



# A Guide to Smart Literature Searches and Critical Appraisal for NHS Professionals

Liz Lourandos  
Knowledge Specialist



# Today's Session

- SWL Libraries
- OpenAthens account
- Why are you searching?
- Searching tips – includes PICO and Boolean operators
- Additional Tips, including applying limits
- Healthcare Databases: Medline and EMBASE via OVID, TRIP via TRIP.
- Evaluate what you find



# South West London NHS Libraries

- Croydon Health Services NHS Trust
- Epsom & St Helier University Hospitals NHS Trust
- Kingson and Richmond NHS Foundation Trust
- St George's University Hospitals NHS Foundation Trust

# Croydon Health Services NHS Trust

- Staff and students
- Monday – Friday 09:00-17:00. 24/7 access on application.
- Online membership form accessible from the library catalogue - <https://croydonhealth.koha-ptfs.co.uk/cgi-bin/koha/opac-memberentry.pl>
- Future NHS site <https://future.nhs.uk/CroydonLibraryUG/grouphome>
- <https://croydonhealthlibrary.uk/>



SCAN ME



# Croydon Health Services

- Physical Library
  - Books and journals from our or other libraries
  - Study spaces & IT facilities
  - The Pod, Silent Study Room and IT Suite
  - Library Staff:
    - Literature searches, , information skills training, article requests and support
- Future NHS <https://future.nhs.uk/CroydonLibraryUG/grouphome>
- <https://croydonhealthlibrary.uk/>

# Croydon Health Services

- Virtual Library
  - Library website
  - Electronic Resources and Quick Links
  - Library Catalogue
  - BMJ Case Reports
  - KnowledgeShare
  - UpToDate
- Future NHS site <https://future.nhs.uk/CroydonLibraryUG/grouphome>
- <https://croydonhealthlibrary.uk/>

# Epsom & St Helier University Hospitals NHS Trust

- Hirson Library – St Helier Hospital, 8.30 to 5pm
- Sally Howel Library – Epsom Hospital, 8.30 to 4.30pm (8.30am – 9.30am unmanned)
- Online membership form accessible from the library catalogue - <https://esth.koha-ptfs.co.uk/cgi-bin/koha/opac-memberentry.pl>
- <https://www.epsom-sthelier.nhs.uk/lis>



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# Epsom & St Helier University Hospitals NHS Trust

- Physical Library
  - Books and journals from our or other libraries
  - PCs, Internet access and support
  - Library Staff:
    - Training, literature searches, article requests and support
  - Games

<https://www.epsom-sthelier.nhs.uk/lis>



# Epsom & St Helier University Hospitals NHS Trust

- Virtual Library
  - Library website
  - Electronic Resources and Quick Links
  - Library Catalogue
  - eLearning
  - Point of care tools
  - KnowledgeShare
  - Audiobooks

<https://www.epsom-sthelier.nhs.uk/lis>

# Kingson and Richmond NHS Foundation Trust

- Stenhouse Library
- Staffed hours: Monday-Friday 09:00-17:00
- Online membership form accessible from the library catalogue - <https://esth.koha-ptfs.co.uk/cgi-bin/koha/opac-memberentry.pl>
- <https://www.kingstonandrichmond.nhs.uk/services/healthcare-professionals/education-centre/stenhouse-library>



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# Kingston and Richmond NHS Foundation Trust

- Physical Library
  - Books and journals from our or other libraries
  - PCs, Internet access and support
  - Library Staff:
    - Training, literature searches, article requests and support

<https://www.kingstonandrichmond.nhs.uk/services/healthcare-professionals/education-centre/stenhouse-library>

# Kingson and Richmond NHS Foundation Trust

- Virtual Library
  - Library website
  - Electronic Resources and Quick Links
  - Library Catalogue
  - Point of care tools
  - KnowledgeShare

<https://www.kingstonandrichmond.nhs.uk/services/healthcare-professionals/education-centre/stenhouse-library>

# St George's University Hospitals NHS Foundation Trust

- St George's Library
- 8am to 6pm, Staffed Monday to Friday
- <https://www.stgeorges.nhs.uk/gps-and-clinicians/library-services-from-st-georges-library/>



SCAN ME



# St George's University Hospitals NHS Foundation Trust

- Physical Library
  - Books and journals from our or other libraries
  - PCs, Internet access and support
  - Library Staff:
    - Training, literature searches, article requests and support

<https://www.stgeorges.nhs.uk/gps-and-clinicians/library-services-from-st-georges-library/>

# St George's University Hospitals NHS Foundation Trust

- Virtual Library
  - Library website
  - Electronic Resources and Quick Links
  - Library Catalogue
  - Point of care tools

<https://www.stgeorges.nhs.uk/gps-and-clinicians/library-services-from-st-georges-library/>

# What is OpenAthens?



- A single username and password for NHS staff to access e-resources
- A form of authentication – recognises that you are eligible to access the resource



# What resources can I access?

- All the resources authenticated via OpenAthens are paid for at either:
  - National level
  - Regional level
  - Local level
- Not all resources (e.g. point of care tools, full-text journal articles) are available

# Why are you searching?

I need evidence to inform...

