Tipos de artigos científicos e a sua estrutura

Jornadas do Centro de Neurociências Publicação Científica: Motivação e Formação
9 de abril de 2016

Palestrante: Manuel Gonçalves Pinho
Moderador: Professor Doutor Altamiro Pereira

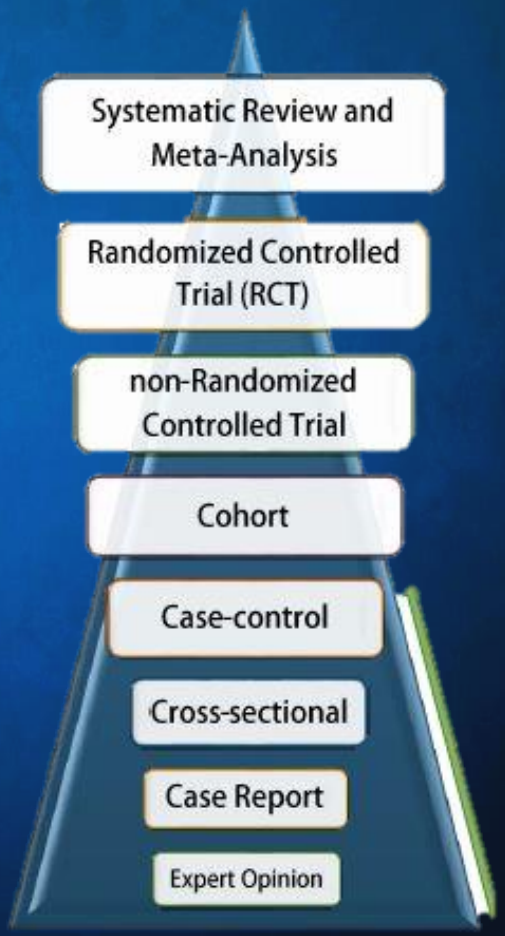
-CINTESIS – In4Health
-CIDES – Faculdade de Medicina da Universidade do Porto
-Porto Biomedical Journal - PBJ

PORTO BIOMEDICAL JOURNAL

CINTESIS CENTRO DE INVESTIGAÇÃO EM TECNOLOGIAS E SERVIÇOS DE SAÚDE

CIDES departamento de Ciências da Informação e da Decisão em Saúde
Faculdade de Medicina | Universidade do Porto

Article types classification



Peh WC, Ng KH. Basic structure and types of scientific papers. Singapore medical journal. 2008;49(7):522-5.

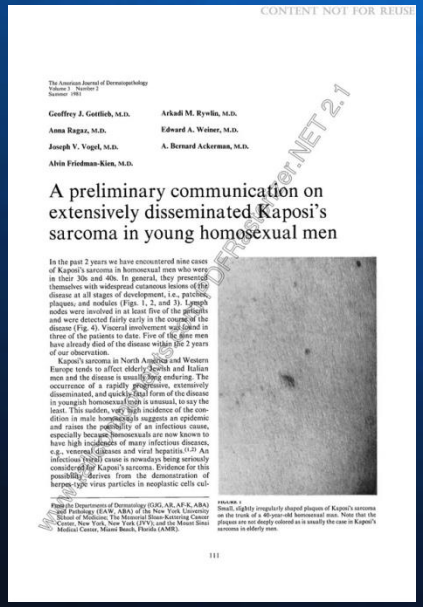
Case Report

Description of a single case with unique features.
These unique features may consist of:

- previously unreported observations of a recognized disease
- the unique use of imaging or diagnostic test to reveal a disease
- previously-unreported clinical condition
- previously-unreported treatment in a recognized disease
- previously-unreported complication of a procedure

Importance?

