The Art Of Writing An Abstract And Getting It Accepted

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Conflict of Interest

- Nothing to disclose

Learning Assessment – Q1

- Performing a medication use evaluation (MUE) can not be considered as a pharmacy practice research piece.
  - True/false?

Learning Assessment – Q2

- The terms “efficacy” and “effectiveness” do have the same meaning, “efficacy” is British and “effectiveness” is American English.
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Learning Assessment – Q3

- In the conclusion, the abstract's author should integrate his/her personal opinion in order to put the presented results into a broader context and to add a personal touch to the abstract.
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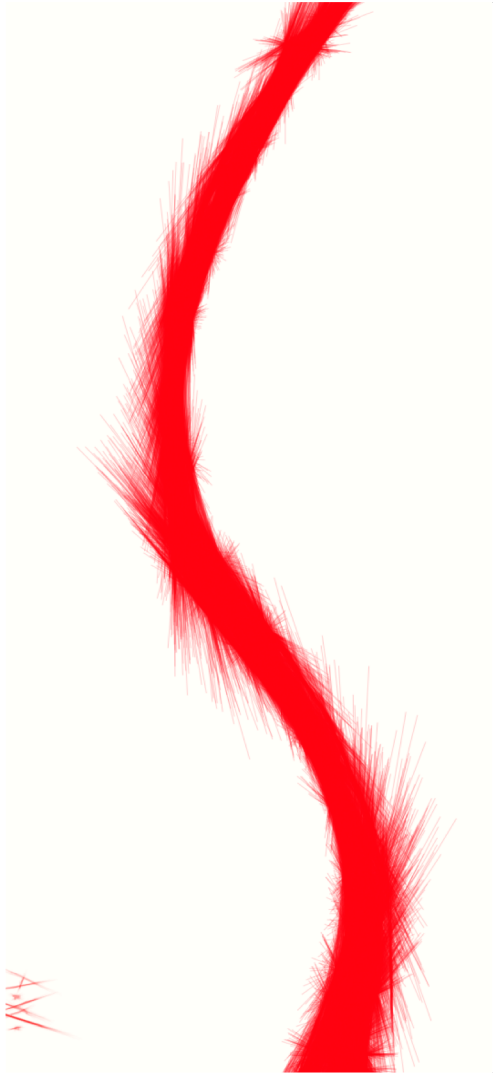
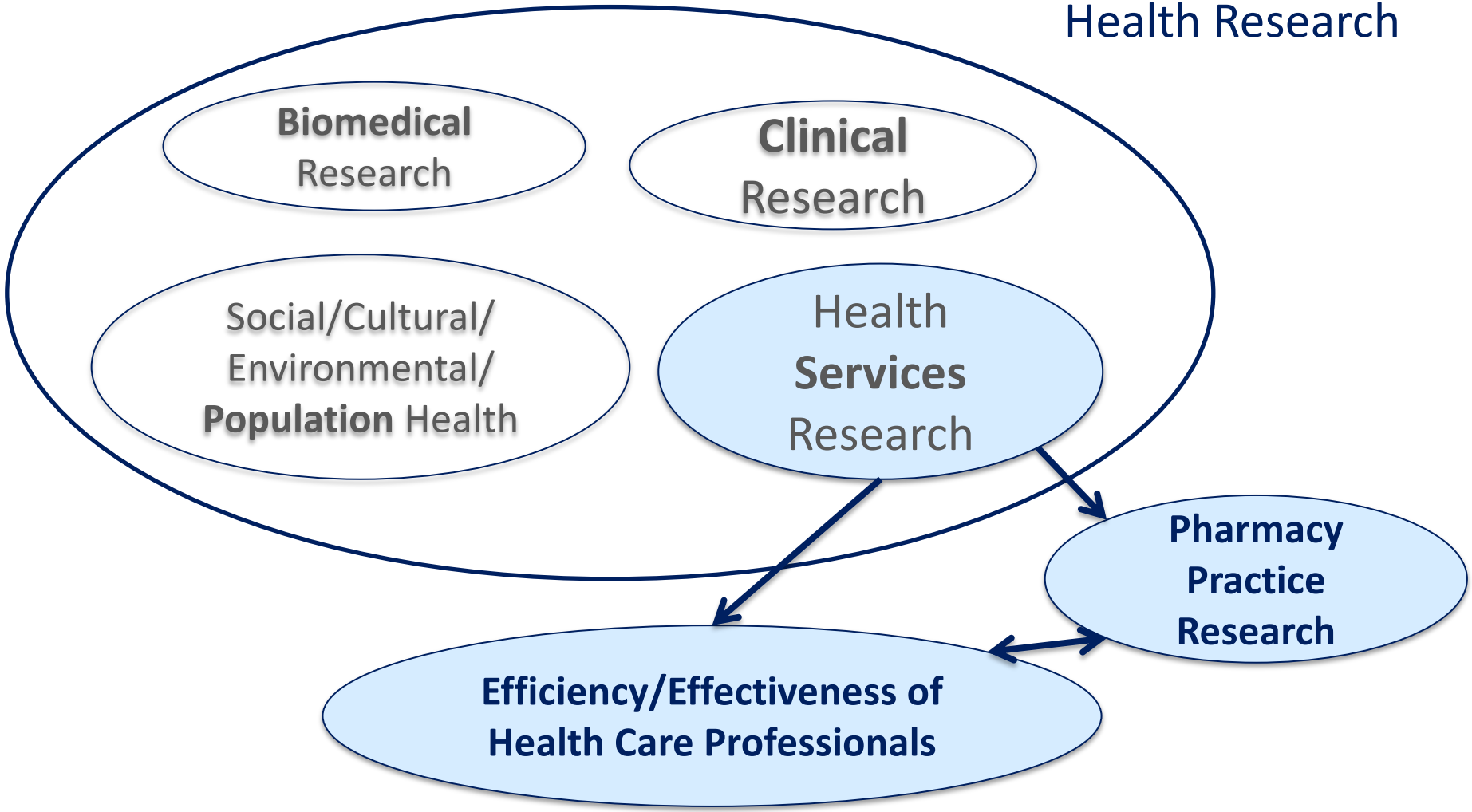