- the care of a specific patient
- changes to the delivery of a service
- a business case for a new role or service
- a policy/guideline update
- my role/best practice

# Searching Tips

- Planning – PICO
- Combining
- Applying Limits
- Additional Tips

# Planning – PICO

Break the search into concepts PICO framework

- **P** - **P**opulation (or Patient)
- **I** - **I**ntervention
- **C** - **C**omparison (or Control)
- **O** - **O**utcome

# Planning – PICO

Patient, problem or population	Age, sex, race, condition or disease, care setting, etc
Intervention or exposure	Type of intervention or exposure e.g. test, therapy or clinical procedure, harmful substance, etc
Comparison	Alternative interventions, if applicable
Outcomes	Measurement, result, effect



**A scenario - Interventions to support the mental health of health-care workers in relation to Covid-19**

# P - Population (or Patient)

14 responses





**A scenario - Interventions to support the mental health of health-care workers in relation to Covid-19**





# I - Intervention

14 responses





**A scenario - Interventions to support the mental health of health-care workers in relation to Covid-19**



## C - Comparison (or Control)

3 responses

other settings

no intervention

other health issues





**A scenario - Interventions to support the mental health of health-care workers in relation to Covid-19**



# O - Outcome

8 responses

well being

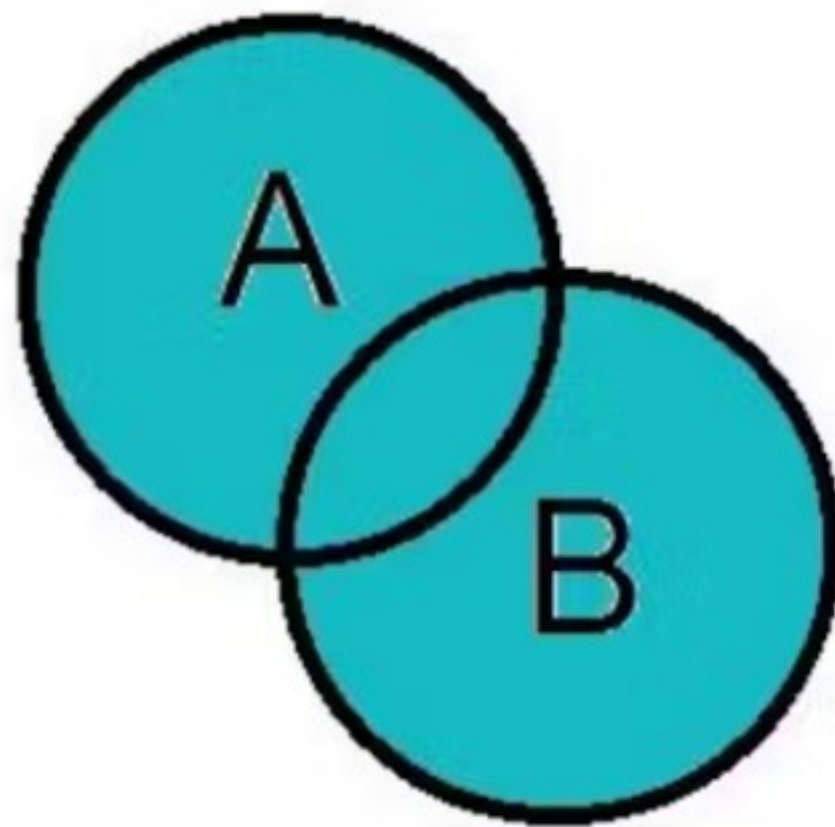
improved concentration  
positive change in mood  
positive test result  
stress sick leave taken  
improved work capacity  
feedback

