

# Scientific Writing and Publication Ethics: Best Practices for Researchers

Turning research into clear, credible and  
publishable communication



# What “effective” means in scientific writing

Effective writing helps readers understand exactly what was studied, how it was studied, what was found and why it matters.

## Accurate

Claims match the data and methods; **NO OVERSTATEMENT**

## Clear

Readers can follow the logic without guessing.

## Structured

Sections guide readers through the **RESEARCH STORY**.

## Transparent

Methods, limitations and uncertainty are visible.

## Ethical

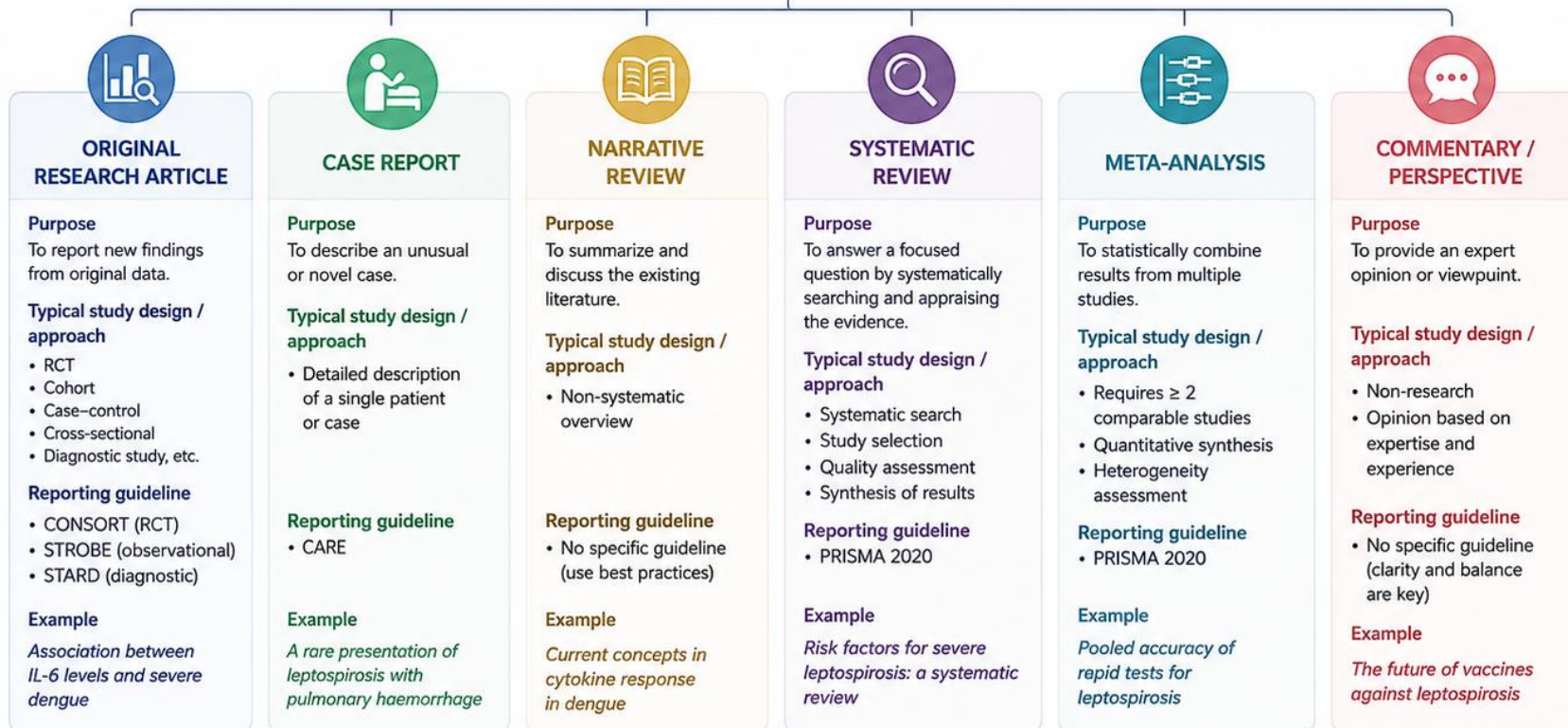
**SOURCES, AUTHORSHIP, DATA & AI USE ARE HANDLED RESPONSIBLY.**

# Decide and select the ARTICLE TYPE first

*'Your article type determines your study design, reporting guideline and target journal'*



## COMMON ARTICLE TYPES



### KEY TAKE-HOME MESSAGE

Choosing the right article type first helps you: design the correct study • follow the right guideline • target the right journal • write a stronger paper

# Selecting the Right Journal for Publication

- ✓ Determines the **visibility and impact** of your research
- ✓ Affects **acceptance probability**
- ✓ Influences **audience reach** (academics, practitioners, policymakers)
- ✓ Impacts **citation rate and academic reputation**

# Key Criteria for Choosing a Journal

- ✓ **Scope & Aim** - Must match your research topic and methodology
- ✓ **Indexing** - Check databases like Scopus, Web of Science, Google Scholar  
<https://www.scopus.com/sources.uri> - Scopus journal list  
<https://mjl.clarivate.com/home> - Web of science master journal list
- ✓ **Impact Factor / CiteScore** - index that measures how often a journal's articles are cited in other research - [Journal Citation Reports \(JCR\)](#)
- ✓ **Acceptance Rate** - Lower rate - more competitive journal
- ✓ **Publication Time** - Review and publishing duration
- ✓ **Open Access, APC**

# Choosing a journal ....

- ✓ Search journals using: Elsevier Journal Finder/Scimago/ Google Scholar

<https://journalfinder.elsevier.com>

- ✓ Check:
  - Scope match
  - Impact factor/Scimago ranking
  - Submission guidelines
  - Author guidelines
  - Ethical standards



# Using Scimago



## • Rankings

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Clear filters



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Only Diamond Open Access Journals?



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Citable Docs. (3years)

Apply

369 Journals

| Title                                 | Type    | ↓ SJR     | H index | Total Docs. (2025) | Total Docs. (3years) | Total Refs. (2025) | Total Citations (3years) | Citable Docs. (3years) | Citations / Doc. (2years) | Ref. / Doc. (2025) | %Female (2025) |
|---------------------------------------|---------|-----------|---------|--------------------|----------------------|--------------------|--------------------------|------------------------|---------------------------|--------------------|----------------|
| 1 Nature Reviews Microbiology ↗       | journal | 18.406 Q1 | 421     | 137                | 451                  | 9937               | 16899                    | 255                    | 36.94                     | 72.53              | 40.14          |
| 2 Immunity ↗                          | journal | 16.481 Q1 | 498     | 254                | 674                  | 16951              | 14743                    | 481                    | 21.16                     | 66.74              | 41.35          |
| 3 Cellular and Molecular Immunology ↗ | journal | 7.021 Q1  | 153     | 126                | 432                  | 11497              | 6841                     | 295                    | 15.36                     | 91.25              | 43.48          |
| 4 Clinical Microbiology Reviews ↗     | journal | 6.584 Q1  | 358     | 56                 | 107                  | 14469              | 2577                     | 106                    | 21.82                     | 258.38             | 46.71          |
| 5 The Lancet Infectious               | journal | 5.549 Q1  | 317     | 453                | 1458                 | 8861               | 11316                    | 638                    | 7.75                      | 19.56              | 38.01          |



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Rankings

What is SJR for? SC

SJR : Scientific

What is SJR for? SC

About Us

SJR (SCImago Jour

# Using Scimago

<https://www.scimagojr.com/>



1. Selecting a journal
2. Check for indexing, Q1-Q4 status



# Scimago Ranking- The Quartile System -Q1, Q2, Q3, Q4

- ✓ **Q1 (Top 25%)**
  - Very competitive, high rejection rate
- ✓ **Q2 (25% – 50%)**
  - Moderate competition
- ✓ **Q3 (50% – 75%)**
  - Easier acceptance than Q1/Q2
- ✓ **Q4 (75% – 100%)**
  - Easier to publish but lower impact

<https://www.scimagojr.com/>

# Avoid predatory journals



<https://beallslists.com/>

## **Rapid acceptance**

- Acceptance within days
- Little or no peer review

## **Aggressive email invitations**

- "Dear eminent researcher..."
- Invitations outside your area of expertise

## **Unrealistic promises**

- Publication within 7–14 days
- Guaranteed acceptance

## **Fake metrics**

## **Poor editorial boards**

- Unknown editors
- Editors with unrelated expertise
- Sometimes listed without permission



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Index Copernicus Value(ICV) 2015 : 86.95

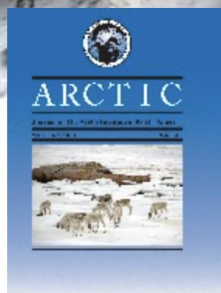
**SJIF 2020:- 6.326**



<https://arcticjournal.org/index.html>

ARCTIC Journal

HOME ABOUT AIMS AND SCOPE SUBMISSION GUIDELINES EDITORIAL CONTACT



## ARCTIC Journal

Arctic (ISSN: 0004-0843) is a leading international journal reporting developments and advances in various fields of science and technologies. It publishes original papers, research notes and reviews in English. The Journal is published 12 times a year on monthly basis. ARCTIC also covers some special issues depending on scientific events within the year. Each season will be released in a hard copy format consisting of 3 issues (Print release: Quarterly) with editorials, reviews, original research, evidence based reviews, letters and more. Authors of accepted papers are required to pay a minimum publication charge based upon their paper length and number of the color pages. Only top

ranked peer reviewed accepted papers are sponsored by the publisher to be included free of charge. We are happy to announce that the Five-Year- impact factor for ARCTIC Journal is now 1.633 as released by Thomson Reuters (JCR2024).