- Hospital pharmacy practice **research**
- **Background** knowledge and **terminology**
- General principles
- Good and ‚*could-be-improved*‘ **example**

Health Research



Smith FJ. Conducting your pharmacy practice research Project, PP Press 2010, 2nd ed

Hospital Pharmacy Practice Research

For whom?

Patients

Our own profession

Other practitioners

Healthcare Organisations

Government

Collaborative approach!

Why?

Evidence

Innovation

Critical appraisal

Public expectations

Health policy questions

Service development

Examples: Evaluation of new services/technologies, audits of professional practice, analysis of prescribing patterns, pharmacoeconomics, assessment of medicines-related needs…

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Data sources

Individuals

- Pharmacists, practitioners, other HCP
- Pharmacy clients, hospital patients, students, …

Documentary sources

- Research databases
- Prescribing data
- Dispensing data, patient medication records
- Medical record

Other

- Documentation maintained by service providers, practitioners, government, professional bodies
- Literature

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Recipe of **good study**

- Clear study question
  - Aims and objectives
  - „Small is beautiful“
- Protocol
- New **message**!
  - You should know the literature.
- Clear and valid **methods**

Quantitative Studies

Goal: Quantification of phenomena

- Descriptive OR experimental

Examples

- Frequency of events
- Proportions, associations
- MUE
- RCT
- Before/after studies
- …

Qualitative Studies

Goal: Explore how? Why?

- Descriptive/exploratory/ hypothesis generating
- Exploration of processes, patterns of people‘s thoughts, behaviour,…
- Explanation of priorities, concerns, meanings,…

Examples of techniques

- Focus group
- Survey (+/-)

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Audit

- Form of **service evaluation**
  - Information generated to document and improve the process and outcomes
  - Rather practical knowledge
  - Local context
  - Current activity (rather than questioning and testing new approach)
- Systematic approach!