# Combining

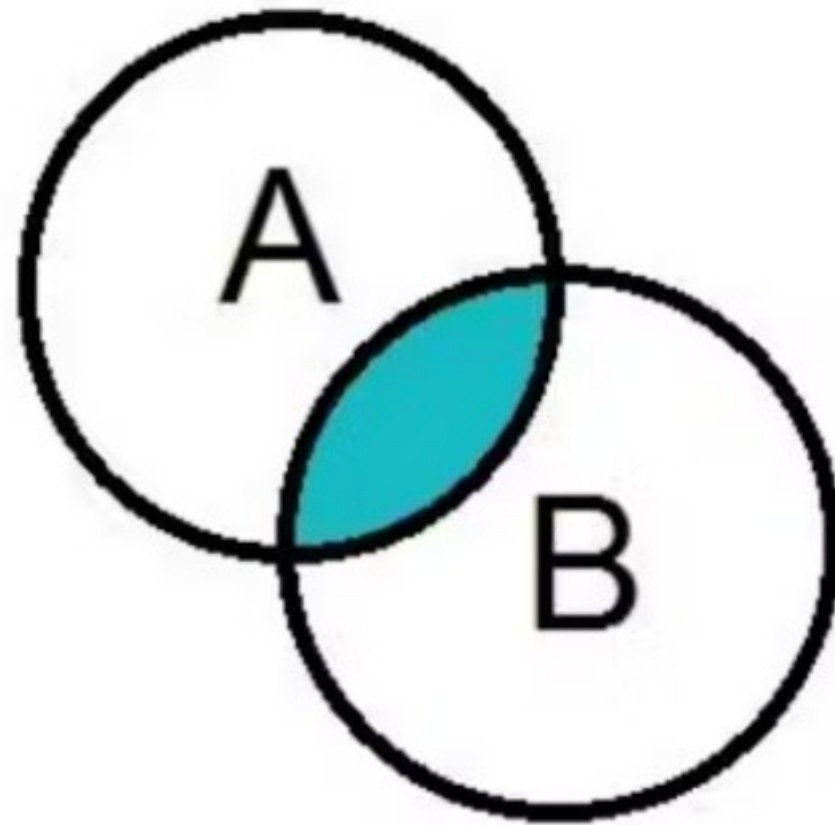
The relationships between your concepts are created using the options 'AND' 'OR' 'NOT'  
These are known as Boolean Operators

- **OR To search for EITHER terms** (increases) Mental Health OR Wellbeing
- **AND To search for BOTH terms** (reduces) Nurses AND Midwives
- **NOT To search for 1 term NOT the other** Nurses NOT Doctors

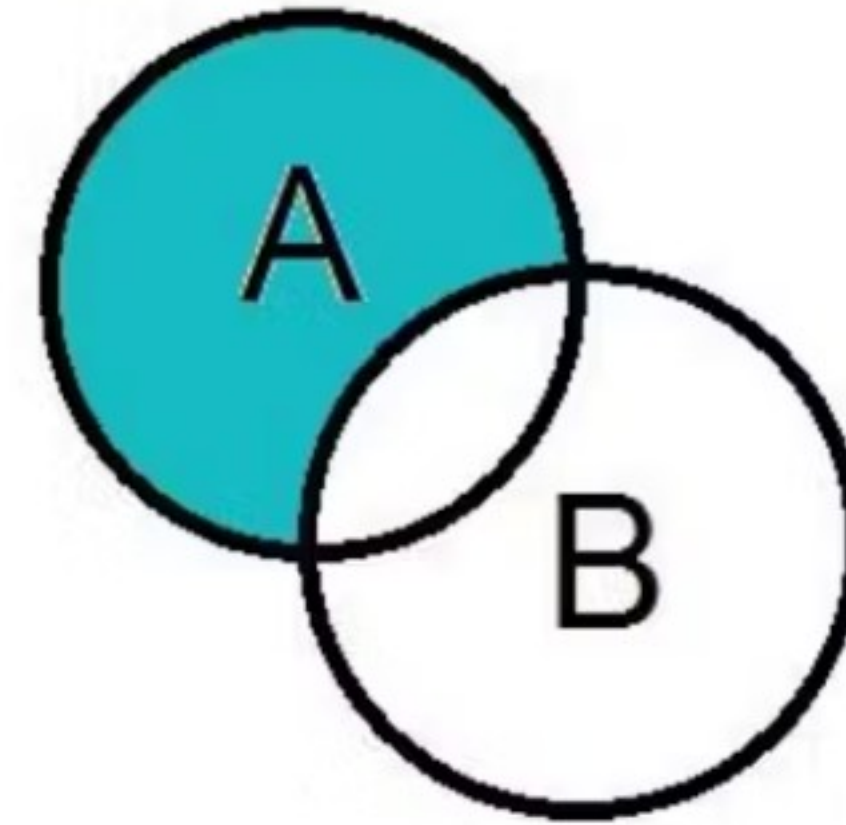
# Visualise it



A OR B



A AND B



A NOT B

# Applying Limits

- **Publication Year** - Narrows your results to particular year/period
- **Age** - neonates; children; adults; older people
- **Language** - English Language
- **Publication type** - systematic review; journal article; PDF file



