

# Order of Writing

- Write Methods and Results first

# Abstract

- Why you did it?
- What you did
- What you found
- What it means?
  - For practice
  - For theory

# Introduction

- Introduction (1-1.5 pages only)
  - Paragraph 1: What we know
    - Use best evidence/best studies/most relevant/most valid
  - Paragraph 2: What we don't know?
  - Paragraph 3: Why we did this study?
    - Aims and Hypothesis
    - DO NOT put results of study here
- Examples

- Avoid Textbook knowledge
  - *“Asthma is the most common disease of childhood”*
- *Avoid defining the problem*
  - *“Asthma is a condition in which the airway narrowing in response to community occurring...”*
- Better *“House dust mite is thought to be important in exacerbating symptoms of asthma....”*
- Quote the science and not the scientist
  - *A study by Smith et al. reviewed the medical records of older people with....*
  - Better: *The incidence of XX was found to be ZZ in a review of hospital medical records*

# Methods

- Where the study was conducted
- Every measurement reported in the results section must have a description of the methods used to obtain it
- Ethics approval and whether informed consent obtained
- Study design
- Participants
  - Inclusion/exclusion criteria

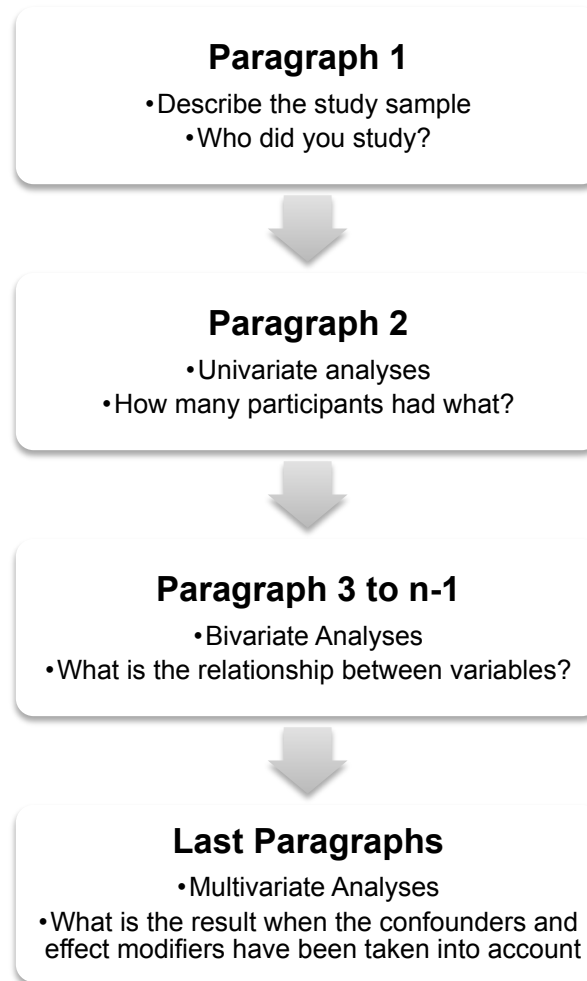
# Methods II

- Sample Size
- Questionnaires
  - mode of administration
  - show that validated
- Interventions- CONSORT Guidelines
- Clinical Assessments – measurement bias

# Statistical Methods

- what stats tests and stats program
- state p value used to determine stats significance
- info about distribution of variables and tests used
- reference if not simple or well known stats test

# Template for Results



From: Scientific Writing – Easy when you know how. Peat et al. BMJ Books



# Results

- Topic sentences to begin each paragraph
- Interpretation of Results (don't repeat numbers in text)
  - *Eg: The active group had a larger change from baseline than the control group, although the difference did not reach statistical significance*

# Results 2

- baseline characteristics in table
  - *percentage, mean and standard deviation or median and interquartile range*
- there is a statistical significance between groups or there isn't (absolute!)

# Rules for Reporting Numbers

- Numbers < 10 – report as words
- Words not numbers begin sentences
- No space between number and its per cent sign  
eg: 35%
- % to only one decimal place is ample
  - if sample size > 100 eg: 10.4%
  - If sample size < 100 do not use decimal place
- Ranges use “to” or comma not “-”

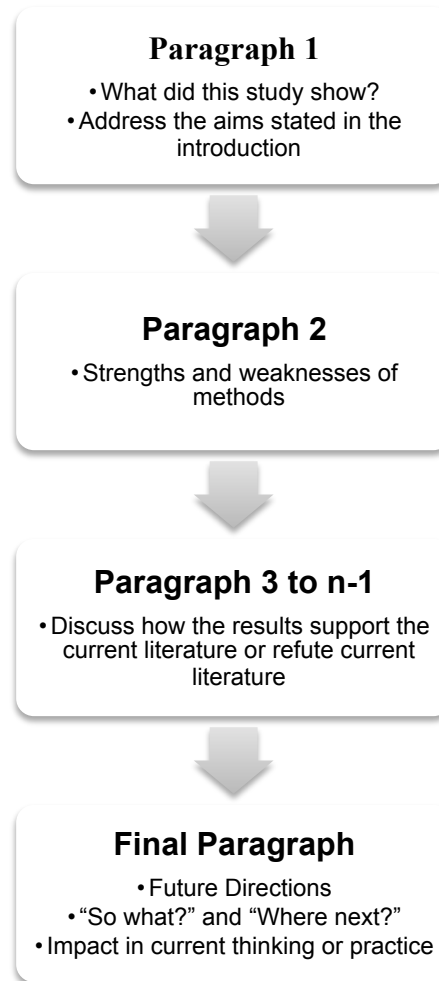
# Tables and Figures

- Avoid multiple borders and grids
- People read left to right – so groups in columns and outcome variables in rows
- Show most important info in a figure, as long as the figure does not take up more space than reporting the data would

# Statistics

- Mean versus Median (interquartile range)
- SD versus SE
  - SE as a measure of distribution (wrong!)
  - SE error bar (avoid)
  - CI better for group comparison
- P values - 95% CI may tell the story
- Give P value rather than “NS”

# Template for Discussion



From: Scientific Writing – Easy when you know how. Peat et al. BMJ Books

# Writing Style

- Short words and short paragraphs
- Simple rather than complex
- Stick to nouns and verbs