1981 - AIDS



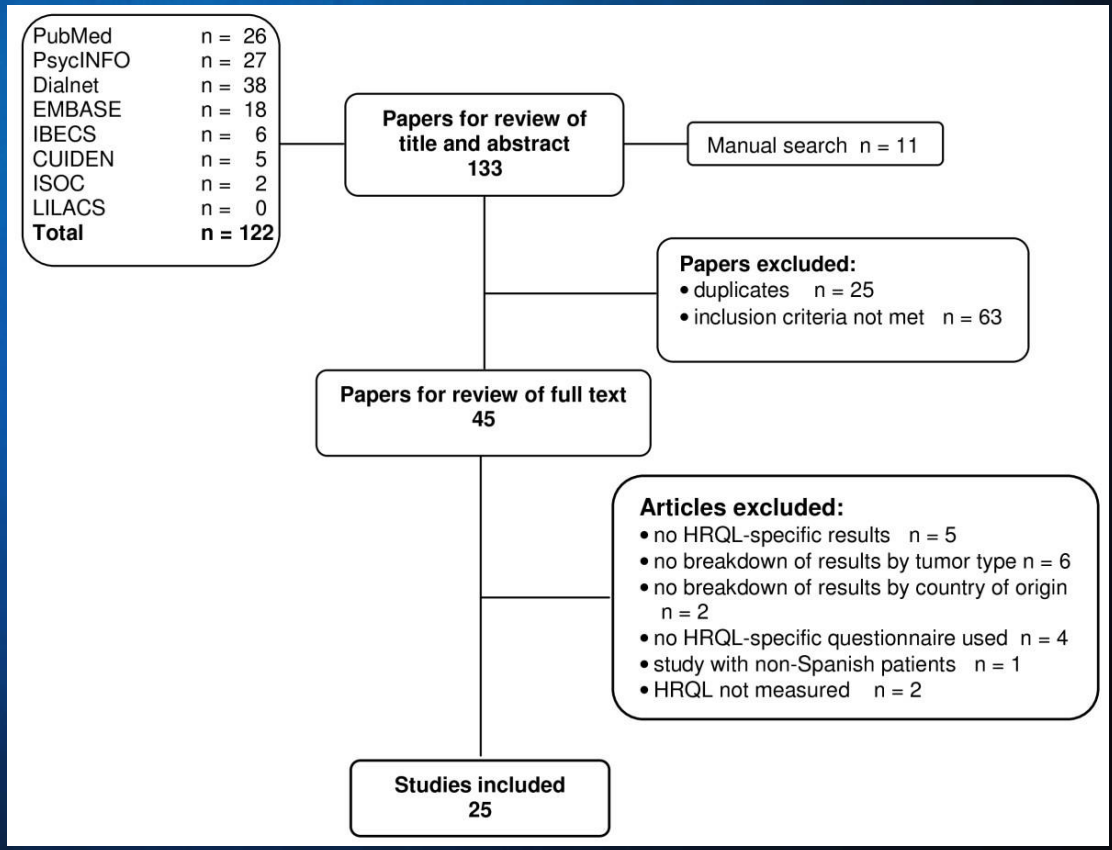
1. Introduction
2. Description of the case
3. Discussion
4. Literature review
5. Summary/conclusions

McCarthy LH, Reilly K. How to write a case report. FAMILY MEDICINE-KANSAS CITY-. 2000;32(3):190-5.

Review

Systematic REVIEW

- application of scientific strategies that limit bias by the systematic assembly, critical appraisal and synthesis of all relevant studies on a specific topic

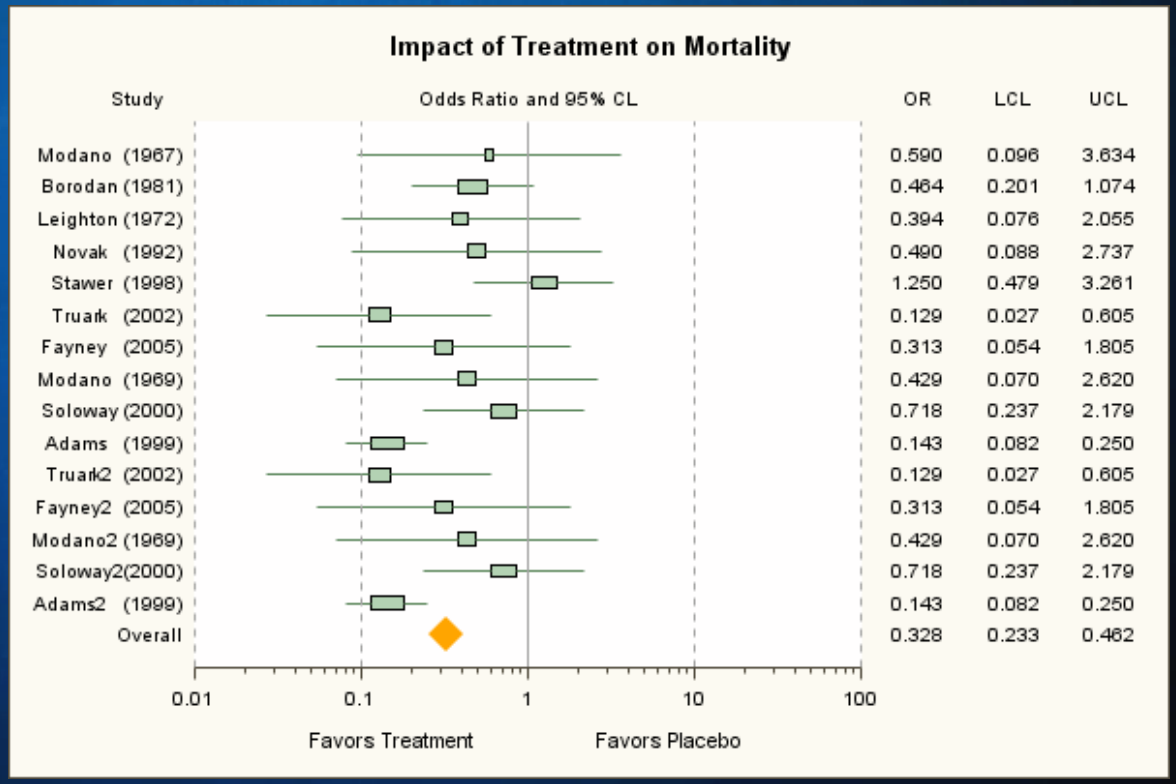


Peh WC, Ng KH. Basic structure and types of scientific papers. Singapore medical journal. 2008;49(7):522-5.

