

INTRODUCTION

Dr. Osman

Content

- Definition of statistics and its components
- Populations and samples
- Exposures and outcomes
- Variables
- Statistics

What is statistics?

Statistics is the science of Collecting, Summarising, Presenting and Interpreting data

Exampless : a case study

- There is anecdotal evidence of a phenomena. . .

DOMESTIC VIOLENCE | Provincial hospital plans gender section due to rising violence

Central Kenya 'top husband-beaters'

Lobby fighting for the rights of men against domestic violence vows to set up camps in area for three months

Ask the two dignitaries for the rights of male victims of domestic violence, and the affiliates will jump to connect them to the resources to help them with pressing issues at domestic abuse.

Central Province is the worst place because women are in the habit of leaving up their hair. We go here to give women the 'red head' but with help from the local women we are not able to do this. The women at the West Provincial General Hospital in Welisara.

When should we expect to finally finish? In the Central Provinces, there have been no deaths in the case of leprosy children, before they are thrown

standing by weekly at the hospital on Wednesdays. Mr. Smith, 40, says he would not be alone and his doctor insists that he stay in the hospital.

They have all had bumps, and he was limping after three hits. His second catch. His screaming fingers are pointing at his wife, a 19-year-old housewife, whom he claims loved his attacks. "I did this because she hated to live with who had accused me badly of beating up my brother-in-law," he said.

But pointing, when the bullet reached the woman, he always lets go to her "this up," the Magistrate. "Woman and the brother-in-law."

Child's confusion
The last thing she knew was the same people she could tell thoughts were leading to her husband. She says nothing is the same since the accident. It was like being in a coma.



Marceline go **Warner** **Richard** for
travelling on Wednesday. He's a bit
confused with his wife.

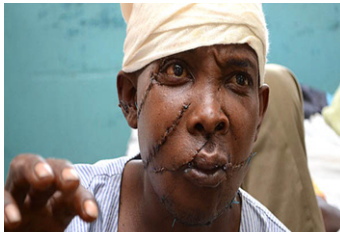
after 30 minutes. The distance between the house and the ground, according to Whorlitz, should not take more than 100 minutes of sailing.

On returning, he tried to open the lid, but the suspended child resisted him for "hours up to 200."

Whorlitz later told Whorlitz and there was a knock on the door at which he went to answer it. Signs of

...the ...

Special Products Company
group of people like a

[illegible]

All stitched up: Simon Mwangi at the Nyeri Provincial General Hospital in February 2012.



Question

- Are women from Central Province battering their husbands/partners more than women from other provinces in Kenya?

Exposure & Outcomes

- The exposures and outcomes of interest are specific to study hypotheses
- Should always be clearly defined before the study starts
- Type of outcome determines the analysis that will be used.

Outcomes

- The outcome of a study is a broad term for any defined disease, state of health, health-related event or death.

Outcomes

- An outcome is the result of an experiment or other situation involving uncertainty.
- Its the focus of your attention - seeking to understand its occurrence and variation
- In some studies, there may be multiple outcomes.

In this case our outcomes is?|.

In this case our outcomes is?|.

- Husband/partner battering

Exposure

- The exposure of interest may be associated with either an increased or a decreased occurrence of disease or other specified health outcome,
- May relate to the environment, or inborn or inherited characteristics

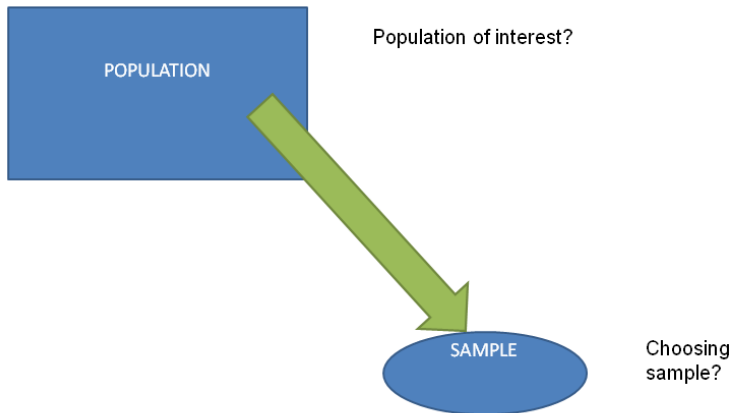
Exposure in this case is?