SUBMIT MANUSCRIPT

LATEST PAPERS

PUBLICATION FREQUENCY

ARCHIVE

POLICIES

### Latest Published Papers:

#### Title: Thermomechanical Fatigue of Additively Manufactured Nickel Superalloy Lattice Struts

Abstract: Lightweight lattice heat exchangers must survive cyclic thermal gradients during startup–shutdown. Selective laser melting produces struts with surface roughness and microstructural gradients that alter crack initiation sites. Isothermal and out-of-phase thermomechanical tests on dogbone specimens extracted from unit cells reveal shorter lives than bulk wrought material at matched stress amplitudes, motivating post-process hot isostatic pressing to close internal porosity.

## Journal Citation Reports (JCR2024)®

### Source: Thomson Reuters Citation Data

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5-Year Impact Factor: 1.3

Average Impact Factor: 24.481

Eigen factor Score: 0.001130

Article Influence Score: 0.541

#### Indexes:

Science Citation Index Expanded

Scopus

Current Contents - Agriculture, Biology & Environmental Sciences

Zoological Record

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Languages: English

#### Subjects:

- Life Sciences

- Engineering

- Theoretical Sciences

\* Authors of accepted papers will receive 3 hard copies free of charge by the end of each season release. The publisher will contact the authors of the countries with limitations in avion delivery to find other solutions.

# Good Scientific Writing

- ✓ **Clear** - **unnecessary details -NO**
- ✓ **Simple language** - **complicated sentences -NO**
- ✓ **Neutral** - **assumptions** (Everyone knows that ...) and **unproven statements**  
(It can never be proved that ...)- **NO**
- ✓ **Structured logically** - ideas and processes are expressed in a **logical order**
- ✓ **Accurate** - **vague and ambiguous language- NO-** about, approximately,  
almost



# Essential Parts of a Scientific paper

- ✓ **Title:** Describe the **core contents** of the paper
- ✓ **Abstract:** **Summarize** the major elements of the paper
- ✓ **Introduction:** “**why**” - **rationale** for the study
- ✓ **Methods:** “**when, where, how, how much**” - **experimental procedures**
- ✓ **Results:** “**what**” - summarize the findings **without interpretation**
- ✓ **Discussion:** **Interpret the findings**
- ✓ **Conclusion :** **MUST BE BASED ON YOUR RESULTS**
- ✓ **Acknowledgement:** Give **credit** to those who helped you
- ✓ **References:** papers, books, websites



# TITLE – **Strong** Title



- Specific and clear : **Reflect the main findings or focus of the study**
- Keep titles **concise** (16 words or less) -3 -8 key words
- Avoid abbreviations unless universally recognized (DNA, HIV)
- **Write the title after completing the entire manuscript** - to alignment with research outcomes
- Test your title **with other authors with different disciplines to verify clarity** and broader academic accessibility
- Omit filler words like "An investigation into..." or "Study of..." or "Analysis of" or words (e.g., A, An, The)

# WHAT DO YOU THINK ?????



**Efficacy of rupatadine in reducing the incidence of dengue haemorrhagic fever in patients with acute dengue: A randomised, double blind, placebo-controlled trial**

**Title reflects the main objective and scope of the study**

## Background

Rupatadine was previously shown to reduce endothelial dysfunction in vitro, reduced vascular leak in dengue mouse models and to reduce the extent of pleural effusions and thrombocytopenia in patients with acute dengue. Therefore, we sought to determine the efficacy of rupatadine in reducing the incidence of dengue haemorrhagic fever (DHF) in patients with acute dengue.

Outpatient Department (OPD) of the National Institute of Infectious Diseases

Only 123 patients were recruited to the rupatadine arm and 126 patients into the placebo arm

# WHAT DO YOU THINK ????



The NEW ENGLAND  
JOURNAL of MEDICINE

CURRENT ISSUE ▾

SPECIALTIES ▾

TOPICS ▾

ORIGINAL ARTICLE



## Tirzepatide as Compared with Semaglutide for the Treatment of Obesity

**Authors:** Louis J. Aronne, M.D., Deborah Bade Horn, D.O., Carel W. le Roux, M.D., Ph.D., Wayne Ho, M.D., Beverly L. Falcon, Ph.D., Elisa Gomez Valderas, M.Sc., Sagar Das, M.Sc., Clare J. Lee, M.D., M.H.S., Leonard C. Glass, M.D., Cagri Senyucel, M.D., Ph.D., and Julia P. Dunn, M.D., for the SURMOUNT-5 Trial Investigators\* [Author Info & Affiliations](#)

Published May 11, 2025 | N Engl J Med 2025;393:26-36 | DOI: 10.1056/NEJMoa2416394 | [VOL. 393 NO. 1](#)  
[Copyright © 2025](#)

### Abstract

Title reflects the main objective and scope of the study

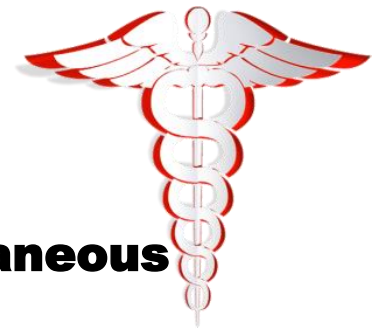
#### BACKGROUND

Tirzepatide and semaglutide are highly effective medications for obesity management. The efficacy and safety of tirzepatide as compared with semaglutide in adults with obesity but without type 2 diabetes is unknown.

#### CONCLUSIONS

Among participants with obesity but without diabetes, treatment with tirzepatide was superior to treatment with semaglutide with respect to reduction in body weight and waist circumference at week 72. (Funded by Eli Lilly; SURMOUNT-5 ClinicalTrials.gov number, [NCT05822830](#).)

# WHAT DO YOU THINK ?????



## **Distinct microbiome profiles and biofilms in *Leishmania donovani*-driven cutaneous leishmaniasis wounds**

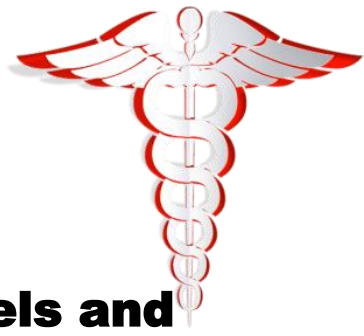
Title Reflect the main findings of the study

### **Abstract**

The endemic strain of *Leishmania donovani* in Sri Lanka causes cutaneous leishmaniasis (CL) rather than more common visceral form. We have visualized biofilms and profiled the microbiome of lesions and unaffected skin in thirty-nine CL patients. Twenty-four lesions (61.5%) were biofilm-positive according to fluorescence in situ hybridization. Biopsies of biofilm-positive lesions were dominated by *Pseudomonas*, class Bacilli and Enterobacteriaceae and distinguished by significantly lower community evenness. Higher relative abundance of a class Bacilli OTU was detected in wound swabs versus contralateral skin. Wound swabs and biopsies had significantly distinct microbiome profiles and lower diversity compared to unaffected skin. Greater abundances of potentially pathogenic organisms were observed in wet ulcers, lesions with high parasite loads and large wounds. In summary, more than half of *L. donovani* associated CL wounds harboured biofilms and the wounds exhibited a distinct, less diverse, microbiome than unaffected skin.

Only 39 CL patients

# What do you think ?????



## **IL-1 $\beta$ , IL-10, and TNF- $\alpha$ gene polymorphisms are associated with cytokine levels and hepatocellular carcinoma risk in a Chinese cohort**

We conducted a hospital-based, retrospective case-control study involving the newly histologically confirmed primary HCC and age- and gender-matched healthy controls. Circulating levels of IL-1 $\beta$ , IL-6, IL-10 and TNF- $\alpha$  were measured by enzyme-linked immunosorbent assay (ELISA). Functional single nucleotide polymorphisms in the regulatory regions of their genes were genotyped via PCR- restricted fragment length polymorphism (PCR-RFLP) method. 160 patients and 280 healthy controls were enrolled. HCC patients

60 patients and 280 healthy controls were enrolled

Techniques – ELISA and PCR -RFLP



| Title format                                                                                                                                                       | Example title                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prevalence of [disease] in [population] in [location]                                                                                                              | <i>Prevalence of tuberculosis in homeless women in San Francisco</i>                                                                                                     |
| Risk factors for [condition] among [population] in [location]                                                                                                      | <i>Risk factors for preterm births among low-income women in Mexico City</i>                                                                                             |
| <b>Systematic review/meta-analysis</b><br>Effectiveness of [treatment] for [disease] in [population] for [outcome]: A systematic review and meta-analysis          | <i>Effectiveness of Hepatitis B treatment in HIV-infected adolescents in the prevention of liver disease: A systematic review and meta-analysis</i>                      |
| <b>Clinical trial</b><br>[Intervention] improved [symptoms] of [disease] in [population]: A randomized controlled clinical trial                                   | <i>Using a sleep app lessened insomnia in post-menopausal women in southwest United States: A randomized controlled clinical trial</i>                                   |
| <b>General molecular studies</b><br>Characterization/identification/evaluation of [molecule name] in/from [organism/tissue] (by [specific biological methods])     | <i>Identification of putative Type-I sex pheromone biosynthesis-related genes expressed in the female pheromone gland of <i>Streltzoviella insularis</i></i>             |
| <b>General molecular studies</b><br>[specific methods/analysis] of organism/tissue reveal insights into [function/role] of [molecule name] in [biological process] | <i>Transcriptome landscape of <i>Rafflesia cantleyi</i> floral buds reveals insights into the roles of transcription factors and phytohormones in flower development</i> |
| <b>Software/method papers</b><br>[tool/method/software] for [what purpose] in [what research area]                                                                 | <i>CRISPR-based tools for targeted transcriptional and epigenetic regulation in plants</i>                                                                               |



# Title

What do you think?