# Additional Tips

## Exact phrase search

Use “inverted commas” to search an exact phrase or title

## Wildcard search \* \$

To include all forms of a word

eg: clinic\* will return clinician, clinical, clinic, clinics

# Where to search

Looking for	Use
Journal articles on a topic	Use health & social care databases
Guidelines/summaries	Use NICE Guidance OR the BMJ Best Practice point of care tool
A specific report/article	Use the organisation's website or Google or the BrowZine E-Journals A-Z List
Examples of good practice	Use the FabNHS

# Health & Social Care Databases

- **AMED** - physiotherapy, OT, rehabilitation & complementary medicine
- **British Nursing Index** - small database of popular British nursing journals
- **CINAHL** - nursing and allied health, including recent US research
- **EMBASE** - European database of biomedical and pharmacological literature
- **EMCARE** - nursing and allied health

# Health & Social Care Databases

- **HMIC** (Health management information consortium) - a compilation of DH-Data (health administration & toxicology) and Kings Fund (health improvement & management)
- **Medline** - the largest database, covers clinical, medical and nursing literature
- **PsycINFO** - psychology, psychiatry and related disciplines)
- **Social Policy & Practice** - behavioural and social sciences, social work and public health

# NHS Knowledge and Library Hub

<https://library.nhs.uk/knowledgehub/>

The screenshot shows the NHS Knowledge and Library Hub website. At the top, a yellow banner reads "Welcome, Guest. Sign in with NHS OpenAthens for full access". Below this is a blue navigation bar with links for "New Search", "Browse Journals", "Register for NHS OpenAthens", and "library.nhs.uk". On the right side of the navigation bar are "Language" and "Help" options.

The main content area features the NHS logo and the title "Knowledge and Library Hub". Below the title, it says "Searching: Health and care evidence, from Health Education England". There is a search bar with the placeholder text "Enter any words" and a "Search" button. Below the search bar are links for "Search Options", "Basic Search", "Advanced Search", "PICO Search", and "Search History".

The page is divided into four columns of resources:

- Clinical decision making**
  - BMJ Best Practice
  - Maudsley Prescribing Guidelines
  - NICE Guidelines
- In-depth searching**
  - AMED
  - British Nursing Index
  - CINAHL
  - Cochrane Library
  - EMBASE
  - EMCARE
  - HMC (Health Management Information Consortium)
  - Medline
- Other resources**
  - NHS Learning Hub
  - Directory of Health Libraries
  - Patient Experience Library
  - How to search the literature effectively
  - Health literacy: you can make a difference
  - Knowledge Mobilisation Framework
  - National Grey Literature Collection
  - NHR Evidence
- NHS OpenAthens**
  - OpenAthens Registration
  - OpenAthens Password Reset
  - Having Problems with OpenAthens?