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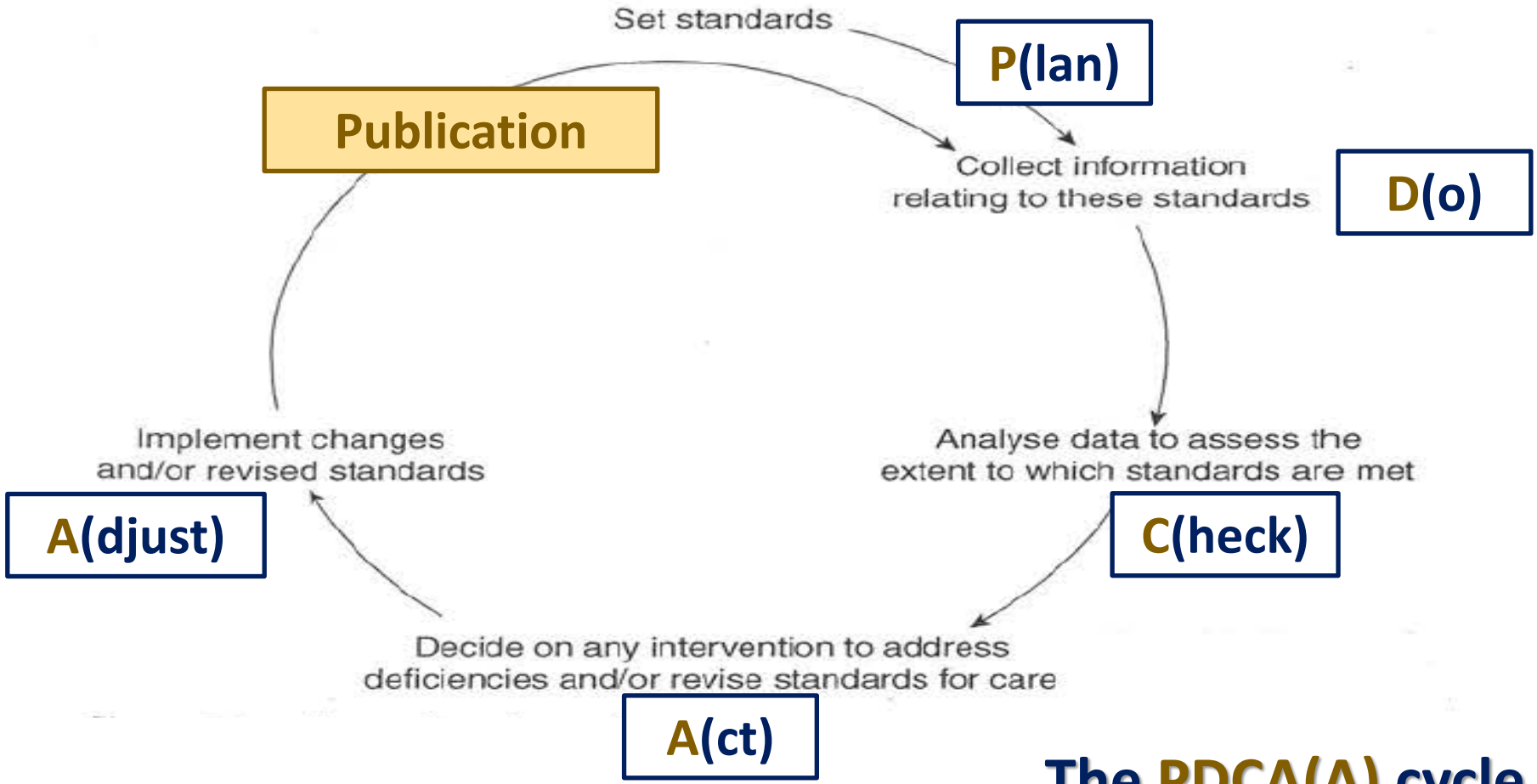
The audit cycle