---

## **“A Study on Acute Respiratory Tract Infections among Children Aged 1-5 Years,”**

**Mandeep walter\* & Dr. Pratiksha Patrick\*\***

*\*PhD Scholar, Malwanchal University Indore (MP)*

*\*\*Guide – S.S Institute of college Of Nursing*

# Title

What do you think?



## ***Full Length Research Paper***

### **Comparison of some complication in $\beta$ -thalassemia patients with control group**

**Amad M. Saleh Jubrail<sup>\*1</sup>, Ghorbat Saleh Ali<sup>\*2</sup> and Malika Kassim Najeeb<sup>\*3</sup>**

<sup>\*1</sup>President of the University of Nawroz, Duhok, Iraq

<sup>\*2,3</sup> College of Science, University of Duhok, Duhok, Iraq

<sup>\*</sup>Corresponding author. E-mail: [marwan.qader@yahoo.com](mailto:marwan.qader@yahoo.com)

Accepted 5 August, 2017

# ABSTRACT – **Summary** of the Story

- ✓ Readers quickly understand **the purpose, methods, results, and conclusions** of the study

## DOs

- Be written clearly and simply
- Present the main objective and scope of the study
- Briefly describe the methods used
- Summarize the key results State the main conclusions
- Be written after completing the full paper

## DON'T

- Repeat yourself unnecessarily, eg. “Methods: We used X technique. Results: Using X technique, we found...”
- Include citations or references

## Key Point

The abstract is often the first and sometimes only section read by readers, so it must **clearly communicate the value and focus of the research**



## General qualities of a good abstract

---

The abstract is a condensed and concentrated version of the full text of the research manuscript. It should be sufficiently representative of the paper if read as a standalone document.

The abstract must be as detailed as possible within the word count limits specified by the journal to which the paper is intended to be submitted. This will require good precis writing skills, as well as a fine judgment about what information is necessary and what is not.

The abstract must contain as much information as possible on the analyses related to the primary and secondary outcome measures.

The abstract should not present a biased picture, such as only favorable outcomes with the study drug, or findings that support the authors' hypotheses; important nonsignificant and adverse findings should also receive mention. Thus, to the extent possible, the reader should be able to independently evaluate the authors' conclusions.

---

# Abstract



Need answers for:

- Why was the study done?
- What exactly was done?
- Who was studied?
- What was found (with numbers)?
- What should readers conclude?



## ABSTRACT



**Background:** *Acute Respiratory Tract Infections (ARTIs) are among the leading causes of morbidity and mortality in children under five years of age, particularly in developing countries. These infections, including upper and lower respiratory tract infections, significantly contribute to the global disease burden, with pneumonia being a major cause of child deaths. Despite global initiatives, the prevalence of ARTI remains high in countries like India due to various socio-demographic and environmental risk factors.*

**Aim:** To study the frequency of Acute Respiratory Tract Infections (ARTI) in the past one year among children aged 1–5 years attending an immunization clinic at a tertiary care hospital.

**Objectives:** To assess socio-demographic characteristics, determine the frequency of ARTI, and identify the association between ARTI and its risk factors among children.

**Methods:** A cross-sectional study was conducted from November 2024 to June 2025 at immunization clinics of selected private hospitals in Indore. A total of 250 children aged 1–5 years were selected using a non-probability convenience sampling technique. Data were collected through face-to-face interviews with mothers using a semi-structured questionnaire. Statistical analysis included descriptive and inferential statistics to identify associations between ARTI and risk factors.

**Results:** Among the 250 children, 52.8% were females and 47.2% were males, with the majority (40%) in the 1–2 years age group. More than four episodes of ARTI per year were reported in 60% of children. Significant risk factors associated with increased frequency of ARTI included low maternal education (45.8%,  $p = 0.002$ ), inadequate ventilation (42.4%,  $p = 0.000$ ), use of biomass fuel (50%,  $p = 0.002$ ), preterm birth (33.3%,  $p = 0.02$ ), and low birth weight (29.2%,  $p = 0.009$ ). Other contributing factors included poor immunization status, lack of exclusive breastfeeding, and exposure to passive smoking.

**Conclusion:** The study concludes that ARTI remains a major public health problem among children aged 1–5 years. Modifiable risk factors such as poor housing conditions, low maternal education, and environmental exposures play a significant role in increasing ARTI frequency. Strengthening maternal awareness, improving living conditions, and enhancing child healthcare services are essential to reduce the burden of ARTI.



## ABSTRACT

**Introduction:** Respectful Maternity Care (RMC) acknowledges that respects for woman's rights, choices and dignity during labor and childbirth is vital component of health care quality. This cross-sectional descriptive study intended to gain in-depth understanding on knowledge, attitude and practices of nurse midwives working in referral Private Maternity hospitals of District Banaskantha Gujrat on RMC. The study also looked into determinants of RMC.

**Methods:** The sample consisted of 83 nurse midwives who were working in birthing and maternity unit of three regional referral Private Maternity hospitals of Banaskantha Gujrat on RMC. The sites were chosen purposefully due to their high delivery volume. A survey instrument was piloted in Paro hospital prior to study. Data was collected from July to October 2024. Analysis was mainly descriptive, simple percentages were used to calculate frequency distribution of aspects and determinants of respectful maternity care.

**Results:** Four in five of the respondents knew and practiced woman's right to information and communication during childbirth process. However, providers were found lacking on some aspects of the knowledge and practices related to respecting choices and rights of the women during childbirth and recounted their experiences of observing events which are described as abusive in maternal health literatures. Inadequate facilities, overworked staffs and limited trainings were found as detrimental factors.

**Conclusions:** Aspects of RMC were not duly practiced. Providers must be made aware of the woman's right to respectful care which is crucial to improve maternal health services. Individual Health Facility must provide conducive environment to practice RMC. Future studies on RMC from receiver end are recommended.

**KEYWORDS:** *Care; Childbirth; Hospital; Labor; Maternity; Midwives; Respectful; Woman's right.*



# INTRODUCTION

**WHY** your topic is so important. This is generally accomplished with a strong opening hook.

1. Introduce your topic

2. Describe your background

3. Establish your research problem

4. Specify your objectives

5. Map out your paper

# Introduction

A simple breakdown



## Question

## Paragraph

Why should I care?

1

What is known?

2

What is unknown?

3

Why does the gap matter?

4

What did you do?

5

# Poor Introduction

- Citation dump
- The encyclopedic introduction
- The “worldwide burden” introduction



# MATERIALS AND METHODS

- Provide full details of experiments- so that **experiments can be reproduced**
  - **Provide all details if the method is new**
  - **If previously published, cite references rather than repeating**
- Organize methods under subheadings (e.g., subjects, experimental design, measurements, assays)
- Describe the experimental design in detail - Be clear, precise, and concise
- **Do not include results in this section**
- Use past tense



| Methods Element  | Components                                                                                                                                                                                          |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Study design     | Study type<br>Specifics per study type (retrospective vs prospective, randomization, reporting guidelines)<br>Setting<br>Time frame                                                                 |
| Ethics statement | Institutional review board or ethics committee approval<br>Institutional Animal Care and Use Committee<br>National Institutes of Health Service Policy on Humane Care and Use of Laboratory Animals |
| Subjects         | Characteristics of population (basic demographics, general health status)<br>How subjects were selected<br>Inclusion and exclusion criteria<br>Animal details (species, weight, age, sex)           |

Materials

- Items used and preparation details
- Equipment (name, model, manufacturer, settings, calibration, validation)
- Drugs (generic name, concentration, dose, frequency, route)
- Gases (concentration, dose, frequency, route, flow)
- Study procedures
- How procedures were performed
- Justification for procedures
- Chronological order
- Measurements or calculations
- Specific data elements collected
- Outcome measures
- Statistical analysis
- How data were analyzed
- Power analysis for sample size
- Statistical tests used and justification
- P* value for statistical significance
- Software

# THE RESULTS

- ✓ **Core of the research paper**, presenting the new knowledge generated
  - Write in **past tense**
  - Be **clear and simple**
  - Summarize findings in an **orderly and logical sequence**
  - **Avoid interpretation—save that for the Discussion section**
  - Guide the reader through the **major points**
  - Do **not repeat methods** already described in the Methods section
- ✓ **Presentation Formats:**
  - Directly in the text
  - In a table
  - In a figure



# THE TABLES AND FIGURES

- ✓ When to Use Tables
  - Use tables **for large or complex data sets** - difficult to explain clearly in text
  - Helpful for showing **exact values and comparisons**
- ✓ When to Use Figures
  - To **show trends, patterns, or relationships**
  - Suitable when findings are **better understood visually**
  - Graphs, charts, diagrams, and images
- ✓ Every table and figure must have a **clear title**
- ✓ **Captions or legends should explain the main message**
- ✓ Should be understandable even without reading the full text

# Table captions

Clearly and concisely describe the data presented  
-reader can understand the table without  
referencing the main text