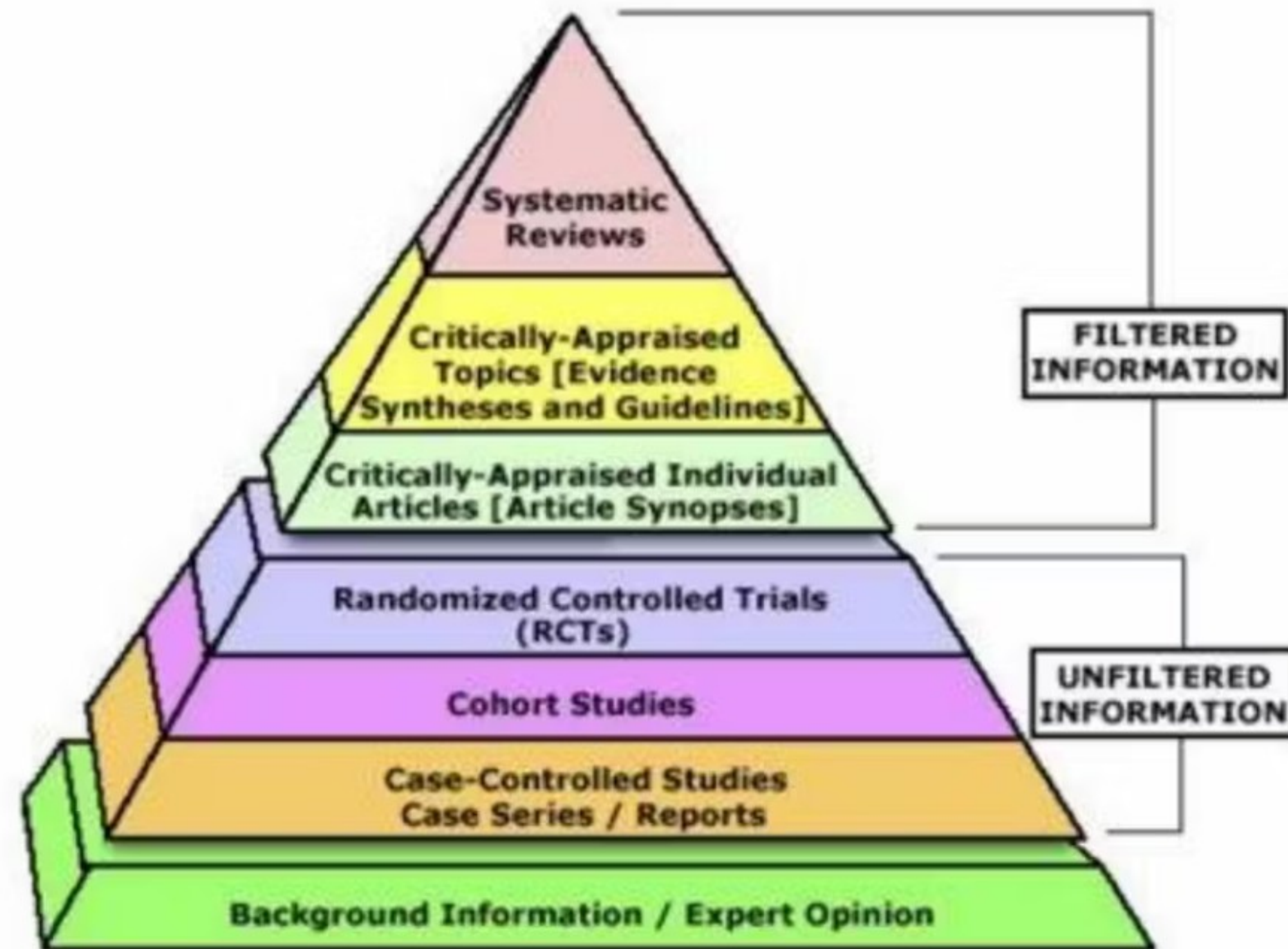
# Evaluate what you find (Critical Appraisal)

Critical appraisal is: "The process of assessing and interpreting evidence by systematically considering its validity, results and relevance." (Cochrane Glossary, c2020)

# Why is critical appraisal important?

- Identify strengths and weaknesses in research
- Is it biased?
- Is it applicable to your local setting/population?
- Focus on the highest quality evidence to guide clinical practice
- Enable evidence based, informed decision making

# Evidence pyramid



Source: [S4Be](#) (Students for Best Evidence)





# Critical Appraisal Skills Programme

<https://casp-uk.net/>

Appraisal checklists for a variety of different study types:

- Randomised Controlled Trials
- Cohort Studies
- Systematic Reviews
- Qualitative studies



# Critical appraisal checklists

<https://casp-uk.net/casp-tools-checklists/>



**CASP**  
Critical Appraisal  
Skills Programme

Study and citation: .....

Section A: Is the basic study design valid for a randomised controlled trial?			
<b>1. Did the study address a clearly focused research question?</b> CONSIDER: Was the study designed to assess the outcomes of an intervention? Is the research question 'focused' in terms of: <ul style="list-style-type: none"> <li>• Population studied</li> <li>• Intervention given</li> <li>• Comparator chosen</li> <li>• Outcomes measured?</li> </ul>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Can't tell <input type="checkbox"/>
<b>2. Was the assignment of participants to interventions randomised?</b> CONSIDER: <ul style="list-style-type: none"> <li>• How was randomisation carried out? Was the method appropriate?</li> <li>• Was randomisation sufficient to eliminate systematic bias?</li> <li>• Was the allocation sequence concealed from investigators and participants?</li> </ul>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Can't tell <input type="checkbox"/>
<b>3. Were all participants who entered the study accounted for at its conclusion?</b> CONSIDER: <ul style="list-style-type: none"> <li>• Were losses to follow-up and exclusions after randomisation accounted for?</li> <li>• Were participants analysed in the study groups to which they were randomised (intention-to-treat analysis)?</li> <li>• Was the study stopped early? If so, what was the reason?</li> </ul>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Can't tell <input type="checkbox"/>
Section B: Was the study methodologically sound?			

Would you use it to change your practice or to recommend changes to care?

**APPRAISAL SUMMARY:** Record key points from your critical appraisal in this box. What is your conclusion about the paper? Would you use it to change your practice or to recommend changes to care/interventions used by your organisation? Could you judiciously implement this intervention without delay?