Review

Meta-analysis

- Statistical pooling of data from individual studies.



Peh WC, Ng KH. Basic structure and types of scientific papers. Singapore medical journal. 2008;49(7):522-5.

Review

REVIEW - This is a **detailed analysis** of **recent developments** on a specific topic. It serves to highlight important points that have been **previously reported in the literature**. This type of paper **does not introduce new information** and **does not include the author's opinion or personal experience**. A large number of relevant references are expected.

1. Research Question	PICO- Population/Intervention/Comparison/Outcome
2. Research Protocol	Query
3. Literature Search	Pubmed/EMBASE
4. Data Extraction	*Publication bias (results/language)*
5. Quality Appraisal	PRISMA
6. Data Analysis and Results	
7. Interpretation of Results	

Wright RW, Brand RA, Dunn W, Spindler KP. How to write a systematic review. Clinical orthopaedics and related research. 2007;455:23-9.

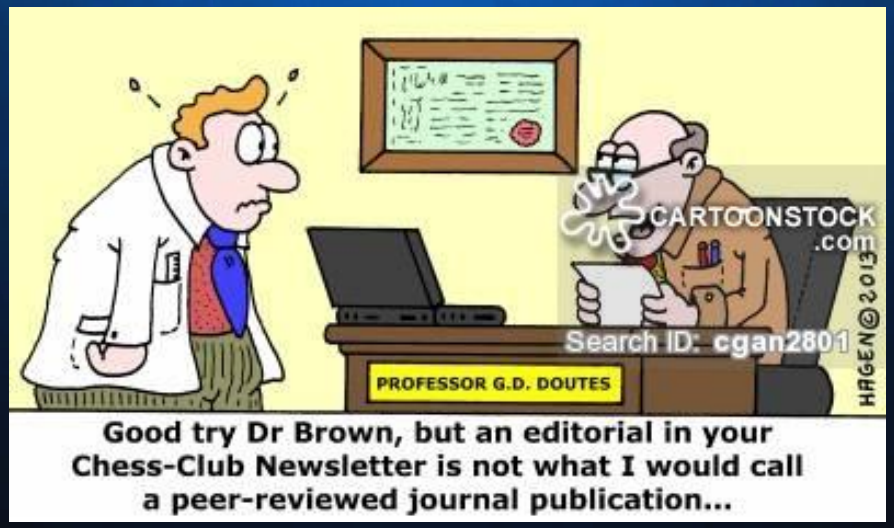
Commentary

Short article that describes an author's personal experience of a specific topic

- the subject may be controversial and the author's perspective is provided
- outline the various viewpoints that exist
- it may be based on a current hot topic

Editorial

- short review or critique of original articles accepted for publication in the same issue of the journal
- a brief description of a subject that does not warrant a full review
- draw attention to very recent innovations or subjects of general interest to readers
- Editorials are invited by the editor or written by the editor