**Table 1** Demographic and clinical characteristics of participants with hospital-onset bacteraemia and fungaemia events from 13 US hospitals, January 2016 to June 2019, N=2109

| Characteristics           | Total n (%)<br>N=2109 | Adult n (%)<br>n=1754 (83) | Paediatric n (%)<br>n=355 (17) | Academic n (%)<br>n=1768 (84) | Community n (%)<br>n=341 (16) |
|---------------------------|-----------------------|----------------------------|--------------------------------|-------------------------------|-------------------------------|
| Median age in years (IQR) | 56 (33–67)            | 60 (48–69)                 | 1 (30 days to 9 years)         | 53 (27–65)                    | 64 (53–74)                    |
| Gender                    |                       |                            |                                |                               |                               |
| Male                      | 1253 (59.4)           | 1047 (59.7)                | 206 (58)                       | 1066 (60.3)                   | 187 (54.8)                    |
| Female                    | 856 (40.6)            | 707 (40.3)                 | 149 (42)                       | 702 (39.7)                    | 154 (45.2)                    |

**Table 3** Association of demographic, clinical and microbiological attributes with preventability among non-commensal hospital-onset bacteraemia and fungaemia (HOB) events (N=1789)

|                                |                                             | Number of<br>events with<br>attribute | Potentially<br>preventable HOB<br>events, n (%) | Bivariate<br>(unadjusted) OR<br>(95% CI) | Adjusted OR<br>(95% CI) |
|--------------------------------|---------------------------------------------|---------------------------------------|-------------------------------------------------|------------------------------------------|-------------------------|
| Demographic<br>characteristics | Neonates (0–27 days)*                       | 62                                    | 17 (27.4)                                       | 0.68 (0.38 to 1.19)                      | Reference for age       |
|                                | Infants and toddlers (28 days to 23 months) | 87                                    | 35 (40.2)                                       | 1.23 (0.79 to 1.91)                      | 2.09 (0.92 to 4.72)     |
|                                | Children (2–11 years)                       | 74                                    | 18 (24.3)                                       | 0.57 (0.33 to 0.98)                      | 1.76 (0.70 to 4.40)     |
|                                | Adolescents (12–17 years)                   | 62                                    | 12 (19.3)                                       | 0.42 (0.22 to 0.80)                      | 1.12 (0.41 to 3.04)     |
|                                | Adult (18 years and older)                  | 951                                   | 345 (36.2)                                      | 1.07 (0.88 to 1.30)                      | 1.88 (0.95 to 3.74)     |
|                                | Older adult (65 years and older)            | 553                                   | 209 (37.8)                                      | 1.15 (0.94 to 1.42)                      | 2.01 (0.998 to 4.04)    |
|                                | Race—White                                  | 1125                                  | 390 (34.6)                                      | 0.90 (0.74 to 1.10)                      | —†                      |
|                                | Race—Black                                  | 459                                   | 183 (39.8)                                      | 1.28 (1.03 to 1.60)                      | —†                      |
|                                | Race—Other                                  | 91                                    | 21 (23.1)                                       | 0.53 (0.32 to 0.87)                      | —†                      |
|                                | Sex—Male                                    | 1076                                  | 380 (35.3)                                      | 0.98 (0.80 to 1.19)                      | —‡                      |

# Tables



**Table 1.** Characteristics of the Patients and Therapies at Baseline.\*

| Characteristic or Therapy                      | Vasopressor Group<br>(N = 481) | Fluids Group<br>(N = 482) |
|------------------------------------------------|--------------------------------|---------------------------|
| Median age (IQR) — yr                          | 68 (58–77)                     | 69 (56–77)                |
| Male sex — no. (%)                             | 281 (58.4)                     | 302 (62.7)                |
| Median weight — kg†                            | 79 (65–95)                     | 78 (66–94)                |
| Usual residence — no. (%)                      |                                |                           |
| Home                                           | 465 (96.7)                     | 452 (93.8)                |
| Long-term care facility‡                       | 16 (3.3)                       | 30 (6.2)                  |
| Median Charlson Comorbidity Index score (IQR)§ | 1 (0–3)                        | 1 (0–3)                   |
| Median APACHE II score (IQR)¶                  | 18 (15–23)                     | 18 (14–22)                |
| Median modified SOFA score (IQR)¶              | 4 (3–6)                        | 4 (3–6)                   |
| Median systolic blood pressure (IQR) — mm Hg   | 85 (79–92)                     | 86 (80–91)                |
| Median lactate level (IQR) — mmol/liter        | 3.3 (2.5–4.7)                  | 3.2 (2.4–4.5)             |



**Table 2. Fluid and Vasopressor Administration (24-Hour Intervention Period).**

| Variable                                                                  | Vasopressor Group<br>(N=481) | Fluids Group<br>(N=482) | Difference<br>(95% CI)* |
|---------------------------------------------------------------------------|------------------------------|-------------------------|-------------------------|
| Median volume of IV fluid administered (IQR) — ml†                        |                              |                         |                         |
| 0 to 1 hr                                                                 | 185 (0 to 500)               | 1000 (500 to 1080)      | −800 (−930 to −670)     |
| 0 to 6 hr                                                                 | 500 (250 to 1000)            | 1500 (1000 to 2091)     | −1000 (−1088 to −884)   |
| 6 to 24 hr                                                                | 480 (0 to 1100)              | 600 (0 to 1256)         | −120 (−437 to 0)        |
| 0 to 24 hr                                                                | 1140 (500 to 2120)           | 2248 (1500 to 3332)     | −1108 (−1395 to −850)   |
| Median volume of IV fluid administered (IQR) — ml/kg†                     |                              |                         |                         |
| 0 to 1 hr                                                                 | 2 (0 to 6)                   | 10 (5 to 16)            | −9 (−10 to −7)          |
| 0 to 6 hr                                                                 | 7 (3 to 14)                  | 20 (13 to 27)           | −13 (−15 to −12)        |
| 6 to 24 hr                                                                | 5 (0 to 14)                  | 8 (0 to 17)             | −3 (−5 to −1)           |
| 0 to 24 hr                                                                | 14 (6 to 27)                 | 29 (18 to 43)           | −15 (−18 to −12)        |
| Vasopressor initiation, 0 to 24 hr                                        |                              |                         |                         |
| Patients — no. (%)‡                                                       | 416 (86.5)                   | 326 (67.6)              | 18.9 (13.3 to 24.5)     |
| Median time to vasopressor initiation (IQR) — hr§                         | 0.4 (0.2 to 0.9)             | 1.4 (0.4 to 3.1)        | −1.0 (−1.2 to −0.9)     |
| Vasopressor administration by peripheral venous catheter — no. (%)        | 346 (71.9)                   | 267 (55.4)              | 16.5 (10.5 to 22.4)     |
| Duration of vasopressor administration by peripheral venous catheter — hr | 6.2 (3.4 to 14.9)            | 5.7 (3.0 to 18.7)       | 0.5 (−1.1 to 1.7)       |
| Central venous catheter in situ — no. (%)¶                                | 188 (39.1)                   | 180 (37.3)              | 1.7 (−4.6 to 8.1)       |
| Vasopressor infusion by central venous catheter — no. (%)                 | 179 (37.2)                   | 159 (33.0)              | 4.2 (−1.8 to 10.2)      |

\* Differences are reported as differences in the medians for continuous variables and as percentage-point differences for percentages.

† Data regarding fluid administration were collected during the 24-hour intervention period unless a patient was transferred to a noncritical area of the hospital or to a nonparticipating hospital before completion of the period. Analyses of fluid volume per kilogram of body weight were restricted to patients with recorded body weight (469 patients in the vasopressor group and 465 in the fluids group). The interval from 0 to 1 hour represents the time from randomization to the end of the first full hour after randomization.

‡ Vasopressor infusion included one or more of the following agents at any dose for at least 30 minutes: norepinephrine, 244 of 385 patients (63.4%) in the vasopressor group and 207 of 342 (60.5%) in the fluids group; epinephrine, 17 of 362 (4.7%) and 25 of 333 (7.5%), respectively; vasopressin, 62 of 368 (16.8%) and 59 of 334 (17.7%); metaraminol, 128 of 371 (34.5%) and 113 of 338 (33.4%); and phenylephrine, 2 of 361 (0.6%) and 0 of 331.

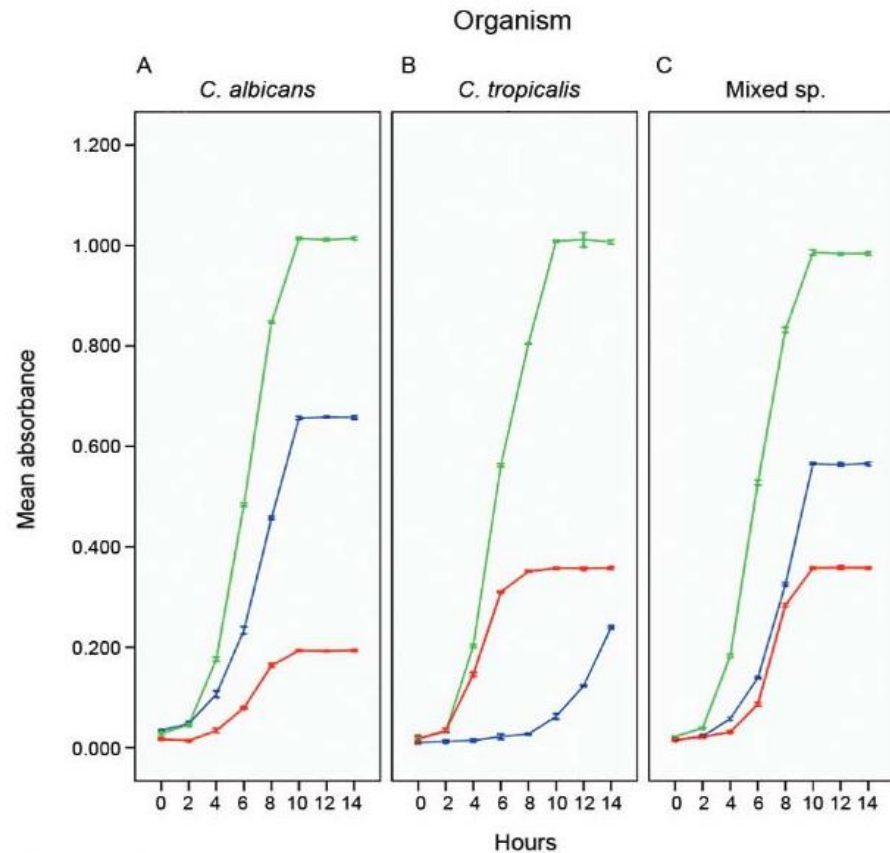
§ Time to vasopressor initiation is reported for patients who received a vasopressor infusion (416 patients in the vasopressor group and 331 in the fluids group). Patients who received a vasopressor infusion before randomization were assigned 0 hours as the time of vasopressor initiation.