The PDCA(A) cycle

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Medicine Use Evaluation

- Applicable to single medication, therapeutic class, disease state, condition, process-step, or outcome

- Goal: To prevent, identify and/or resolve actual and potential medication-related problems AND ensure optimal patient outcomes

- Where to look at? (Planning phase)
  - *High risk* drugs or use in *high risk* patients (safety!)
  - Frequently prescribed drugs
  - Economic implication
  - Questionable benefit/safety

ASHP Guidelines on Medication-Use Evaluation Am J Health-Syst Pharm. 1996;53:1953-5

Validity

Do the instruments actually measure what they are designed to measure?

Reliability

Are measurements or procedures reproducible?

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Efficacy	Effectiveness	Efficiency
Power to produce a desired result or effect (ideal circumstances)	Power to produce a desired result or effect (real life circumstances)	Effective operation as measured by a comparison of production with cost (as in energy, time, and money) Ability to do or produce something without wasting materials, time, or energy

Merriam Webster Online Dictionary

The **abstract**:

A **summary of points** (as of a writing) usually presented in **skeletal form**; *also*: something that summarizes or concentrates the **essentials** of a larger thing or several things

Merriam Webster Online Dictionary

The storyline of an abstract

Once upon a time researchers believed tha

But then I thought that maybe …

So what I did was…

And I‘ve discovered that …

Which changed the way that we …

Background

Objectives

Methods

Results

Conclusion

- **Concise** piece of **text**
- Requested **structure**
- Easy-to-read
- **Only major issues**
- Target **audience**
- Target **language**

Your abstract = **your signature!**

Basic **structure** and terminology

- **Title**: accurate, clear, concise, including as much about the context and the study aims as possible

- **Authors**: only those who significantly contributed

Look at **the good** and **the ‚could-be-improved‘** example!

Background:

- Current knowledge, state-of-the art, actual problem or question
  - Concise
- Why did you start? What has triggered the research?
- Make the first sentence as interesting as possible!

Closing the gap and improving patient safety with better drug information

Background I

The problem of poor information transfer exists at the interface between clinical and ambulatory treatment. Patients are not sufficiently informed about their current and future drug treatment.

- Clearly defined problem
- Title fits.

Development and implementation of a pharmacotherapeutic protocol in patients submitted to caesarean

Background II

The medication errors are the most frecuent cause of adverse events.To develop pharmacotherapeutic protocols are a usefull tool in improving the quality and safety patient care.

- Very general statement
- Limited connection to title
- What is the problem?
- English/Grammar

Purpose:

- Study aim – What did you investigate?
- Goal? Objectives?

Closing the gap and improving patient safety with better drug information	Development and implementation of a pharmacotherapeutic protocol in patients submitted to caesarean
Purpose I	Purpose II
To compare knowledge of medicines to be managed at discharge with or without the involvement of a clinical pharmacist.	To develop a pharmacotherapeutic protocol of use of carbetocin in patients submitted to caesarean in order to achive an efficient treatement and to improve the quality and safety patient care.To assess the results once implanted the protocol.
• Clearly defined intervention and outcome	• Too general • Efficiency – costs? • English/grammar

Materials and methods:

- Concise description of the
  - design,
  - context/setting,
  - patients,
  - intervention(s),
  - outcomes,
  - variables, and
  - statistical methods
- Not too much, not too little information

Closing the gap and improving patient safety with better drug information

Materials and methods I

The amount and depth of information given to the patients about drug treatment started during hospital with and without the intervention of clinical pharmacists were investigated consecutively in a controlled, comparative study at 5 different hospitals (11 wards).
The satisfaction of patients and their general practitioners (GP) with the different style of discharge management was investigated by means of questionnaires.

