*DATA is the basic unit in statistical studies.
.statistics is a tool for converting data into information.
.Factors Should To Be Considered Before Collection Of Data:
-OBJECTIVE AND SCOPE OF THE ENQUIRY
-SOURCES OF INFORMATION
-TECHNIQUE OF DA COLLECTION
-UNIT OF COLLECTION

VALIDITY
is The quality of a research that makes it trustworthy and scientific.
-the use of scientific methods in research to make it logical and acceptable.

RELIABILITY
is the certainty that the research is enough true to be trusted on.

data	Primary	Secondary
The concept	Data is collected by researcher himself	Secondary data collection •Data collected, compiled or written by other researchers 2 May have biases
IMPORTANCE	-cannot be neglected. -A research can be conducted without secondary data	•Availability of secondary data has become much easier after the expense of the electronic media and internet. •Published Printed Sources •Their credibility مصداقية depends on many factors.
Characteristics:	1-Primary data means original 2--collected for the first time 3-collected from the original source first hand. 4- It is real time data, 5- collected by researcher himself. 6-collected specially for the purpose in mind to address (treat, talk to) the research problem 7-questions are meaningful to the purpose 8-uses surveys, experiments or direct observations 9-has not been published yet 10-has not been changed or altered by human beings; 11-its validity is greater than secondary data .12--more reliable, authentic and objective.	NEXT on the writer, publishing company and time and date when published. New sources are preferred and old sources should be avoided

الطب والجراحة لجنة

THE HIGH YELD

data	Primary	Secondary
Sources **PSATA** بساطة	limited difficult to obtain scarcity (shortage or lack) lack of cooperation. **A. EXPERIMENTS** -more suitable for medicine -experimenter has to keep control over the influence of any extraneous variable on the results. **B. SURVEY** Survey is most commonly used method in social sciences, management Health Surveys --for investigating of factors affecting H and disease -studying the natural history -Population surveys H survey needs sample technique H survey could be descriptive, analytic or both, cross sectional, longitudinal, 2 Surveys related to administrative of H. Services uses of H. services, evaluation of population needs & evaluation of medical care . **C. QUESTIONNAIRE** -is the most commonly used method in survey -Questionnaires are list of questions either, an open-ended close –ended -conducted via telephone, mail, live in a public area, or in an institute, electronic mail or through fax and other methods. Steps To An Effective Survey Questionnaire Prepare your survey questions Select your respondents/sampling Administer the survey questionnaire Tabulate data collected Analyze and interpret data collected	**CENSUS** The total process of collecting, compiling & publishing. Demographics, Economic and social data pertaining at a specified time or times to all country so -census is a massive process -It needs a considerable organization -It is taken in most countries of the world, at a regular intervals usually every 10 years **HOSPITAL AND HEALTH RECORD** Basic and primary source of information about disease which is prevalent in the community -drawback: constitute only the tip of the iceberg of disease only those patients who seek medical care mild case may not attend The admission policy may vary **REGISTRATION OF VITAL EVENTS E.G. BIRTH, DEATH AND MARRIAGES** **HOSPITAL AND HEALTH RECORD** give duration of illness, provide continues account of the frequency of disease **OTHER H.S RECORDS** Hospital out-pt. department. MCH center, BW, W, Height, Immunization, arm circumference, disease, School H record, DM & Hypertension clinic draw back, it is only related to certain segment of population Environmental health data identification and quantification of factors causative of disease . eg. H. man power statistic no. of physicians, dentists, Pharmacies, nurse.... Epidemiological surveillance. In many countries where there is endemic diseases, special control/ eradication programs have been insulated. considerable morbidity and mortality rate for specific disease E.g. control program against COVID 19. TB, Malaria, Dengue fever, etc.
Advantages	Targeted Issues are addressed Data interpretation is better Efficient Spending for Information Decency or purity of Data. Proprietary or ownership Issues Addresses Specific Research Issues Greater Control. Disadvantages of Primary Research •High Cost •Time Consuming Inaccurate Feed-backs •More number of resources is required	Ease of Access Low Cost to Acquire •Clarification of Research Question •May Answer Research Question May Show Difficulties in Conducting Primary Researching
Disadvantages	•High Cost •Time Consuming Inaccurate Feed-backs •More number of resources is required	Quality of Research Not Specific to Researcher's Needs Incomplete Information Not Timely

THE HIGH YELD

الطب والجراحة لجنة

MEDICINE