



RESCAP-MED Project: Writing Workshop

Writing the methods section

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IMRaD (Methods)

- ▶ Like a recipe
- ▶ For informed readers this is the most important section
- ▶ Describes how subjects were selected and excluded
- ▶ **DON'T DESCRIBE RESULTS**
- ▶ Don't describe standard methods in detail – use references
- ▶ Statistics
- ▶ Ethics
- ▶ Remember that you can put more detailed methods on the web--for example, questionnaire

bottom line...

- ▶ Sufficient detail to permit evaluation and replication
- ▶ What you did to answer the research question / obtain the message (**how the story line develops...**)

Possible Outline / Sub-sections


- ▶ Study Population / Participants
 - ▶ Study Design
 - ▶ Interventions / Exposures
 - ▶ Methods of Measurements
 - ▶ Calculations
 - ▶ Analysis of data
 - ▶ Ethical approval
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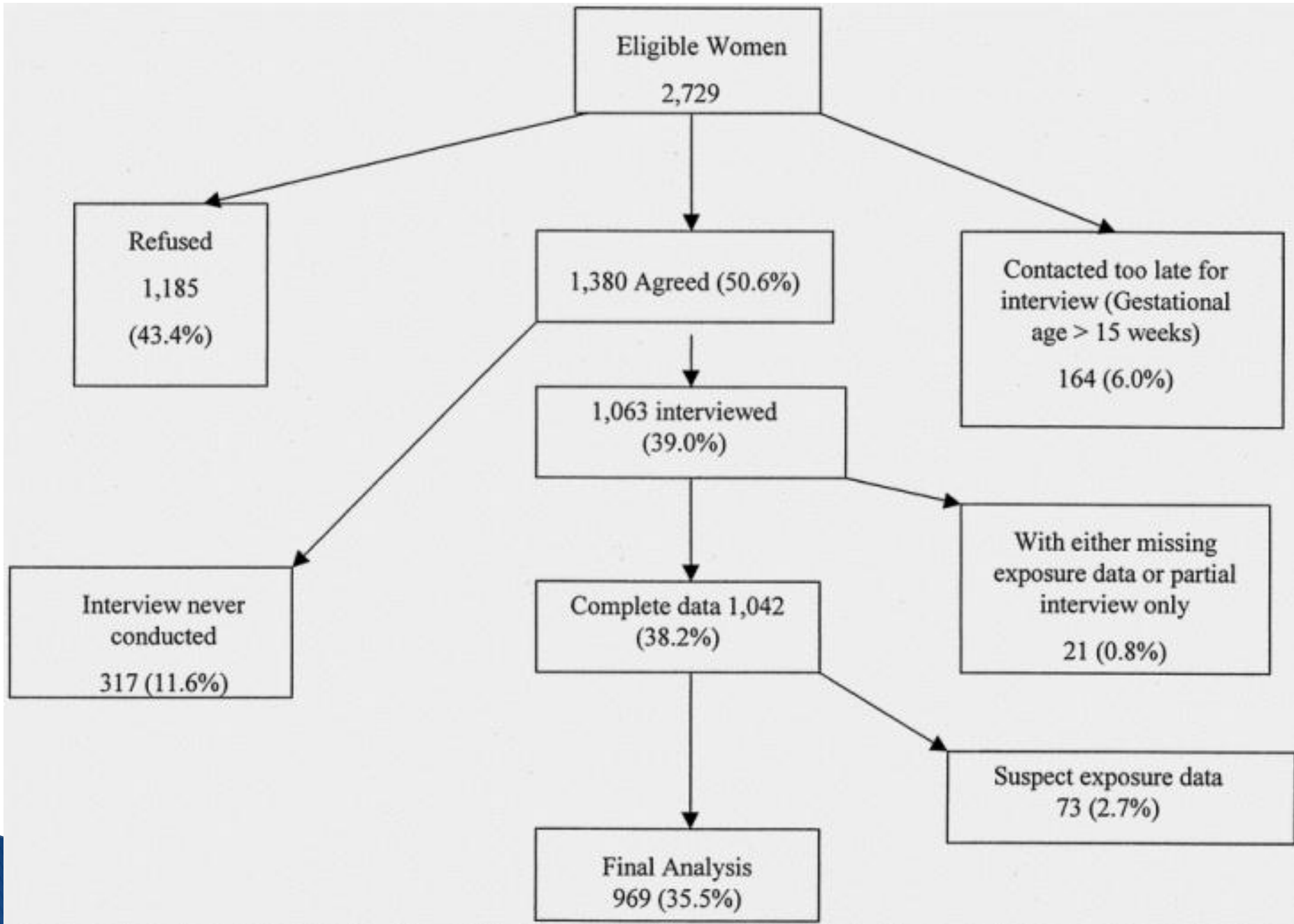
More detailed Headings