Development and implementation of a pharmacotherapeutic protocol in patients submitted to caesarean

Materials and methods II

Prospective study of use of carbetocin in patients submitted to caesarean during a period of seven months. An interdisciplinary team was created and a chronogram of work was described. A bibliographic search was performed using Medline. The updated scientific evidence was evaluated. Other information sources used:product information, clinical guidelines. The protocol was established. The adequacy of the carbetocin use to the established conditions at protocol were analyzed.

Results:

- What did you find?
- Most important results first
- Main results,
  - not just in subjective terms,
  - but underpinned with real data
- Tables and figures only if necessary and beneficial

Closing the gap and improving patient safety with better drug information

Results I

In phase 1 (no involvement of a clinical pharmacist, 847 patients) approximately 50% of patients were prescribed new drugs which were recommended to be continued after discharge. 12% of these patients were not instructed in hospital or in outpatient settings about their newly-prescribed medicines. Even if they were informed about their medicines, 22% of patients were not, or only partially, satisfied.
In phase 2 (617 patients), all patients were trained in using their newly-prescribed medicines, so the information ratio rose to
100%. Patient satisfaction regarding the quality of education increased to 89%. Each patient got an illustrated patient-specific medicines plan, which was reported to be helpful by more than 80% of patients. GPs confirmed that their patients were better informed (36% improvement) thus reducing their effort (22% less GP effort required).

- Clear presentation of results (Phase I vs. II)

Development and implementation of a pharmacotherapeutic protocol in patients submitted to caesarean

Results II

Inclusion criteria, conditions of prescription and dispensing process were established.
All carbetocin treatments were analyzed on the basis on information collected through the request form and the patient clinical records. 966 childbirths occured. 164(17%) were performed by caesarean. In 9(5,5%) carbetocin was used. In all cases, request form was perfectly filled out, checking previously if every case met the protocol. All carbetocin treatments were accord with protocol.

- Methods in the results section
- No data to support quality and safety statement
- No efficiency data

Conclusions:

- What does it mean?
- Why do you think your findings are important?
- Implications?
- Reasonable conclusions only (supported by results)
- Avoid generalisations.
- Avoid unsubstantiated personal opinions.

Closing the gap and improving patient safety with better drug information

Conclusion I

By involving clinical pharmacists, the gap in patients` knowledge about their medicines was reduced. GPs found their patients better informed and appreciated the reduced time and effort.

- Conclusion in line with aim and results presented

Development and implementation of a pharmacotherapeutic protocol in patients submitted to caesarean

Conclusion II

The protocol of use of carbetocin in the hospital has been followed adequately according to the established guidelines. The use of this drug has been limited to patients in whom carbetocin treatment is the most efficient and safe option. Moreover, unnecessary risks and costs are avoided.The protocol let the hospital having a record and a follow-up of the patients, which makes possible the continuous assessment of the economic and clinical results. Results should be assesed for a minimum of one year in order to obtain more reliable data and to identify new opportunities of improvement.

- Length?
- General Statements
- Quality and safety improvement difficult to assess

Checklist prior to submission

- ❑ Abstract adheres to EAHP guidelines
- ❑ ‚My results are in line with study objectives‘
- ❑ ‚My conclusions are supported by data presented in the abstract‘
- ❑ Word limit: 300
- ❑ Language, grammar and spelling checked by peers

Peer review

- Committee has to evaluate the validity and value of your work
  - Scientific value
  - Practical value

- Common reasons for rejections:
  - Bad writing – not understandable!
  - Missing concordance between objectives, (results), and conclusions
  - Thin data…too few patients…not finished yet…

Learning Assessment – Q1

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Wrap up

- First the study (project), then the abstract.
- It takes **time** to write an abstract.
- **Re-read** it after a few days.
- 4-Cs: **c**lear, **c**omplete, **c**oncise, **c**ohesive
- Seek help, ask colleagues.
- Make revisions based on their feedback.
- Beware: Last-minute submissions!

ABSTRACT WRITING AND BEYOND

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