CNSP  
Critical Appraisal  
Skills Programme

## Bitesize videos



How to critically appraise a RCT following the CASP checklist

10 bitesize videos which address each question in the CASP checklist

[Barts Health Knowledge and Library Services, YouTube, 2021](#)

## BMJ Best Practice

### BMJ Best Practice

### Critical appraisal checklists

- Evidenced based toolkit

<https://bestpractice.bmj.com/info/toolkit/ebm-toolbox/critical-appraisal-checklists/>

- Variety of appraisal checklists

## Framework for assessing systematic reviews

General systematic review (SR) quality criteria	Yes	No	Can't tell
Does the SR explicitly report and perform a comprehensive and reproducible literature search?			
Does the SR formulate a clearly focused question?			
Does the SR's methods section explicitly state the basis for inclusion or exclusion of primary RCTs?			
Does the SR report data from primary RCTs (e.g., size, interventions used, results from individual RCTs)			
Does the SR assess the methodological quality of primary studies, and take these into account where necessary?			
Meta-analysis: does the SR combine primary studies appropriately?			
Meta-analysis: does the SR state how results are combined statistically?			
Meta-analysis: does the SR report absolute numbers as well as appropriate summary statistics?			
Does the SR discuss the reasons for any variations/heterogeneity between individual RCTs/overall results?			
Does the SR report on the clinical relevance/importance of the results?			

Research Objective and Relevance

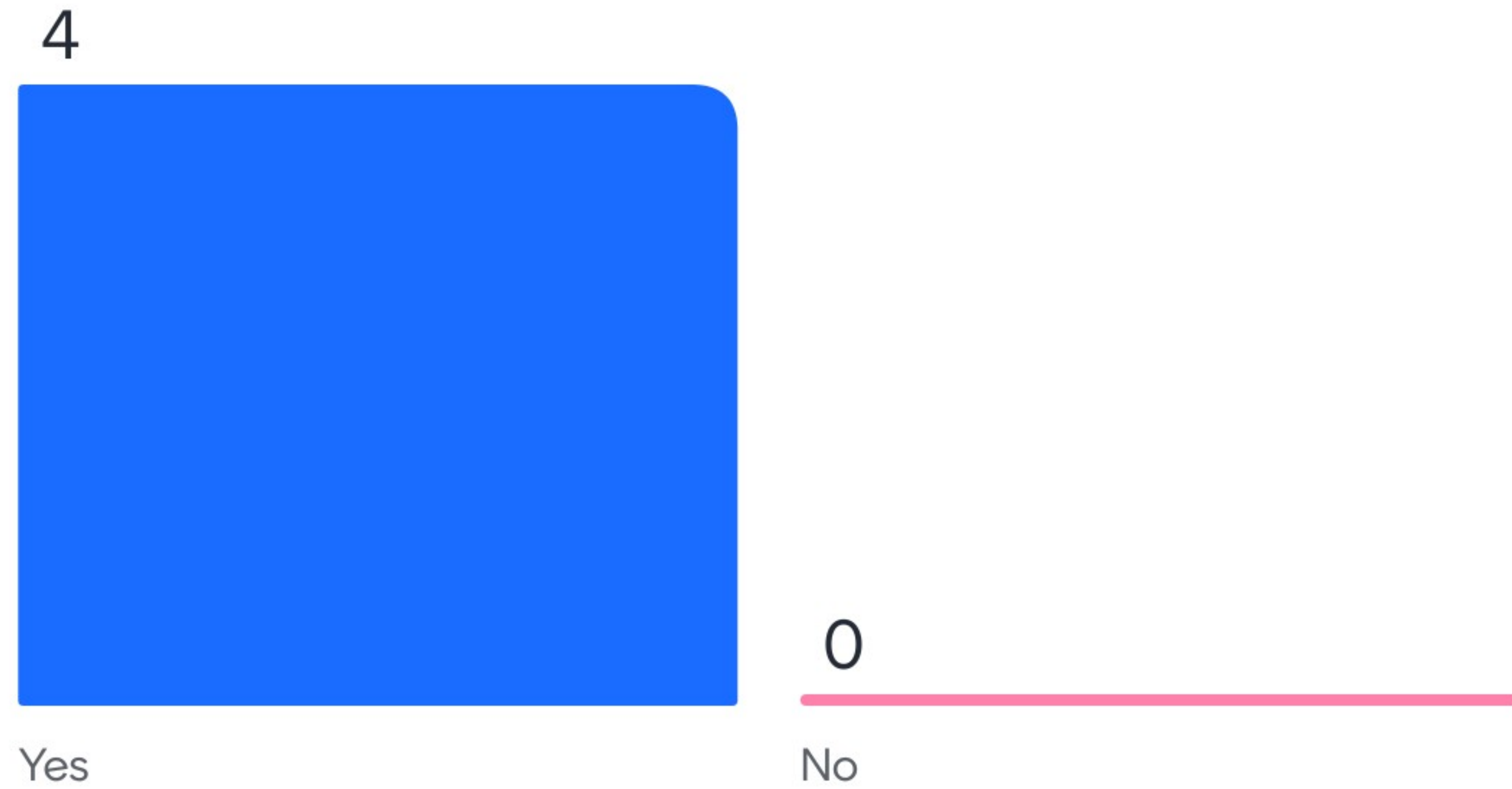
# What is the primary objective of the study?