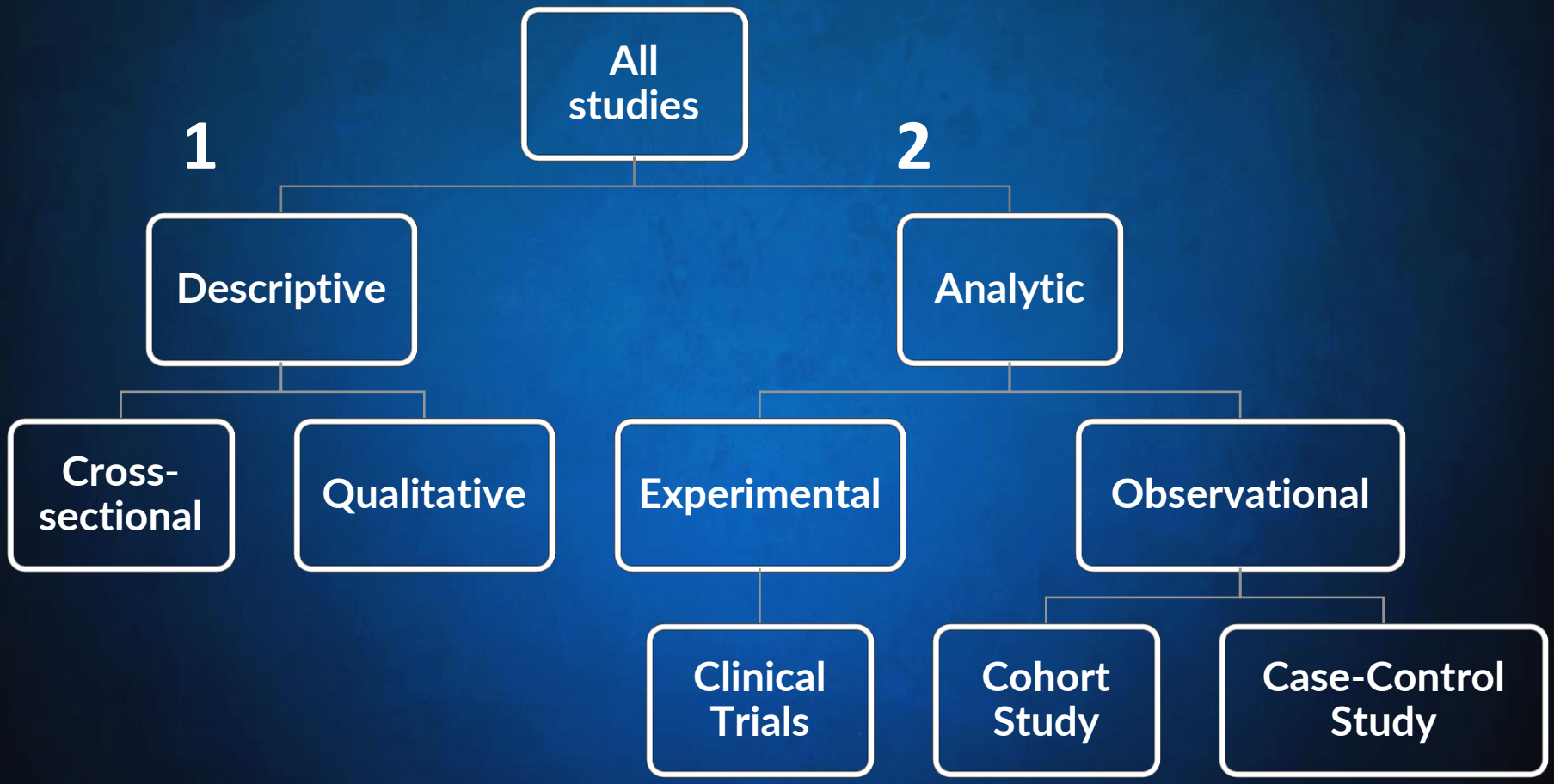


Lowell G. How to Write an Editorial. Undergraduate Review. 2008;4(1):189-92.