(might help with planning)

- ▶ Study population
 - How many subjects were eligible (eligibility criteria)
 - How many declined to participate (and why)
 - How many participated
 - How many dropped out (and when / why)
- ▶ Sampling methods
- ▶ Laboratory methods
- ▶ Epidemiologic investigation
- ▶ Baseline data collection
- ▶ Diagnostic Evaluation
- ▶ Intervention
- ▶ Follow-up
- ▶ Definition of variables
 - Exposure variables
 - Outcome variables
 - Case definition
- ▶ Statistical analysis

Participants

- ▶ Who are they?
 - ▶ Where did they come from?
 - Where and how were they recruited for the study?
 - What was the recruitment rate, refusals, drop-outs etc.
 - How many (sample size – prior estimates made?)
 - ▶ What type of sampling method used?
 - ▶ Description of field site (if appropriate)?
- 



Comparison of the Atkins, Zone, Ornish, and LEARN Diets for Change in Weight and Related Risk Factors Among Overweight Premenopausal Women

The A TO Z Weight Loss Study: A Randomized Trial

METHODS

Participants

Intervention

Process and Outcome Measures

Diet and Physical Activity Data

Anthropometric Data

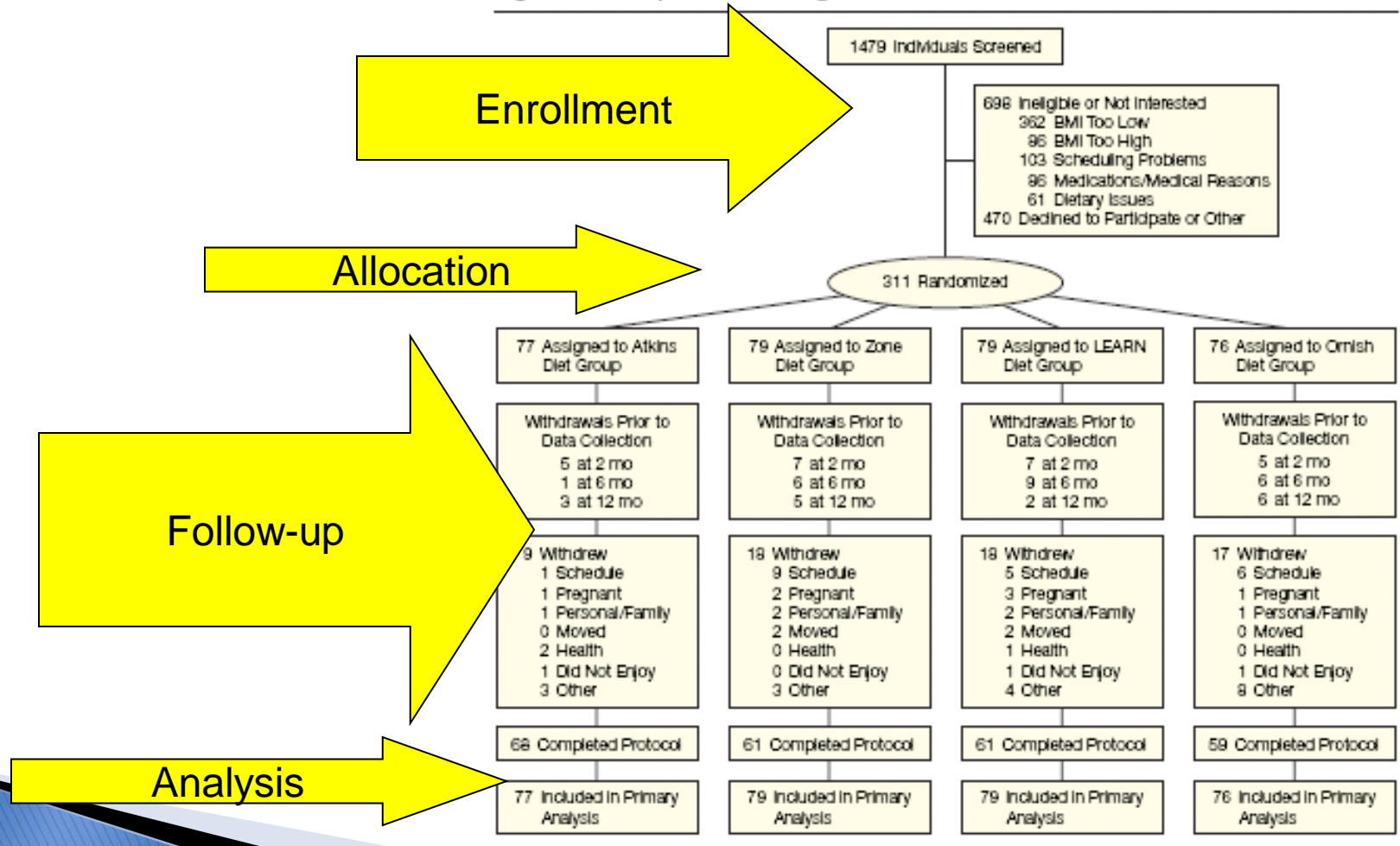
Metabolic Measures

Statistical Analysis

Comparison of the Atkins, Zone, Ornish, and LEARN Diets for Change in Weight and Related Risk Factors Among Overweight Premenopausal Women

The A TO Z Weight Loss Study: A Randomized Trial

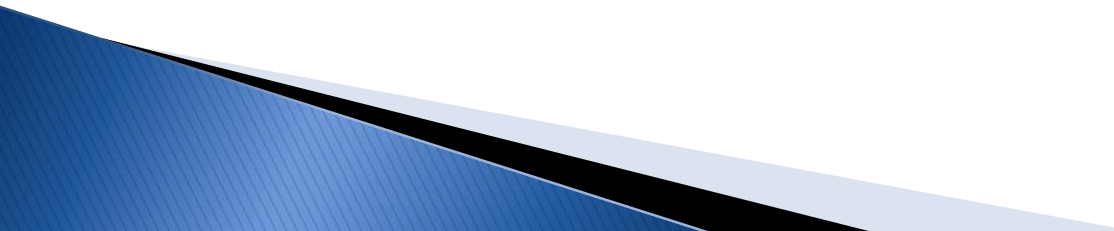
Figure 1. Participant Flow Through the Trial



Experiments / Exposures

- ▶ How the experimental procedures / assessments were carried out, and by whom
- ▶ Methods, lab assays, equipment
- ▶ controls, treatments,
- ▶ what variable(s) were measured,
- ▶ how many samples were collected,
- ▶ replication,
- ▶ quality control and
- ▶ training,
- ▶ the final form of the data
 - If well known only reference
 - Otherwise – more detail (and reference)

Style

- ▶ Probably more in the passive voice than other sections
 - ▶ Be concise as well
 - ▶ Use short sentences
 - ▶ Combine sub-sections if appropriate (e.g. experimental design and methods)
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Positive Writing

- ▶ An example

Influence of Social Factors on Avoidable Mortality: A Hospital-Based Case-Control Study

“ . . . 124 patients died of some type of avoidable mortality cause

-- Public Health Reports. Jan-Feb 2005: 55-62




“ 124 patients died of an avoidable cause Of the 124 eligible cases, 42 were excluded from the analysis. . .