¶ Data shown are for central venous catheters or peripherally inserted central catheters.

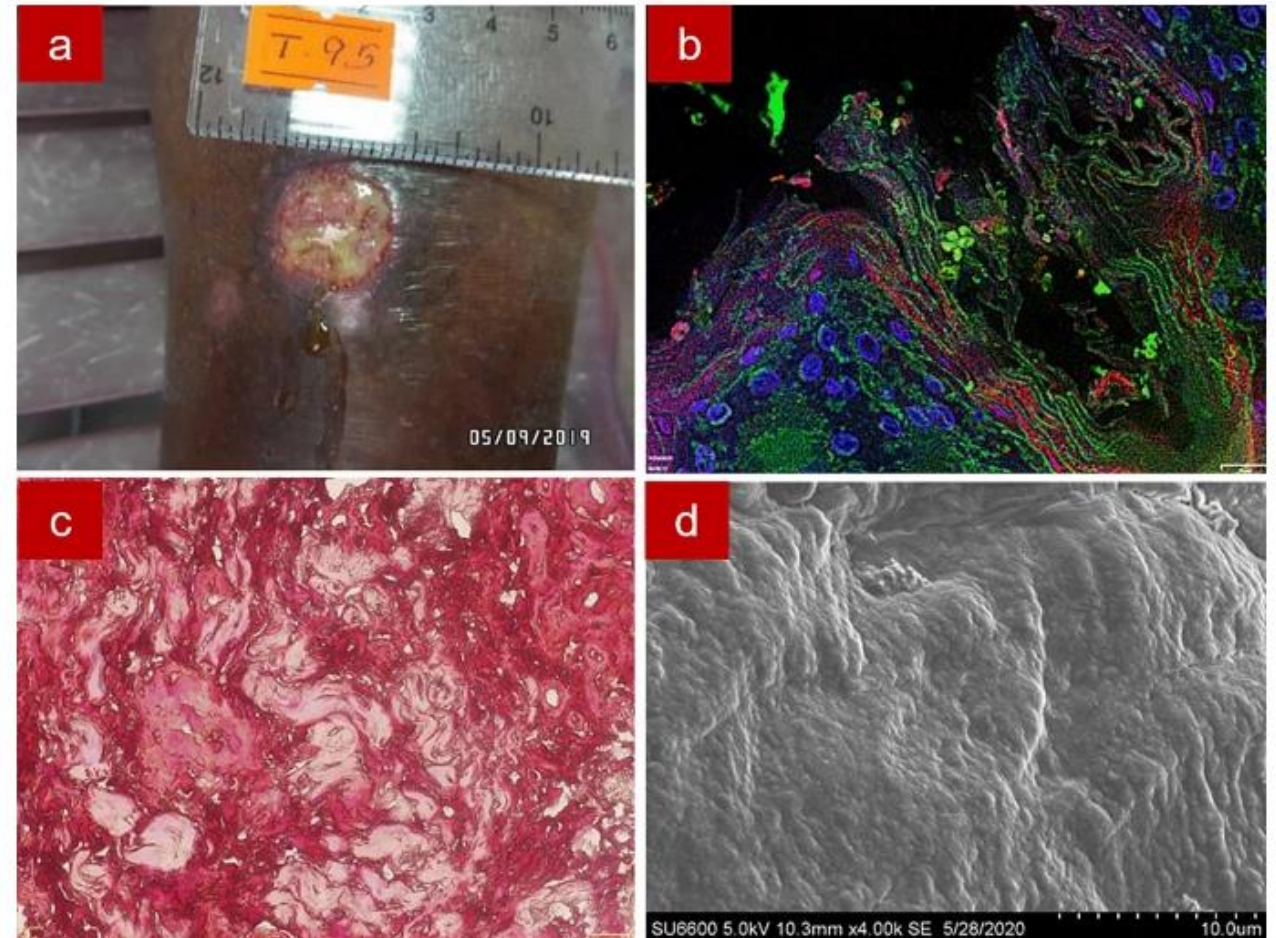


# Figure legends

**Fig. 1** : growth curves of planktonic *Candida* in three different culture media: yeast nitrogen base (YNB), sabouraud dextrose broth (SDB) and RPMI 1640. *C. albicans* (A), *C. tropicalis* (B) and 1:1 mixed species (C) growth in YNB, SDB and RPMI. Data are presented as mean ( $\pm$  standard deviation) of three independent experiments performed in triplicates. 



**Figure 8**



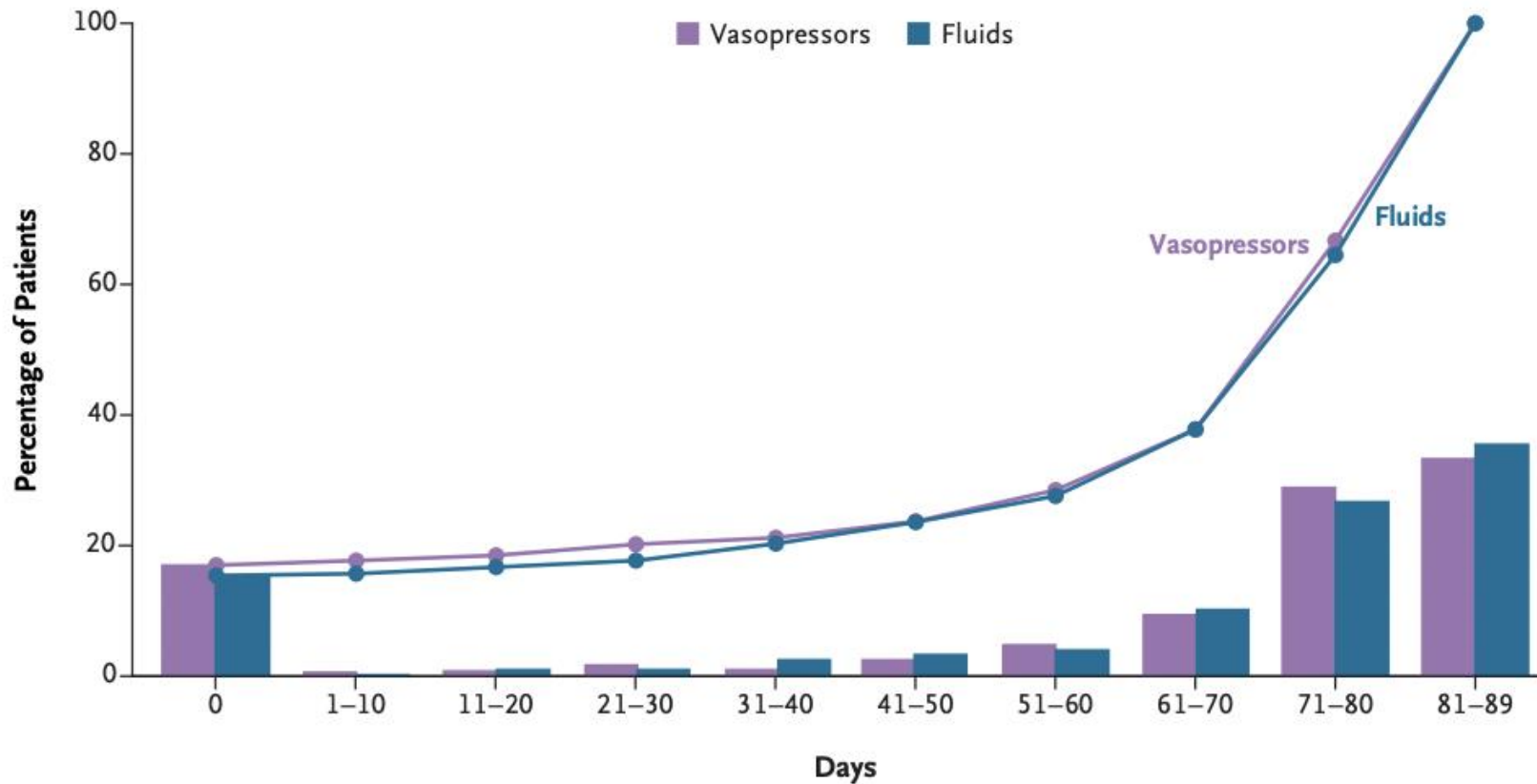
Sample 27. Image of a wet ulcer of 8 weeks duration in the lower limb with green colour pus discharge (a); Fluorescence in situ hybridization showing bacteria in red with the CY3 tagged Eu bacterial probe, extracellular polymeric substances in green with Concavalin A conjugated Alexa Fluor 488 and tissue nuclei in blue with DAPI (b); Gram staining showing gram-negative rods (c); Scanning electron microscopy showing bacteria embedded in smooth extracellular polymeric substance (d).