Letter to the Editor

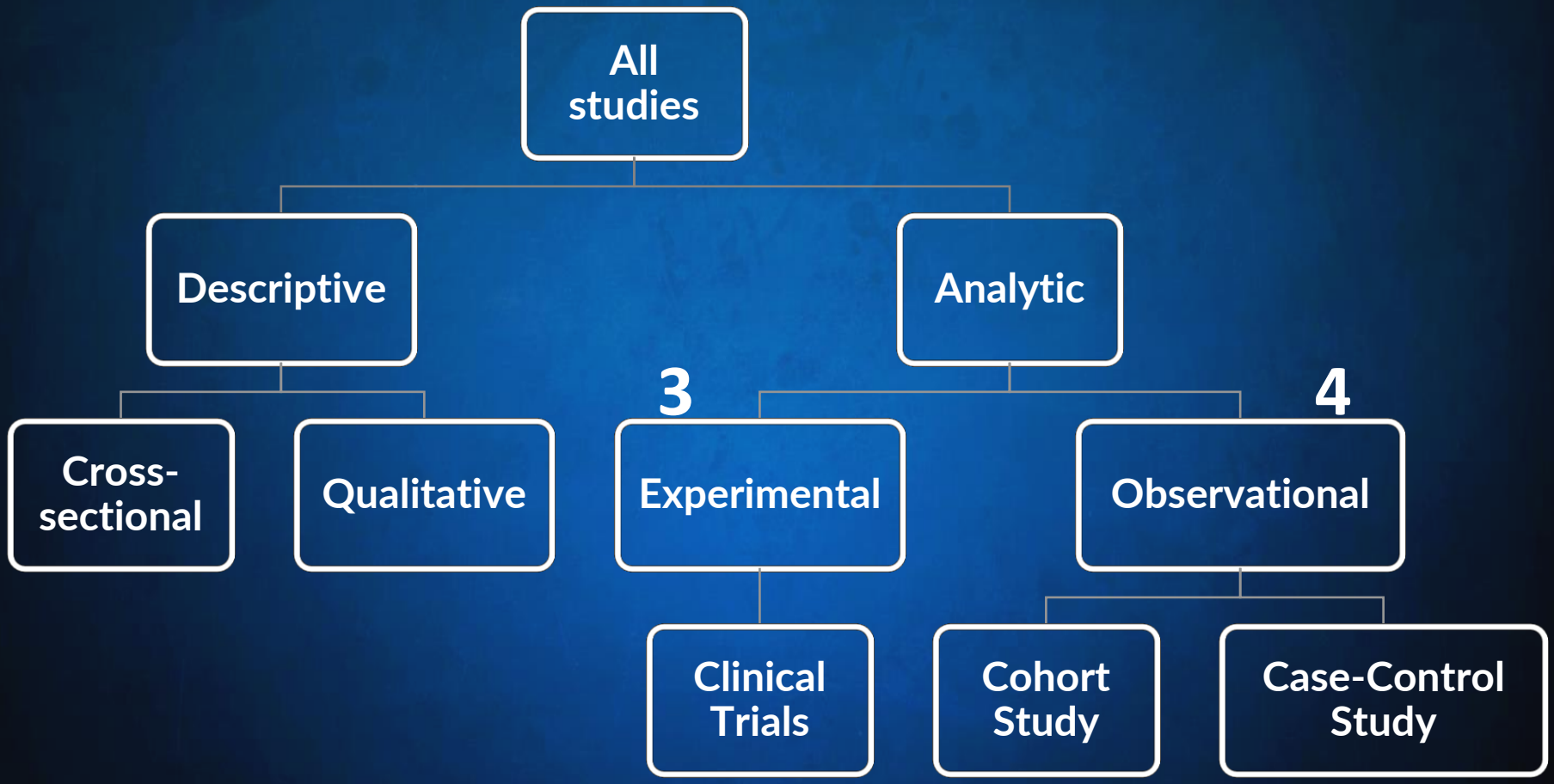
Letter to the Editor

- Short and written on any subject of interest to the journal reader
- Comments on previously-published articles(objective and constructive)
- Written response (Author's Reply to Letter)
- This section may sometimes also be used for displaying new hypotheses.



What is the aim of the study?

1-To describe a population (PO questions)
2- To quantify the relationship between factors (PICO questions)

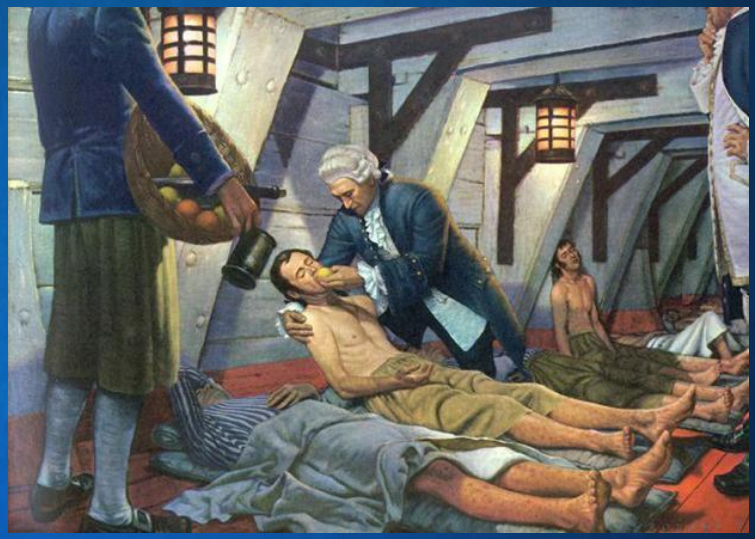


Researcher intercedes as part of the study design?

3-Yes - Experimental
4-No - Observational

Randomized Clinical Trials

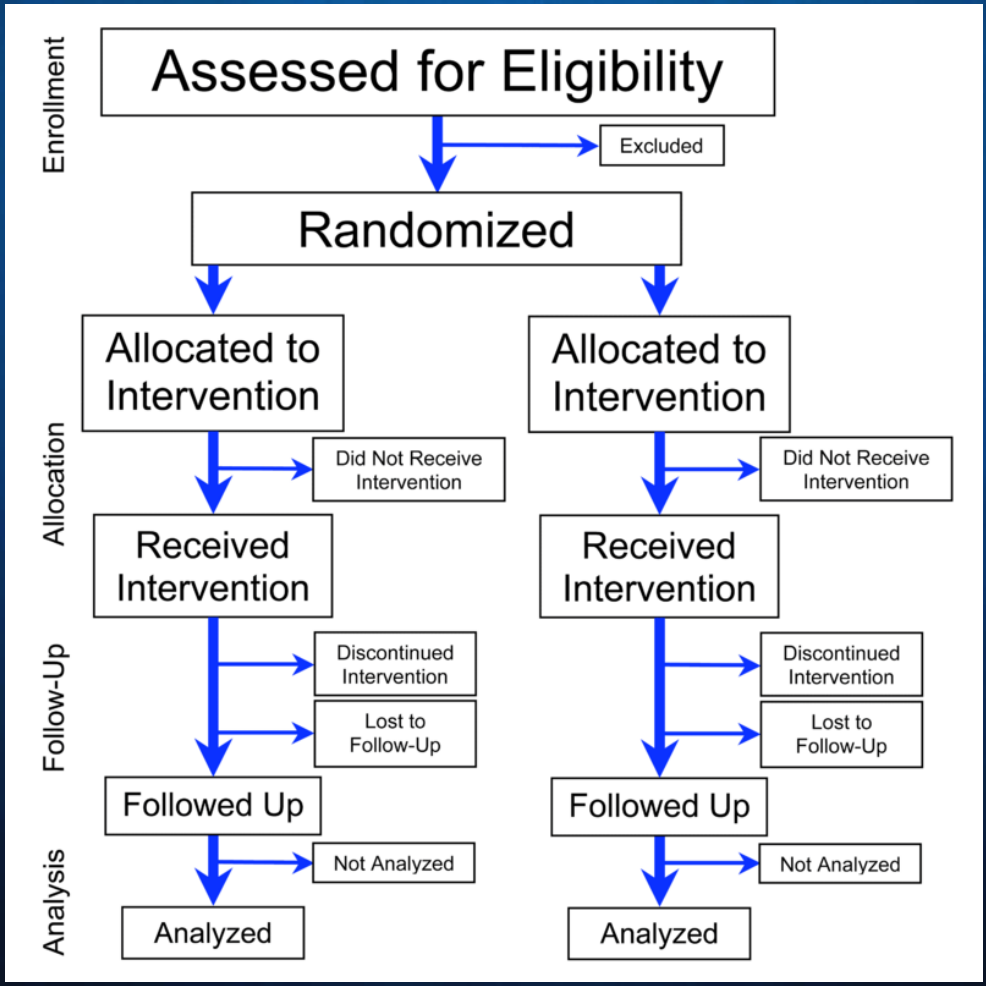
First documented RCT performed in 1747 by James Lind



- Introduce a treatment/exposure to study its effect on real patients
- Participants are **randomly** assigned into the **control group** or the **investigational group**
- Control group receives the typically used or approved treatment
- The investigational group receives the treatment or intervention being studied.