Exposure

- Residence = Central province ??
- Ethnicity = Kikuyu??

Spousal battering in Central Kenya

Spousal battering in Central Kenya



Choosing your sample

- Population of interest?
 - Partnered/married women in Kenya
- Choosing sample
 - Partnered/married women from central + other provinces
 - Why would you not choose married/partnered men?

POPULATION

How to best obtain the
required data

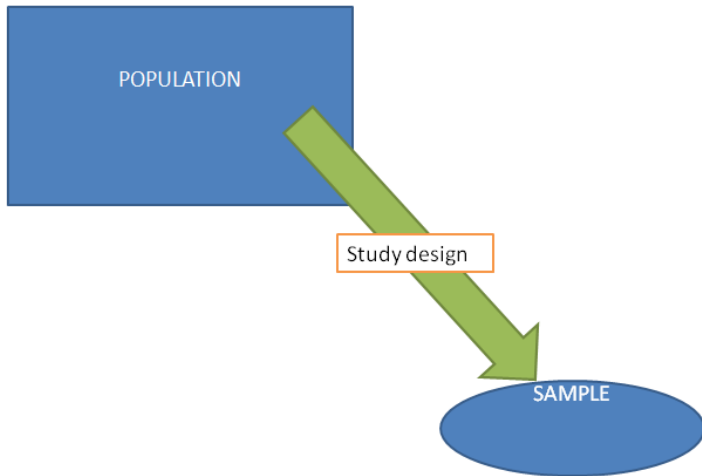
Comparison groups

Sample size

SAMPLE

Decide on study design

- Descriptive
 - Cross sectional
- Analytical
 - Case-control
 - Cohort
- Experimental



Describe your sample

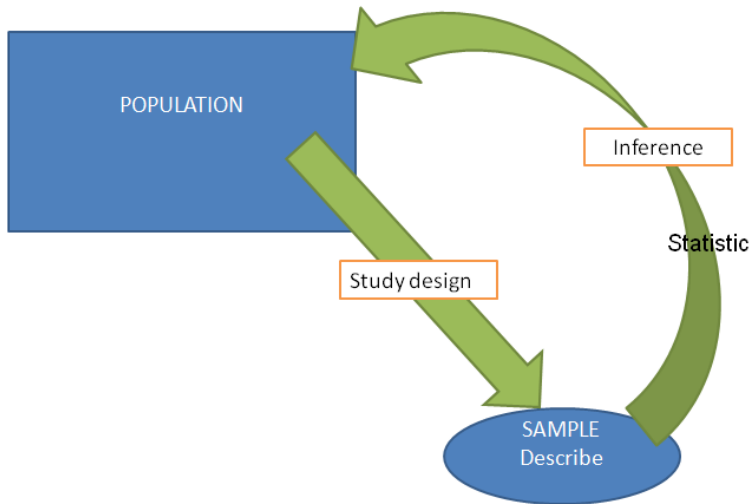
- Characteristic measured for each subject
- Values of the characteristic vary among subjects in a sample or a Population.
- These can be categorical or quantitative

Categorical variables

- Unordered categorical variables
 - Marital status
 - married, divorced etc
 - Ethnic group
 - Kikuyu, Luo, Kamba
 - none is higher than the other
- Ordinal categorical variables
 - Wealth quantiles
 - High, medium, low
 - Employment
 - unemployed, casual laborer, etc

quantitative variable

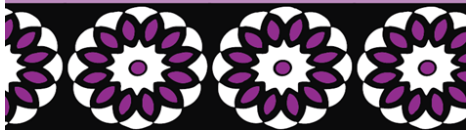
- Takes numerical values, which differ in magnitude. Each value is greater than or lower than any other possible value
 - Discrete
 - Number of children: 0, 1, 2, 3, 4, 5¹
 - Continous
 - Weight



- Allow us to use the sample to make inferences about the population from which it was derived

Lucky for us someone has attempted to answer this question

Kenya



Demographic and
Health Survey

2008-09

remember our issue

- Are women from Central Province battering their husbands/partner more than women from other provinces in Kenya
- The purpose of a statistical analysis is to quantify the magnitude of the association between one or more exposure variables and the outcome variable

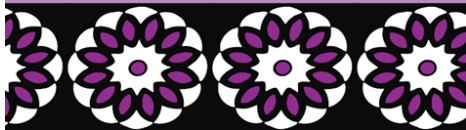
How?