# Figures

For trends



**A** Days Alive and out of the Hospital from Randomization to Day 90



**Figure 2 (facing page).** Distribution of Days Alive and out of the Hospital to Day 90 and Subgroup Analyses for the Primary Outcome.

Panel A shows the distribution of days alive and out of the hospital from randomization to day 90 (the primary outcome) among patients in the vasopressor group or the fluids group. Patients who died before day 90 were considered to have had 0 days alive and out of the hospital at day 90. Points on the lines indicate the cumulative percentage of patients in each group for whom the primary outcome was ascertained at each time point. Panel B shows the median difference in days alive and out of the hospital to day 90 (vasopressor group vs. fluids group), with 95% confidence intervals overall and for prespecified subgroups. The overall estimate includes imputed values for the primary outcome (three patients were lost to follow-up), whereas subgroup analyses were performed without imputation. Square sizes are proportional to subgroup size and horizontal bars represent 95% confidence intervals. Acute Physiology and Chronic Health Evaluation II (APACHE II) scores range from 0 to 71, with higher scores indicating greater severity of illness. Prerandomization fluid volume was dichotomized at the median volume. Confidence intervals were not adjusted for multiplicity and should not be used in place of hypothesis testing.

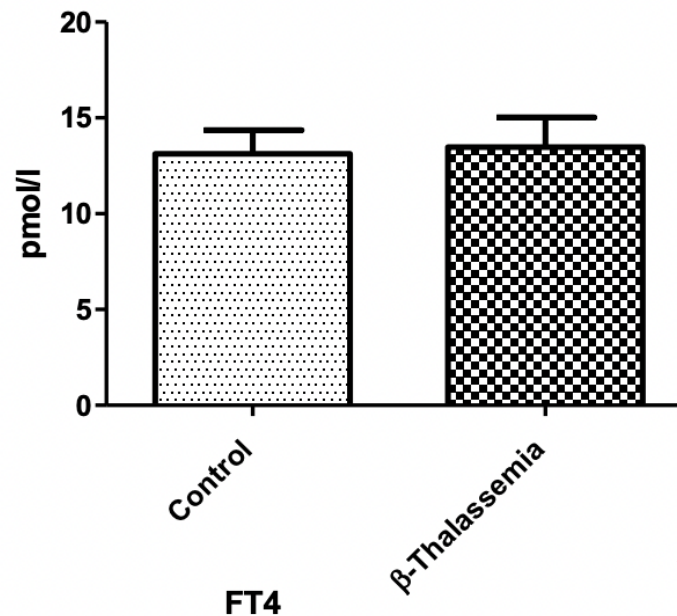


# Don'ts: Table and figure for same results



**Table 1.** Shows the comparison levels of parameters between  $\beta$ -thalassemia patients and control group

| Parameters                 | Control<br>Mean $\pm$ SD | $\beta$ -Thalassemia<br>Mean $\pm$ SD | P-value   |
|----------------------------|--------------------------|---------------------------------------|-----------|
| Age (years)                | 13.34 $\pm$ 2.74         | 14.08 $\pm$ 3.02                      | NS        |
| FT4 (pmol/l)               | 13.13 $\pm$ 1.23         | 13.47 $\pm$ 1.56                      | NS        |
| TSH ( $\mu$ U/ml)          | 2.72 $\pm$ 1.01          | 3.86 $\pm$ 2.7 1                      | p < 0.05  |
| Estradiol (pg/ml)          | 30.60 $\pm$ 14.68        | 13.82 $\pm$ 9.06                      | p < 0.01  |
| Testosterone (ng/ml)       | 3.71 $\pm$ 1.32          | 1.22 $\pm$ 0.83                       | p < 0.001 |
| 25-hydroxy vitamin D ng/mL | 14.03 $\pm$ 5.96         | 11.11 $\pm$ 4.36                      | p < 0.05  |



Poor Figure caption

**Figure 1.** Comparison the average level of FT4 in the patients and control group.

# Discussion



Not another RESULTS section or an INTRODUCTION section

First paragraph: **What did we find?**  
(Principle findings)

Second paragraph: **How do our findings compare with previous findings?**  
(Agreements, discrepancies, possible explanations)

Third paragraph: **Why did this happen?**  
(Biological or clinical interpretation)

Fourth paragraph: **Strengths and limitations**

Last paragraph: **Implications and conclusions**

# THE DISCUSSION

- End with a **short summary** or **conclusion** on the study's significance
- Show relationships among observed facts
- Present principles, relationships, and generalizations from the results
- Highlight exceptions or lack of correlations; define unresolved points
- Compare your results with previously published work
- Discuss theoretical implications and possible practical applications
- Clearly state your conclusions
- Summarize evidence supporting each conclusion
- Highlight strengths and limitations of the study



# Poor discussion



Our study showed that FT4 levels were in normal range in all patients compared with control group, whereas TSH level in patients were significantly higher than control group.

Jain (1994) reported that in the  $\beta$ -thalassemia patients, the mean serum total T4 and T3 levels were significant lower ( $p < 0.001$ ) and TSH level was higher than control group. Other study was demonstrated significant ( $p < 0.05$ ) increased TSH ( $3.5 \pm 1.7 \mu\text{IU/ml}$ ) in the thalassemia patients, when compared with healthy control group ( $2 \pm 1.2 \mu\text{IU/ml}$ ), those results showed 20% with subclinical hypothyroid (Salih and Al-Mosawy, 2013). Whereas other study showed that the serum level of T4 was lower in the

$\beta$ -thalassemia patients, when compared to the control group and TSH level in the patient group was higher than the control group (Asad *et al.*, 2016).

Our studies have shown that 23.68 percentages from  $\beta$ -thalassemia patients had subclinical hypothyroidism, which was in good agreement with the study by Malik *et al.*, (2010). Additionally, our finding disagrees with Mula-Abed *et al.* (2008), Pirincciola *et al.* (2011) that the

# Good discussion



## Discussion

In this multicenter, randomized trial involving patients presenting to the emergency department with septic shock, hemodynamic resuscitation during the first 24 hours with restricted fluids and early vasopressors, as compared with more liberal fluids and later vasopressors, did not increase the number of days alive and out of the hospital from randomization to day 90. Subgroup analyses of treatment effects and key secondary outcomes, including mortality, appeared to be similar in the two groups.

Our findings are consistent with those in the CLOVERS trial, which showed no mortality benefit at hospital discharge with a 24-hour restricted fluid strategy for patients with sepsis and a systolic blood pressure of less than 100 mm Hg. Our trial enrolled patients that met the Sepsis-3 criteria for septic shock, which ensured inclusion of patients with a well-defined, clinically severe form of septic shock.<sup>6,19</sup> A major difference between our trial and others that evaluated restrictive fluid strategies in septic shock is that we enrolled patients in the emergency department before they had been administered intravenous fluid in the amount of 30 ml per kilogram, allowing us to generate practice-informing data regarding initial fluid resuscitation that has been recommended in guidelines without high-quality evidence.<sup>3,8,20–23</sup>



# Good discussion



tion across the suite of algorithm-guided interventions, patient outcomes in the two groups appeared to be similar.

Our pragmatic trial was conducted across various health care settings, and neither resuscitation targets nor specific measures of responsiveness to fluids were specified.<sup>25</sup> Rather, algorithm-guided therapies were individualized according to usual care, enabling generalizability of our findings to routine practice. Regular monitoring ensured sustained adherence to the intervention, including across geographic regions and over time.

Our trial had certain limitations. Owing to the nature of the intervention, treatment could not

be administered in a blinded manner. The intervention was limited to the first 24 hours and did not control for variables during the subsequent hospitalization, including discharge decisions. However, such decisions occurred later under the care of clinicians who were generally unaware of the treatment assignment, and the potential for bias was probably minimal. Biased ascertainment of intervention-related adverse events was mitigated by a systematic and standardized approach to safety monitoring. However, pulmonary edema events in the fluids group may, in part, have been caused by reporting bias.

Several tertiary time-to-event outcomes, such

# Good discussion



## Final conclusion

Among patients presenting to the emergency department with early septic shock, administration of restricted volumes of fluids and early vasopressors, as compared with greater volumes of fluids and later vasopressors, did not increase the days alive and out of the hospital from randomization to day 90.

