# Questionnaire Basics

Dr Wan Nor Arifin

Unit of Biostatistics and Research Methodology, Universiti Sains Malaysia. wnarifin@usm.my



## **Outlines**

- 1.Introduction
- 2.Development
- 3. Validity
- 4.Other issues

- Questionnaire?
- Definition:

"a structured document that is used to collect information from respondents about themselves or others" (McDonald et. al., 2003)

- Basically a measurement tool.
- Questionnaire based research just like any research using measurement (blood pressure, lab investigations, imaging etc). One of tool to measure outcome.
- Questionnaire is everywhere! GCS, BDI, Personality.
- Must choose a suitable (measure your outcome) & good (valid & reliable) questionnaire.

#### Options:

- Existing questionnaire in target language  $\rightarrow$  use.
- Existing questionnaire in foreign language → translate.
- Non-existent  $\rightarrow$  develop.

- Why use questionnaire?
  - Information required?
  - Time?
  - Cost?
  - Simple to conduct?
  - Standardization in obtaining information?

- What we want to measure?
- Why we want to measure?
- Who we want to measure?
- How we want to measure?

- Why we want to measure?
- What we want to measure?
- Who we want to measure?
- How we want to measure?

- Why, What & Who we want to measure?
  - Study <u>objectives</u>.
    - To determine knowledge on leptospirosis.
    - To determine attitude towards fogging.
  - The <u>outcomes</u>.
    - Knowledge on leptospirosis
    - Attitude on fogging practice by KKM.
  - The target <u>respondents</u>.
    - Among villagers, residents.
  - Develop suitable <u>content</u>.

#### How we want to measure?

- Types of questionnaires.
- Methods of administration.
- Types of questions and response options.

# Types of Questionnaires

## **Types**

- 1.Self-administered
- 2.Interviewer-administered

## Self-administered

- Simple information, sensitive information.
- Economical, practical.
- No interviewer bias.
- But, respondent must be able to read...

### Interviewer-administered

- Complex information, e.g. requires explanation.
- Can involve illiterate respondents.
- Requires standardization among interviewer, training – ensure standard way of asking & correct response.
- Costly.
- Time consuming.

## Methods of administration

### Methods of administration

#### 1. Self-administered:

- Pen-and-paper direct, mail.
- Computerized Google Form, Survey Monkey, pdf Form.

#### 2.Interviewer-administered

- In-person interview
- Phone

# Types of questions

## Questions

- Types:
  - Open
  - Closed

## Open

- Allows many possible responses.
- Factual data demography.

Name:
Date of birth: / /
Number of children:
Occupation (please specify):
For the past 1 week, on average how long did you spend for exercise per day? minutes.
What is your opinion on GST?

### Closed

- Fixed, predetermined responses.
- Limit respondent to the choices.
- Easy for data entry, analysis, interpretation.
- Give clue to respondent as to how to answer.
- Must include ALL possible responses.

### Closed

#### • Choices:

- Dichotomous (Yes/No)
- Multiple choice
- Checklist
- Ranking of response options
- Rating
- Likert Scale
- Visual analog scale

## Closed

Have you ever attended Dr Arifin's lecture before? Yes/No					
Gender:	Male [ ]	Female [ ]	Not sure? [ ]		
_	ories for past Poultry [ ]	<b>t 1 week</b> : Vegetable [ ]	Fruits [ ]		
Rank your favourite food from 1 (most prefered) to 5 (least prefered): Nasi Ayam [ ] Nasi Goreng [ ] Nasi dagang [ ] Nasi Kerabu [ ] Nasi Kandar [ ]					
Please rate your experience using HotelBooking.com.my: [1] [2] [3] [4] [5] [6] [7]					
l enjoy Dr Arifin's lecture. Strongly Disagree[ ] Disagree [ ] Neutral [ ] Agree [ ] Strongly Agree [ ]					
Please rate	your boredo	m level right now	7:		
 No pain at al	 			 Worst pain ever	

# Validity

## **Validity**

- Accuracy, extend to which questionnaire measure what it is supposed to measure (Fletcher, Fletcher and Wagner, 1996)
- Validity is "the degree to which all the accumulated evidence supports the intended interpretation of test scores for the proposed purpose" (AERA, APA & NCME, 1999).
- Next lecture.

## Other issues

## Existing questionnaire

- In target language e.g. Malay?
- If not in Malay, i.e. English, translation?
- Same target population? Doctors vs Patients?
- Type? Mode and method of administration?
- Measure outcome of interest?
- Validity evidence?

#### References

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education (1999). Standards for educational and psychological testing. Washington DC: American Educational Research Association.

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