becomes thickened and stiff. It is caused by an alteration in one or more genes and can be passed on through families. Each child of a person with HCM has a 50% chance of inheriting a genetic fault that means they will develop the condition.

The BHF has awarded the Oxford researchers a grant to study three aspects of the disease process in mice and test new treatment approaches for each. Firstly, they will test a drug called DCA to see if it can correct abnormal energy supply. Secondly, they will test a class of molecule derived from green tea to see if it can correct the way the heart muscle cells use calcium. Thirdly, they will try to remove or correct the underlying faulty gene alteration itself.

This work may reveal completely new types of treatment for HCM or other types of cardiac hypertrophy, either on their own or in combination with existing drugs. If they are shown to be effective in animals, two of the approaches they are exploring could quickly be tested in people. Ultimately they may be used to prevent the disease developing in family members who carry alterations in genes that cause HCM.

Project details

Note, the structure is who we are/what we do, what we are going to find, and why it will be important

Grant amount £1,562,307

Grant type Programme Grant

Start Date 01 March 2013

Duration 5 years

Plain language

Buffy the Vampire Slayer

- **Rupert Giles:** If Drusilla is alive, then i-i-it could be a fairly cataclysmic state of affairs.
- **Xander:** Again, so many words. Couldn't you just say we'd be in trouble?
- **Rupert Giles:** Go to class, Xander.
- **Xander:** Gone. Notice the economy of phrasing. "Gone." Simple. Direct.

Plain language in law

Public Law 111–274
111th Congress

An Act

To enhance citizen access to Government information and services by establishing that Government documents issued to the public must be written clearly, and for other purposes.

Oct. 13, 2010
[H.R. 946]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Plain Writing Act
of 2010.
5 USC 301 note.

SECTION 1. SHORT TITLE.

This Act may be cited as the “Plain Writing Act of 2010”.

SEC. 2. PURPOSE.

5 USC 301 note.

The purpose of this Act is to improve the effectiveness and accountability of Federal agencies to the public by promoting clear Government communication that the public can understand and use.

(3) **PLAIN WRITING.**—The term “plain writing” means writing that is clear, concise, well-organized, and follows other best practices appropriate to the subject or field and intended audience.

Why is plain writing needed?

National Marine Fisheries Service, National Oceanic and Atmosphere Administration, Quick-Reference Card

Before

After notification of NMFS, this final rule requires all CA/OR DGN vessel operators to have attended one Skipper Education Workshop after all workshops have been convened by NMFS in September 1997. CA/OR DGN vessel operators are required to attend Skipper Education Workshops at annual intervals thereafter, unless that requirement is waived by NMFS. NMFS will provide sufficient advance notice to vessel operators by mail prior to convening workshops.

After

After notification from NMFS, vessel operators must attend a skipper education workshop before commencing fishing each fishing season.

The key rules to plain language

USE Everyday words

FREE your verbs

USE pronouns

USE active voice

(for scientists – **AVOID** word confusion and jargon)

Thanks to the FAA plain language on line course

Everyday words

- Due to the fact =
- In the event that =
- Has the capacity to =
- Utilize =
- Promulgate =

From Merriam:

promote or make widely known (an idea or cause). - "these objectives have to be promulgated within the organization"

Superfluous

in order to

subsequent to

prior to

despite the fact that

because of the fact that

in light of

owing to the fact that

Simpler

to

after

before

although

because, since

because, since

because, since

Freeing your verbs

- Give a description of =
- Provide assistance with =
- Do the construction of =
- We made an application=
- We made a determination=
- We will make a distribution=

Active voice

- The boy was bitten by the dog. =
- A safety video will be watched by the staff every year. =
- The attendees will be entertained by us. =

WE WILL ROCK YOU

Research communication

- Avoid word confusions.
- What do I mean by 'cycle'. (Metabolic meaning)
- What most people understand 'cycle' to mean

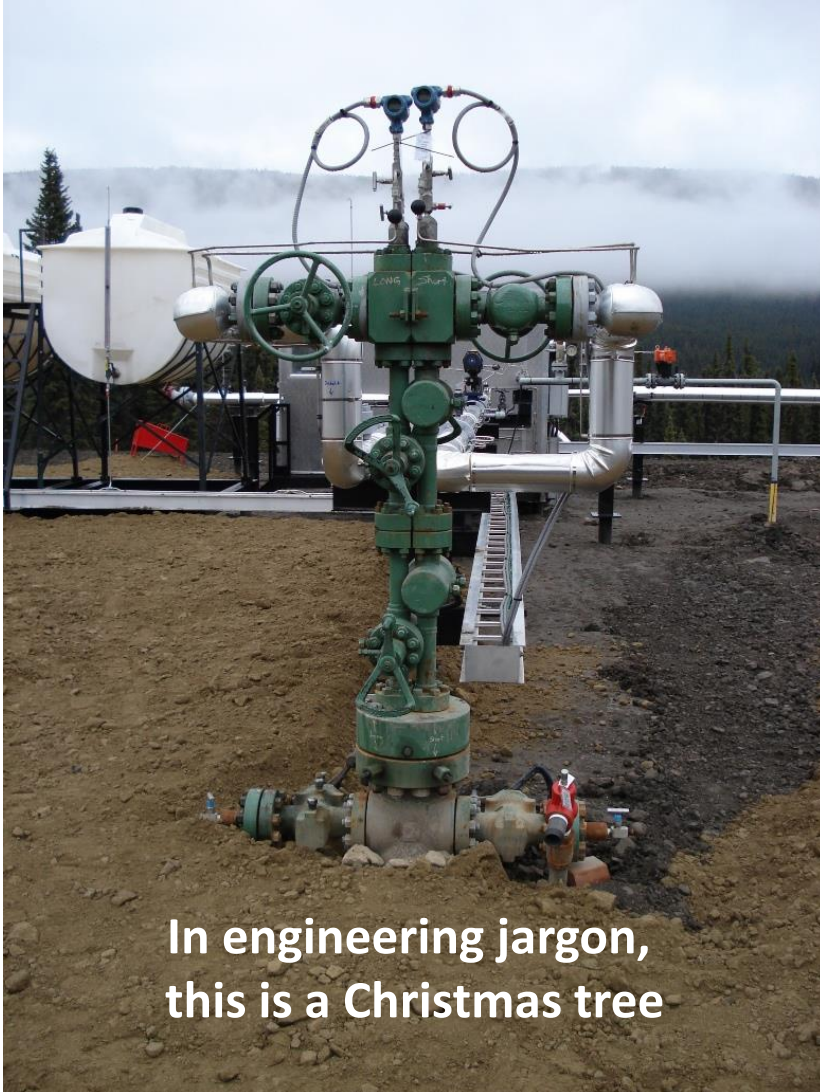


- What do I mean by 'mean'.
- the average of a set of numerical values, as calculated by adding them together and dividing by the number of terms in the set.
- What do most people understand mean to mean



My favourite example of word confusion comes from mining and engineering

A CEO wanted a Christmas tree on the Annual Report



In engineering jargon,
this is a Christmas tree



This is what the report designers used

- What do I mean by excitotoxicity?

Correction – excitocytotoxicity



If you must use these words – DEFINE THEM