1 response

link tv and death rates

Study Design

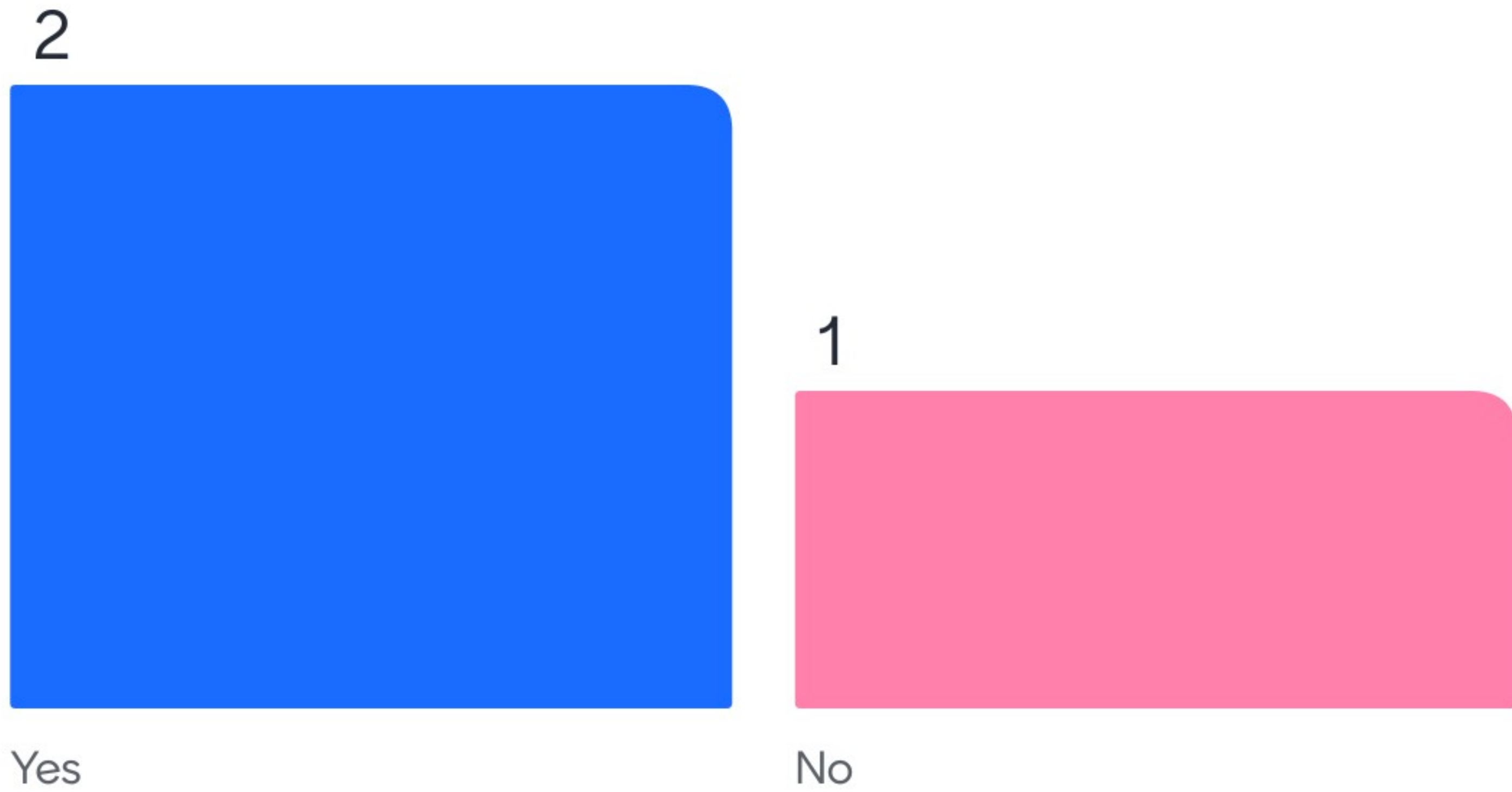
# Are the methods clearly described?