# THE ACKNOWLEDGEMENT

- Acknowledge technical help from colleagues or lab members
- Patients
- Focus on contributions that directly helped your work
- Mention sources of equipment, cultures, or materials
- Include financial assistance, such as grants, or fellowships
- Avoid using the word “wish”; instead write **“I thank...”**
- Keep a professional and appreciative tone



# Data sharing



## Why Share Data?

### Benefits of Data Sharing

- Transparency
- Allows verification of findings
- Reproducibility
- Enables others to repeat analyses
- Increased citations
- Shared datasets are often cited separately
- Collaboration
- Facilitates secondary analyses and meta-analyses
- Increasingly required by journals and funders

Deidentified data shared/deposited in a repository

#### Example:

##### Shareable

- ✓ Age
- ✓ Sex
- ✓ Laboratory values
- ✓ Outcomes
- ✓ Cytokine concentrations
- ✓ PCR results

##### Not Shareable

- ✗ Names
- ✗ Hospital numbers
- ✗ Addresses
- ✗ Contact details

# SCIENTIFIC MISCONDUCT



**“Fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results”**

ORI -Office of research Integrity (US)



Concept

- SCIENTIFIC MISCONDUCT
- Lack of knowledge about publication ethics
- Larger, multi-disciplinary and global collaborations
- Increasing pressure on researchers to publish
- Financial inducements compromising integrity



Publication

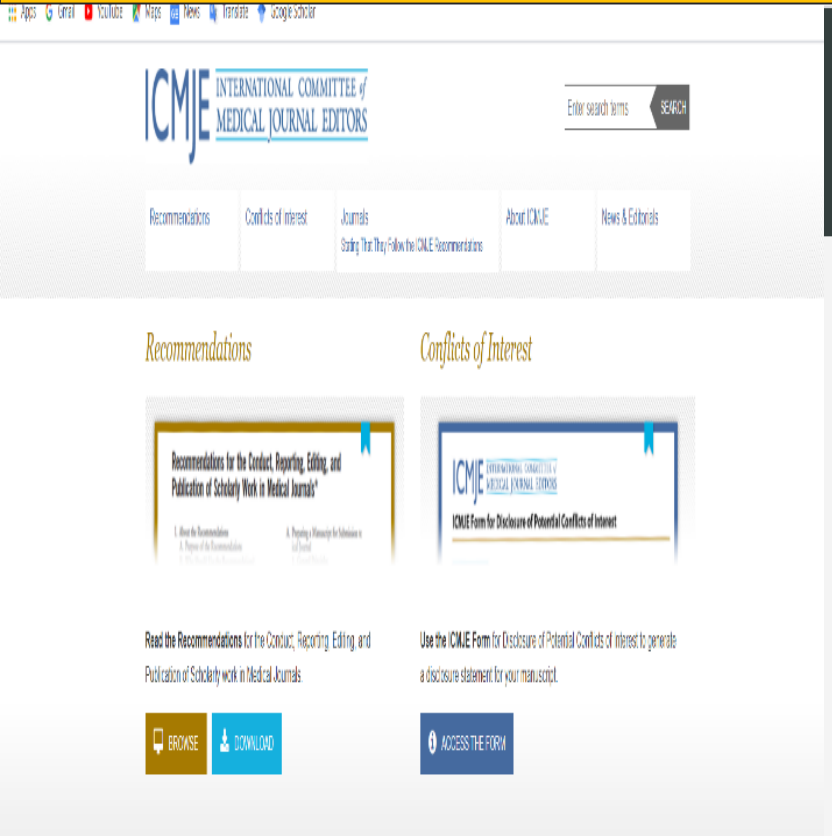
Who are responsible

Researches

Funding bodies

Reviewers/ editor

# International committee of medical journal editors



The screenshot shows the ICMJE website with a navigation bar containing links for Recommendations, Conflicts of Interest, Journals, About ICMJE, and News & Editorials. The main content area features two highlighted sections: 'Recommendations' with a link to 'Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals' and 'Conflicts of Interest' with a link to 'ICMJE Form for Disclosure of Potential Conflicts of Interest'. Both sections include 'Browse' and 'Download' buttons.



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# Committee for publication ethics



The screenshot shows the COPE website with a navigation bar for Guidance, Member resources, and About COPE. The main heading reads 'Promoting integrity in scholarly research and its publication'. Below this, a paragraph states: 'COPE provides leadership in thinking on publication ethics and practical resources to educate and support members, and offers a professional voice in current debates.' A 'Read more' button is located at the bottom of the text.

- Author conflicts
- Plagiarism
- Conflict of interest
- Fabrication and Falsification
- Duplicate submission

# World association for medical editors



The screenshot shows the WAME website with a navigation bar for Home, About Us, Policies, Resources, Support, News, Events, and Contact Us. The main heading reads 'Medical editors should pursue lifelong learning, teaching, both formal and informal, and recognize the need to remedy knowledge deficits in themselves and their coeditors.' Below this is the text '- WAME Professionalism Code of Ethics'.

# AUTHORSHIP CONFLICTS

Author - Who has substantial intellectual contribution to the study (question, design, analysis, interpretation, and written description)

## AVOID



01

### GIFT/GEST AUTHORS

Seniority, reputation, influence, personal favour or in return for payment

02

### GHOST AUTHORS

Who meet authorship criteria but are not listed

## ENCOURAGE



01

### CONTRIBUTIONS

02

### MANUSCRIPT WRITING

03

### APPROVAL OF THE FINAL DRAFT

## How to prevent

Encourage to contribute  
Discuss and decide early  
Educate juniors  
Awareness programmes



## Order of authors:

Authorship, should be “a joint decision of the co authors”

“Authors should be prepared to explain the order in which authors are listed”

## Corresponding author:

Administrative role

Discuss with co-authors at an early stage, and decide in advance

Advice to select somebody whose contact details are not likely to change in the near future

## First and last authors:

The first author is generally who made the greatest contribution to the research

Significance is attached to being the last named author





**TABLE 1** Contributor Roles Taxonomy (CRedit).

| Term              | Definition                                                                                                                                                         |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conceptualization | Ideas; formulation or evolution of overarching research goals and aims                                                                                             |
| Methodology       | Development or design of methodology; creation of models                                                                                                           |
| Software          | Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components |
| Validation        | Verification, whether as a part of the activity or separate, of the overall replication/ reproducibility of results/experiments and other research outputs         |
| Formal analysis   | Application of statistical, mathematical, computational, or other formal techniques to analyse or synthesize study data                                            |
| Investigation     | Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection                                              |
| Resources         | Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools            |

|                              |                                                                                                                                                                                                                 |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data curation                | Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself ) for initial use and later re-use |
| Writing – original draft     | Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation)                                                                     |
| Writing – review and editing | Preparation, creation and/or presentation of the published work by those from the original research group, specifically critical review, commentary or revision – including pre- or post-publication stages     |
| Visualization                | Preparation, creation and/or presentation of the published work, specifically visualization/data presentation                                                                                                   |
| Supervision                  | Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team                                                                        |
| Project administration       | Management and coordination responsibility for the research activity planning and execution                                                                                                                     |
| Funding acquisition          | Acquisition of the financial support for the project leading to this publication                                                                                                                                |

# Sample CRedit author statement

**Zhang San:** Conceptualization, Methodology, Software **Priya Singh.:** Data curation, Writing- Original draft preparation. **Wang Wu:** Visualization, Investigation. **Jan Jansen:** Supervision.: **Ajay Kumar:** Software, Validation.: **Sun Qi:** Writing- Reviewing and Editing,

Prof L.P Samaranayake is among the top ten most cited scholars in the discipline of [Dentistry](#).

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2026, VOL. 18, NO. 1, 2653382  
<https://doi.org/10.1080/20002297.2026.2653382>



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## RESEARCH ARTICLE

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# *S. mutans* level versus past caries experience in predicting future caries

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Lakshman P. Samaranayake<sup>b,d</sup> and Xiaoli Gao<sup>a,e</sup>

<sup>a</sup>Faculty of Dentistry, National University of Singapore, Singapore; <sup>b</sup>Faculty of Dentistry, University of Hong Kong, Hong Kong;  
<sup>c</sup>Faculty of Dentistry, University of Queensland, Australia; <sup>d</sup>Global Research Cell, Dr. D. Y. Patil Dental College and Hospital, Dr. D. Y. Patil Vidyapeeth, Pimpri, Pune, India; <sup>e</sup>Saw Swee Hock School of Public Health, National University of Singapore, Singapore

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## Author contributions

CRedit: **Keerthika Natarajan**: Formal analysis, Validation, Writing – original draft, Writing – review & editing; **Chun Hung Chu**: Data curation, Investigation, Methodology, Validation, Writing – review & editing; **Edward Chin Man Lo**: Data curation, Funding acquisition, Investigation, Methodology, Project administration, Validation, Writing – review & editing; **Chaminda J. Seneviratne**: Data curation, Funding acquisition, Investigation, Methodology, Project administration, Validation, Writing – review & editing; **Lakshman P. Samaranayake**: Data curation, Investigation, Methodology, Validation, Writing – review & editing; **Xiaoli Gao**: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Supervision, Validation, Writing – original draft, Writing – review & editing.



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# Distinct microbiome profiles and biofilms in *Leishmania donovani*-driven cutaneous leishmaniasis wounds

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# FABRICATION AND FALSIFICATION



## Data fabrication

Making up of research findings

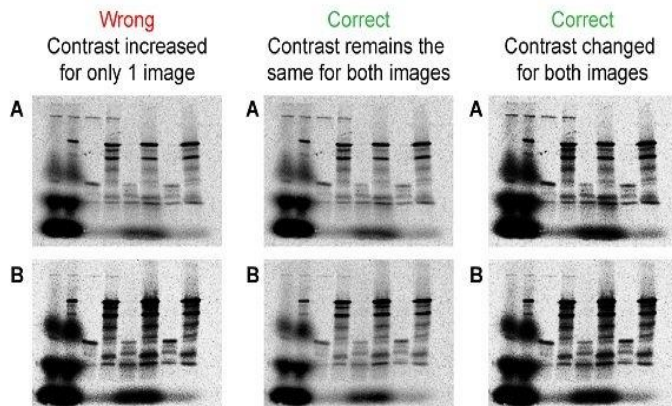
## Data falsification

Manipulating research data with the intention of giving a false impression

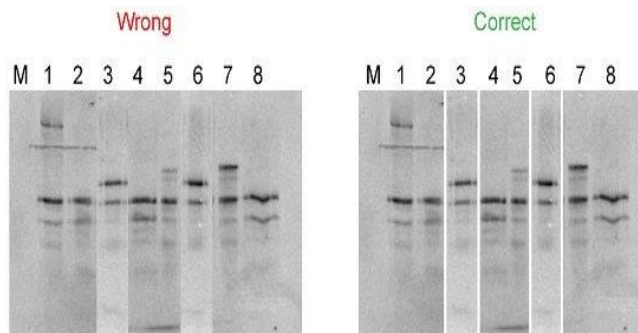
- Manipulating images
  - gels, radiological images
- Removing/ changing outliers or “inconvenient” results