Thiese MS. Observational and interventional study design types; an overview. Biochemia medica. 2014;24(2):199-210.

Randomized Clinical Trials



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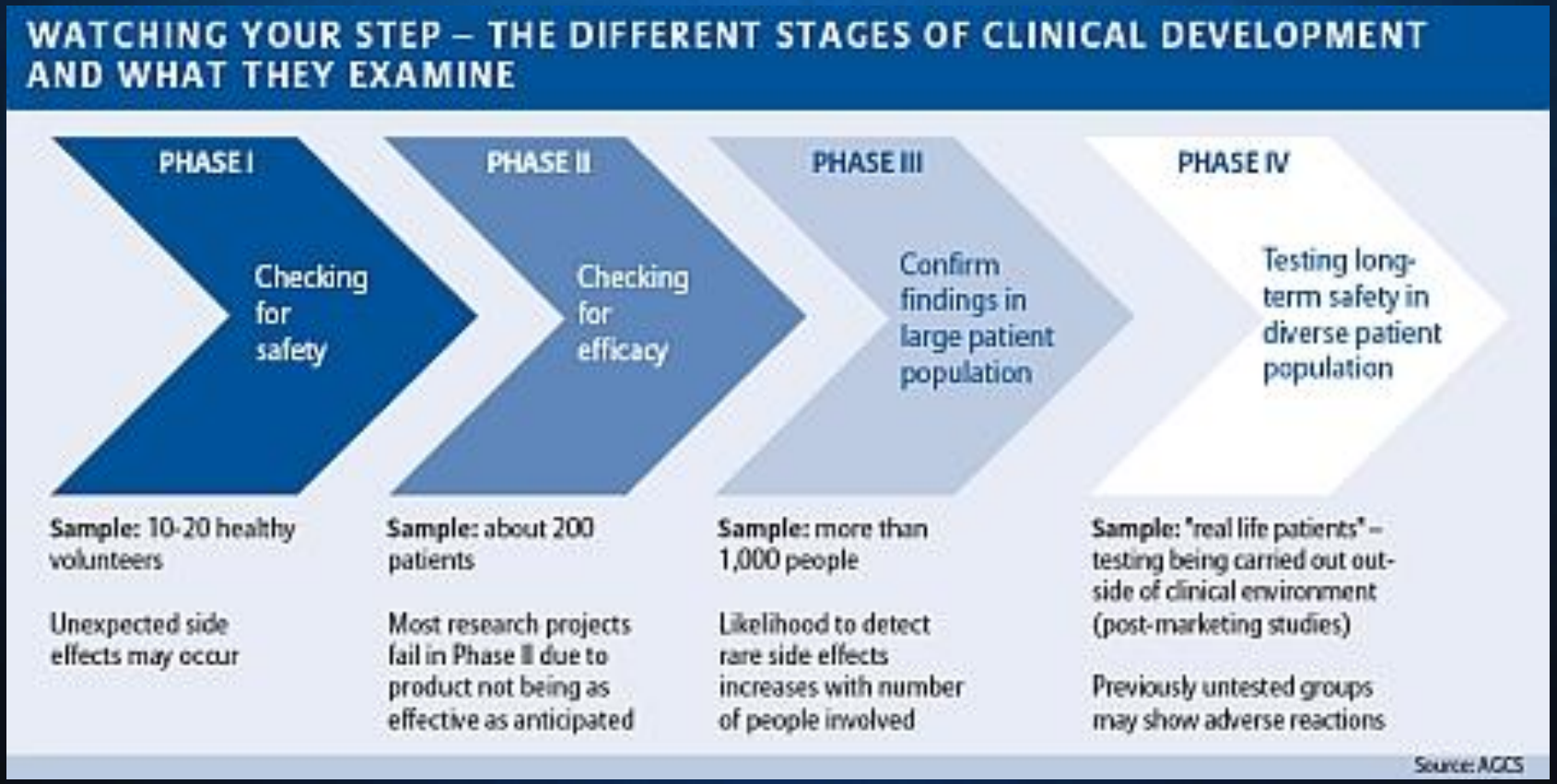
Randomized Clinical Trials