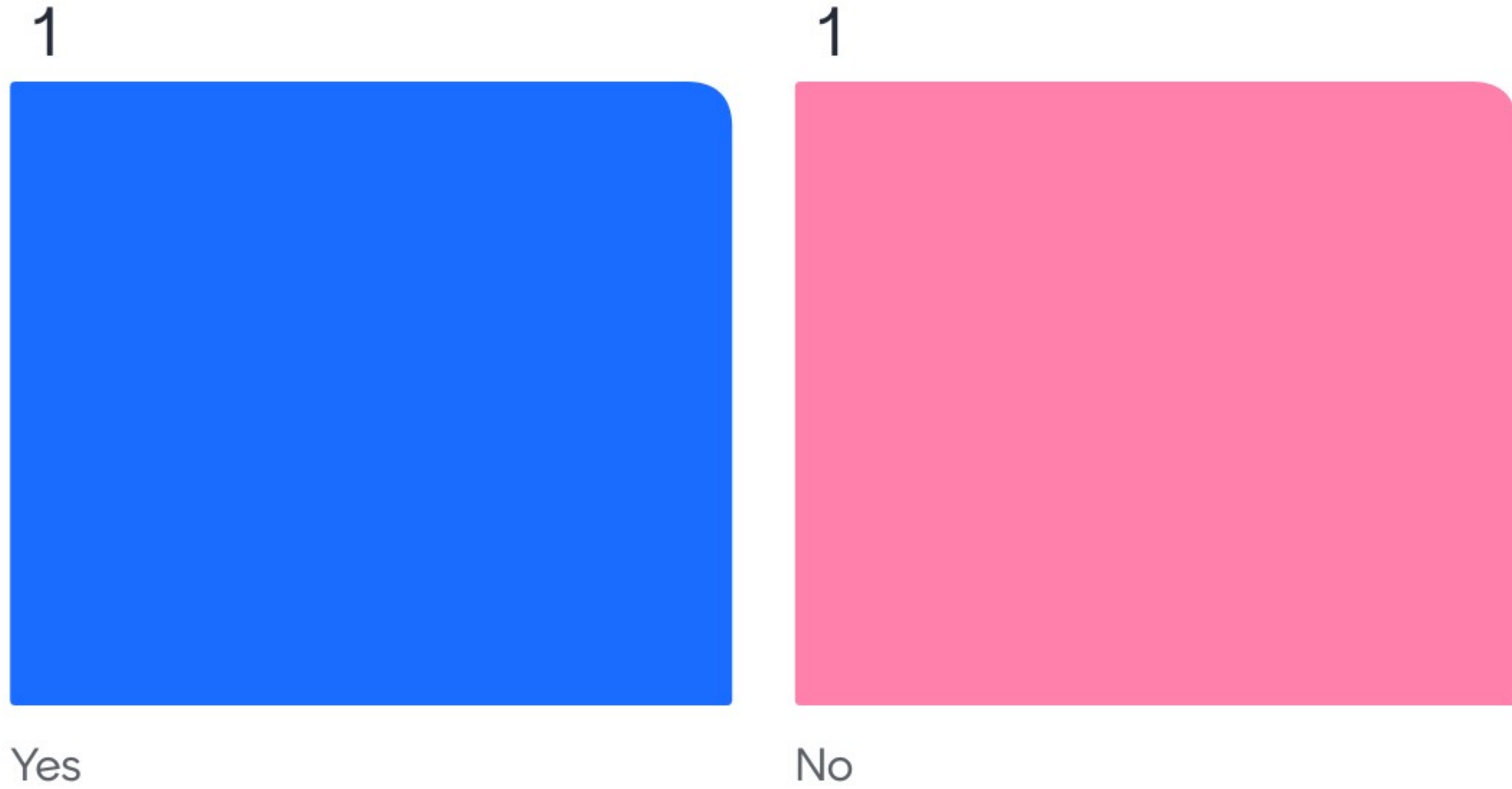
Sample and Population

# Is the sample size adequate?



Results and Interpretation

# Are the findings relevant and consistent with the data?



# Support with statistics

- BMJ Best Practice

Statistic calculators <https://bestpractice.bmj.com/calculators/>

- BMJ Learning

Online course: Understanding statistics <https://new-learning.bmj.com/>



# Thank you

Thank you for attending today  
Questions after today email Liz:

Elisabeth.Lourandos1@nhs.net

# Providing course feedback

We value your feedback

<https://forms.office.com/e/MNJUAWDF7y>

Share Your Experience and Help Us  
Make Our Events Even More  
Awesome!

