# Research Methods for Public Health

Lecture 3

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# Sampling Methods in Research

**What are the sources of data ?**

**1- Internal source such as hospital's own patients files.**

The data is retrieved from inside the company or organization to make decisions for successful operations.

# Sampling Methods in Research

**What are the sources of data ?**

**2- External sources can be divided into two types :**

**A) Primary source :** when the data is coming from the source that basically collected them such as data obtained from the patient's file in the hospital.

**B) Secondary source :** when the data is coming from the source that basically did not collect them such as data obtained from World Health Organization (WHO).

# Sampling Methods in Research

**What are the types of sampling methods ?**

1-) Non-random sample methods

(Non-Probability sampling method)

2-) Random sample methods

(Probability sampling method)

# Sampling Methods in Research

**1-) Non-random sample methods**

**(Non-Probability sampling method)**

When some subjects or members of study have no chance to be

selected in the sample of study.

# Sampling Methods in Research

**What are the types of non-random sample methods ?**

1-) Convenience sample :

The easiest way to get the members of the population for obtaining

very quick results.

# Sampling Methods in Research

**Advantages of convenience sample:**

1- It is very easy to conduct

2- It helps to save time

3- It helps to save money

# Sampling Methods in Research

**Disadvantages of convenience sample:**

1- Bias in data gathering

2- Sampling error

3- No generalized results

# Sampling Methods in Research

**What are the types of non-random sample methods ?**

**2-) Judgment sample :**

The subjects are selected from the population based on the judgment, knowledge and experience of the expert.

# Sampling Methods in Research

**Advantages of judgment sample:**

1- It is based on the experience of researcher for many years

2- It helps to save time and money

3- No special knowledge of statistics is required

# Sampling Methods in Research

**Disadvantages of judgment sample:**

1- It is usually unscientific

2- Personal bias in selecting members is unavoidable

3- No generalized results

# Sampling Methods in Research

**What are the types of non-random sample methods ?**
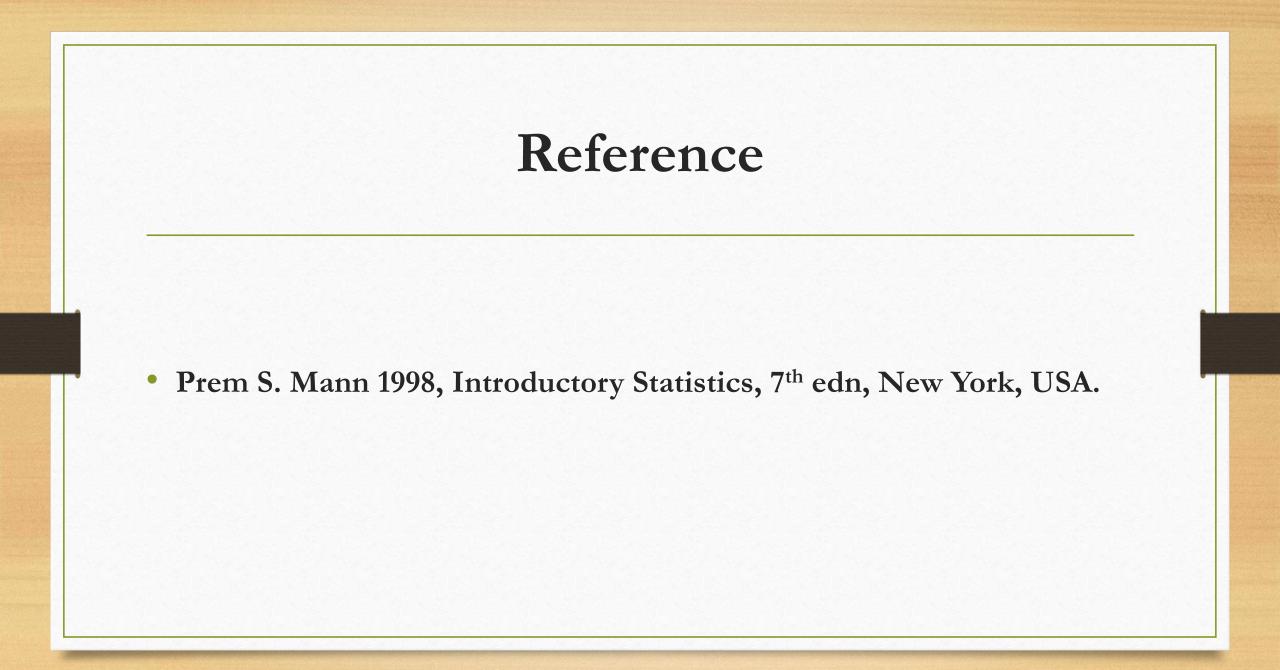
**3-) Quota sample :**

The target population is divided into sub-populations based on specific characteristics, then a sample is obtained from each sub-population. For example: if we want to obtain a sample of 2000 persons from specified city whose population is 60% male and 40% female so the quota sample would be 1200 for male and 800 for female.

# Sampling Methods in Research

**What are the types of non-random sample methods ?**

**3-) Snowball sample:**

When the research participants recruit other participants for a test or study. It is used where potential participants are hard to find. In theory, once you have the ball rolling, it picks up more "snow" along the way and becomes larger and larger

Source: www.questionpro.com

# Reference

- **Prem S. Mann 1998, Introductory Statistics, 7<sup>th</sup> edn, New York, USA.**

# Good Luck for All Students

- Please do not hesitate to contact me if you have any questions.

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# سبحان الله وبحمده سبحان الله العظيم

ذكر الله أعظم ما في الوجود ،، لعل الله يرحمنا بعلم تعلمناه في الحياة الدنيا

أستغفر الله