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Standards of Publication

Standard name	Acronym	Website
Consolidated Standards Of Reporting Trials	CONSORT	www.consort-statement.org
Strengthening the Reporting of Observational studies in Epidemiology	STROBE	www.strobe-statement.org
Standards for Reporting Studies of Diagnostic Accuracy	STARD	www.stard-statement.org
Quality assessment of diagnostic accuracy studies	QUADAS	www.bris.ac.uk/quadas
Preferred Reporting Items for Systematic Reviews and Meta-Analyses	PRISMA	www.prisma-statement.org
Consolidated criteria for reporting qualitative research	COREQ	
Statistical Analyses and Methods in the Published Literature	SAMPL	
Consensus-based Clinical Case Reporting Guideline Development	CARE	www.care-statement.org/
Standards for Quality Improvement Reporting Excellence	SQUIRE	www.squire-statement.org
Consolidated Health Economic Evaluation Reporting Standards	CHEERS	www.ispor.org/taskforces/EconomicPubGuidelines.asp
Enhancing transparency in reporting the synthesis of qualitative research	ENTREQ	

Thiese MS. Observational and interventional study design types; an overview. Biochemia medica. 2014;24(2):199-210.

Basic Structure of a Scientific Article

Title

Authorship

Affiliations

Abstract

Keywords

Projected life expectancy of people with HIV according to timing of diagnosis

Fumiyo Nakagawa[a], Rebecca K Lodwick[a], Colette J Smith[a], Ruth Smith[b], Valentina Cambiano[a], Jens Lundgren[c,d], Valerie Delpech[b] and Andrew N Phillips[a]

Background: Effective antiretroviral therapy (ART) has contributed greatly towards survival for people with HIV, yet many remain undiagnosed until very late. Our aims were to estimate the life expectancy of an HIV-infected MSM (men-who-have-sex-with-men) living in a developed country with extensive access to ART and healthcare, and to assess the effect of late diagnosis on life expectancy.

Methods: A stochastic computer simulation model of HIV infection and the effect of ART was used to estimate life expectancy and determine the distribution of potential lifetime outcomes of an MSM who becomes HIV positive in 2010 aged 30 years. The effect of altering the diagnosis rate was investigated.

Results: Assuming a high rate of HIV diagnosis (median CD4 count at diagnosis: 432 cells/mm^3), projected median age at death (life expectancy) was 75.0 years. Therefore, 7.0 years of life were lost on average due to HIV; comparable to the effect of cigarette smoking. Cumulative risks of death by five and ten years after infection were 2.3% and 5.2%. The 95% uncertainty bound for life expectancy was (68.0,77.3) years. When a low diagnosis rate was assumed (diagnosis only when symptomatic; median CD4 count 140 cells/mm^3), life expectancy was 71.5 years, implying an average 10.5 years of life lost due to HIV.

Conclusions: If low rates of virologic failure observed in treated patients continue, predicted life expectancy is relatively high in people with HIV who can access a wide range of antiretrovirals. The greatest risk of excess mortality is due to delays in HIV diagnosis.

AIDS 2011, **25**:000–000

Keywords: antiretroviral therapy, diagnosis, life expectancy, model

Basic Structure of a Scientific Article

IMRAD structure started to be used in the 50's, mainly in physics field

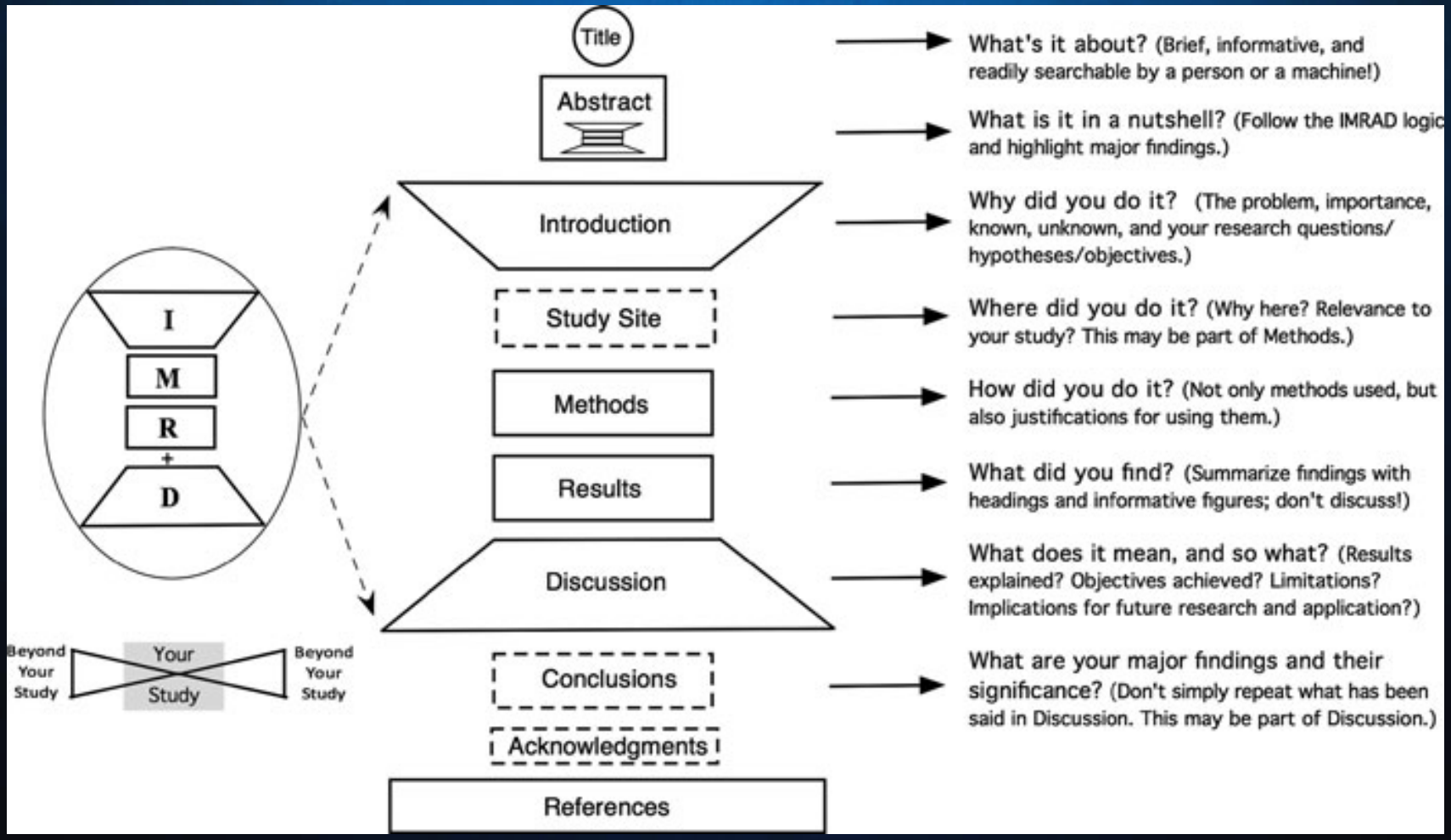
IMRAD stands for:

Introduction (What question was asked?)
Methods (How was it studied?)
Results (What was found?)
And
Discussion (What do the findings mean?)

"The reader needs to see a building, not a pile of bricks!"

Sollaci LB, Pereira MG. The introduction, methods, results, and discussion (IMRAD) structure: a fifty-year survey. Journal of the Medical Library Association : JMLA. 2004;92(3):364-7.

Basic Structure of a Scientific Article



Wu J. Improving the writing of research papers: IMRAD and beyond. Landscape Ecology. 2011;26(10):1345-9.

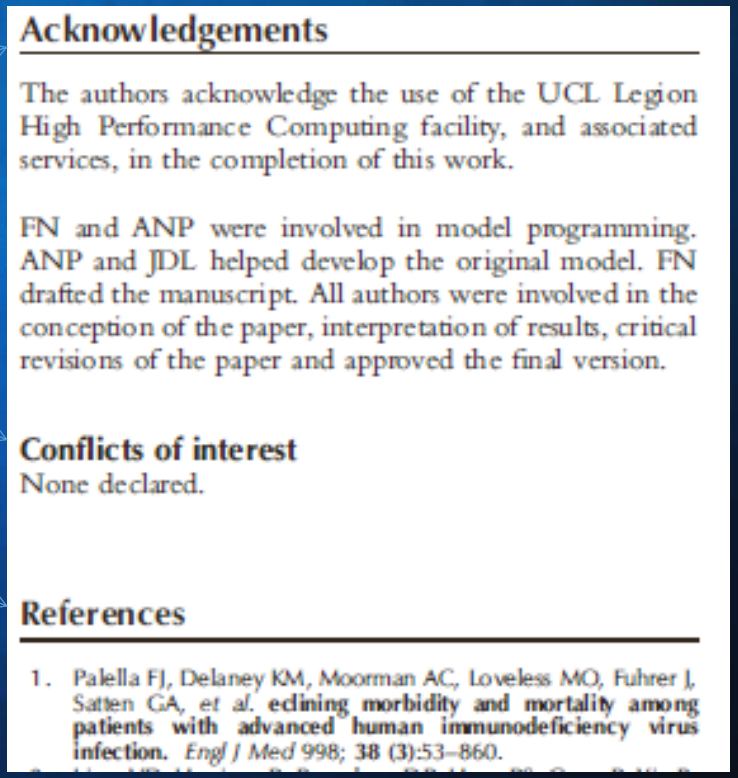
Basic Structure of a Scientific Article

Acknowledgements

Conflicts of interest

References

Ethical approval



Acknowledgements

The authors acknowledge the use of the UCL Legion High Performance Computing facility, and associated services, in the completion of this work.

FN and ANP were involved in model programming. ANP and JDL helped develop the original model. FN drafted the manuscript. All authors were involved in the conception of the paper, interpretation of results, critical revisions of the paper and approved the final version.

Conflicts of interest

None declared.

References

1. Palella FJ, Delaney KM, Moorman AC, Loveless MO, Fuhrer J, Satten GA, *et al.* **eclining morbidity and mortality among patients with advanced human immunodeficiency virus infection.** *Engl J Med* 998; **38** (3):53–860.

Wu J. Improving the writing of research papers: IMRAD and beyond. Landscape Ecology. 2011;26(10):1345-9.

“The best papers combine the science …
with the art of writing”

Journal of
Universal Rejection

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