Is the term “patient who died of an avoidable cause” interchangeable with “eligible case”?

“ 124 patients died of an avoidable cause Of the 124 eligible cases, 42 were excluded from the analysis.

“ . . . 124 patients died of an avoidable cause. Forty-two of them were excluded from the analysis, including seven whose relatives declined, 11 who had no known telephone or address, and 24 who did not answer after five calls. The remaining 82 cases were included and interviewed



Huh???

Forty-two of them were excluded from the analysis, including seven whose relatives declined, 11 who had no known telephone or address, and 24 who did not answer after five calls. The remaining 82 cases were included and interviewed.”

Forty-two of them were excluded from the analysis, including seven whose relatives declined, 11 who had no known telephone or address, and 24 who did not answer after five calls. The remaining 82 cases were included and interviewed.”

“use a colon to introduce a list”

Forty-two of them were excluded from the analysis, including seven whose relatives declined, 11 who had no known telephone or address, and 24 who did not answer after five calls. The remaining 82 cases were included and interviewed.”

Let's try to wordsmith this, using a colon.

Forty-two of them were excluded from the analysis, including seven whose relatives declined, 11 who had no known telephone or address, and 24 who did not answer after five calls.



Forty-two of them were excluded from the analysis:

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-
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Forty-two of them were excluded from the analysis: eleven had no known telephone or address; in seven cases relatives declined to participate; and in 24 cases no family member could be contacted within five call attempts. Relatives of the remaining 82 cases were interviewed

“Put statements in positive form.”

“Put statements in positive form.”

. . . 124 patients died of an avoidable cause. **Relatives of 82 were interviewed.** The remaining 42 were excluded, either because they had no known telephone or address (n=11), relatives declined to participate (n=7), or no family member could be contacted within five call attempts (n=24).”

Sources

- ▶ IEA 2013 course on Epidemiology
- ▶ Epidemiology Supercourse (presentations by Richard Smith and Paul s Ziegel)