Image contrast



Gel Splicing



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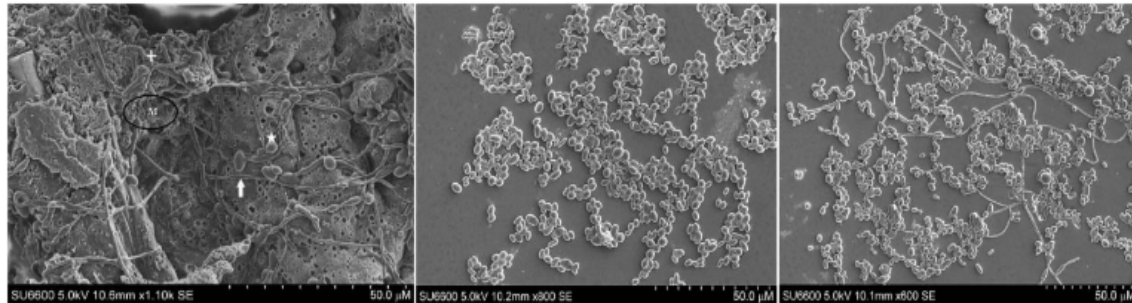
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Always keep the original image



Fig. 4 : (A) scanning electron micrograph of a 48 h old, *Candida albicans* biofilm in RPMI 1640 medium. Note the architecture of 72 h old mature biofilm with profuse extracellular matrix (M), hyphal elements (white solid arrow) blastopores (★), some bearing bud-scars (+) (Scale indicates 50.0  $\mu$ M); (B) scanning electron micrograph of a 48 h old, *C. tropicalis* biofilms in RPMI 1640 medium. Note the architecture of 72 h old mature biofilm devoid of extracellular matrix and relatively sparse growth compared to Fig. 4A above (Scale indicates 50.0  $\mu$ M); (C) scanning electron micrograph of a 48 h old, 1:1 mixed species biofilm of *C. albicans* and *C. tropicalis* in RPMI 1640 medium. Note the architecture of 72 h old mature of 1:1 mixed species biofilm in RPMI 1640 medium devoid of extracellular matrix but clearly showing hyphal elements of *C. albicans* intermixed with *C. tropicalis* blastospores devoid of hyphae (Scale indicates 50.0  $\mu$ M). [\[Z\]](#)



## ERRATUM

In the article “Culture media profoundly affect *Candida albicans* and *Candida tropicalis* growth, adhesion and biofilm development”, DOI number: 10.1590/0074-02760160294, published in *Mem Inst Oswaldo Cruz*, Rio de Janeiro, Vol. 111(11): 697-702, 2016:

On page 701, Fig. 4B-C should be replaced by the Fig. 4Bs-Cs below:

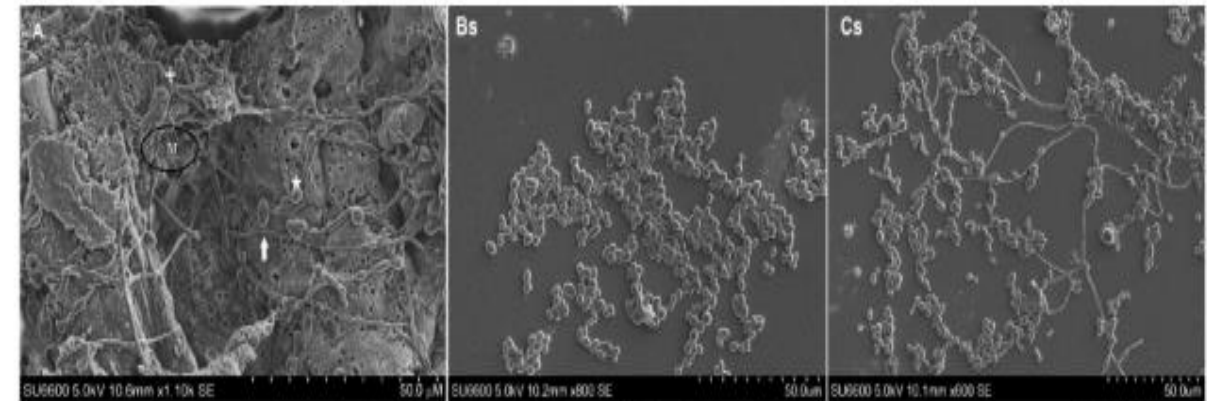
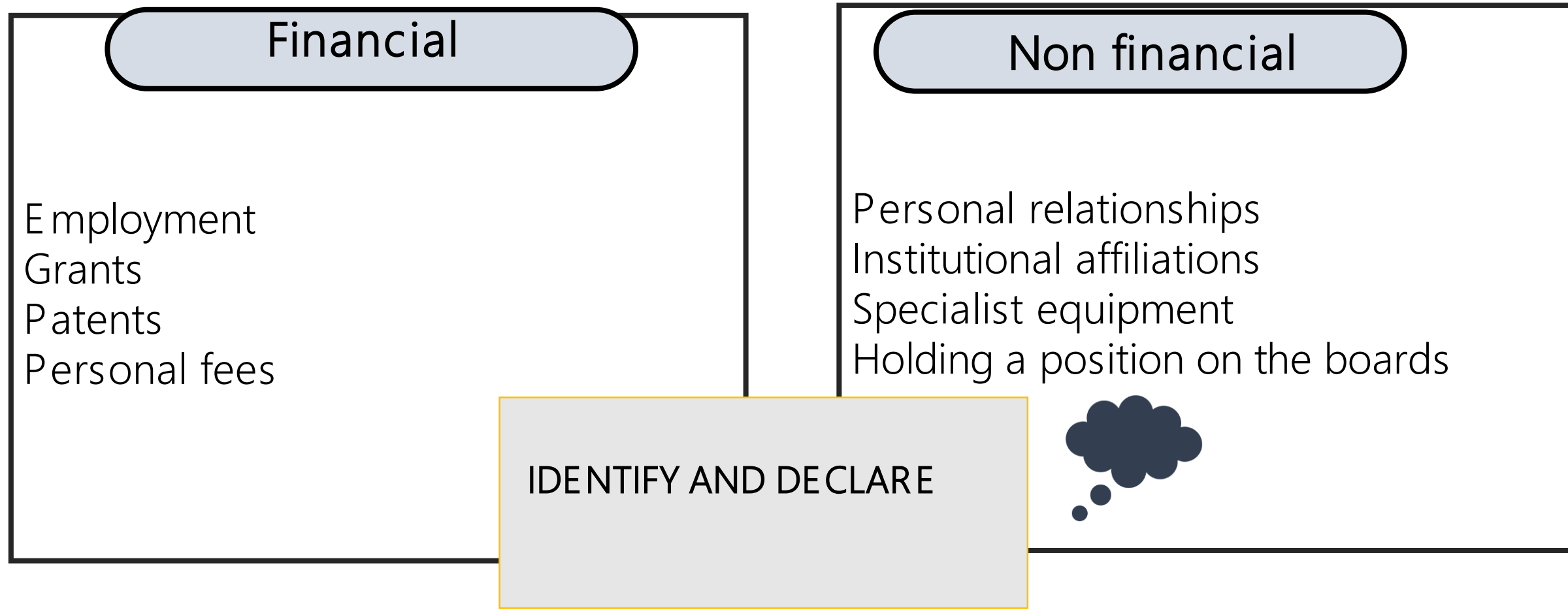


Fig. 4: (A) scanning electron micrograph of a 48 h old, *Candida albicans* biofilm in RPMI 1640 medium. Note the architecture of 72 h old mature biofilm with profuse extracellular matrix (M), hyphal elements (white solid arrow) blastopores (★), some bearing bud-scars (+) (Scale indicates 50.0  $\mu$ M); (Bs) scanning electron micrograph of a 48 h old, *C. tropicalis* biofilms in RPMI 1640 medium. Note the architecture of 72 h old mature biofilm devoid of extracellular matrix and relatively sparse growth compared to Fig. 4A above (Scale indicates 50.0  $\mu$ M); (Cs) scanning electron micrograph of a 48 h old, 1:1 mixed species biofilm of *C. albicans* and *C. tropicalis* in RPMI 1640 medium. Note the architecture of 72 h old mature of 1:1 mixed species biofilm in RPMI 1640 medium devoid of extracellular matrix but clearly showing hyphal elements of *C. albicans* intermixed with *C. tropicalis* blastospores devoid of hyphae (Scale indicates 50.0  $\mu$ M).

# CONFLICTS OF INTEREST

**“A participant in the publication process (author, reviewer, or editor) has a competing interest that could influence the responsibilities in the publication process”**







# **DUPLICATE SUBMISSION**

Submitting/ publishing the same study to two journals

# **REDUNDANT / SALAMI PUBLICATION**

Study is split into several parts and submitted to two or more journals



# RECOMMENDATIONS

**Better education on publication guidelines and ethics**

**Read and understand the journal author guideline prior submission**

**Promote good conduct of medical research**

**Change criteria from quantity to quality when papers are used for assessments**

postgraduate degrees???

promotions???

# Summary



Good Science • Good Writing • Good Ethics = Greater Impact ♥