- Nov 2008 to Feb 2009
- All 8 provinces
- 8,444 women 15-49 years old
- One-off questionnaire

Questionnaire

- Have you ever hit, slapped, kicked or done anything else to physically hurt your (last)husband/partner at times when he was not already beating or physically hurting you?
- 6,318 Kenyan women 15-49 years old participated

Kenya



Demographic and
Health Survey

2008-09

Table 16.13 Violence by women against their spouse

Percentage of ever-married women age 15-49 who have committed physical violence against their husband/partner when he was not already beating or physically hurting them ever and in the past 12 months, according to women's own experience of spousal violence and their own and husband's/partner's characteristics, Kenya 2008-09

Women's experience of spousal violence, women's and their husband's/partner's characteristic	Percentage who have committed physical violence against their current or most recent husband/partner			
	Ever	Number of women	In the past 12 months ¹	Number of women ¹
Woman's experience of spousal physical violence				
Ever	6.9	1,603	4.6	1,489
In the last 12 months	7.5	1,267	5.8	1,196
Not last 12 months/widow/missing	4.8	336	0.0	293
Never	0.7	2,733	0.4	2,558
Current age				
15-19	2.8	170	2.7	170
20-24	2.2	811	2.1	798
25-29	3.1	917	1.6	893
30-39	3.0	1,450	2.3	1,356
40-49	3.5	988	1.4	830
Employed last 12 months				
Employed for cash	3.4	2,194	2.4	2,016
Employed not for cash	2.3	767	2.0	709
Not employed	2.7	1,373	1.1	1,319
Number of living children				
0	2.0	252	1.5	248
1-2	3.0	1,594	2.1	1,520
3-4	2.3	1,373	1.1	1,267
5+	4.0	1,117	2.8	1,012
Residence				
Urban	3.4	1,022	1.7	975
Rural	2.8	3,314	2.0	3,072
Province				
Nairobi	4.1	320	1.7	311
Central	1.3	495	0.6	467
Coast	1.9	365	1.5	348
Eastern	3.3	702	1.4	675
Nyanza	2.3	774	2.0	663
Rift Valley	2.9	1,112	2.3	1,052
Western	5.2	458	3.7	423
North Eastern	5.2	110	2.1	108
Wealth quintile				
Lowest	4.6	784	3.3	723
Second	1.6	793	0.3	720
Middle	3.3	845	2.6	779
Fourth	1.4	849	1.3	803
Highest	3.8	1,064	2.1	1,022

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Conclusion

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- What is missing?

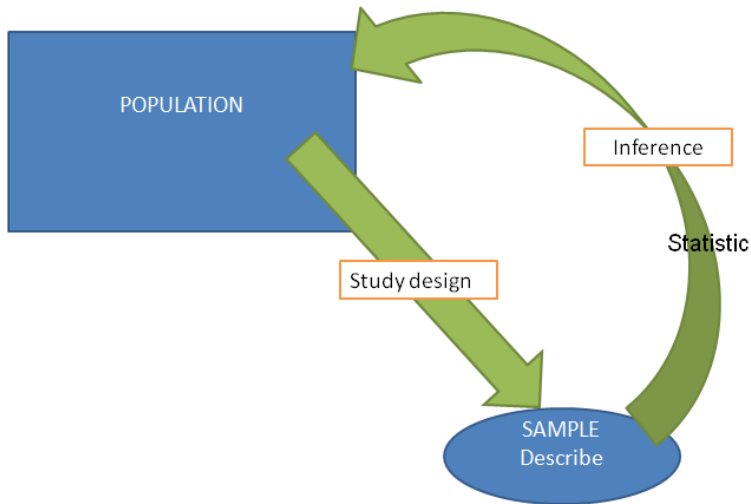
My takes

My take

- Have you ever hit, slapped, kicked or done anything else to physically hurt your (last) husband/partner at times when he was not already beating or physically hurting you?

My take

- Test to compare proportions
 - which ones?
- If you have collected the wrong data - the best analysis will not help you. . . .



In conclusion

- MARRY A WOMAN FROM CENTRAL PROVINCE BUT DO NOT PROVOKE HER
- THANK YOU