

1. Case vignette

A researcher 'X ' conducted a cross- sectional study to know knowledge, attitude, and practice regarding tobacco control among health care workers. The researcher has obtained ethical approval from the institutional review board. The researcher has explained the purpose of the study to study participants and obtained written informed consent from them. The researcher gave a self-administered questionnaire to all in their regional language and asked them to fill out the format in 10 minutes. Statistician noticed while analysing the data that, some of study participants have submitted the questionnaire unanswered to some important questions, so researcher asked statistician to complete data analysis by filling questionnaire himself randomly. The statistician completed the analysis using Epi Info software, developed by the CDC and freely available. The researcher published the article in a national journal.

1. What is cross- sectional study?
2. Why do you think researcher has obtained institutional ethical review board permission?
3. Do you think there is a necessity for the informed consent of study participants?
4. Was the researcher right in taking the decision to complete the data analysis by adding his own ideas as the data collection was completed?
5. What software has the statistician used in data analysis?

2. Case vignette

Researchers want to know the burden of diabetes and pre- diabetes in tribal population of India. A systematic search was performed by the authors using an electronic as well as manual method. The electronic search was done with Pubmed, Google scholar, Medline, Embase, WHO and Biomed central databases. Search strategies used subject headings and key words (diabetes mellitus, impaired fasting glucose, impaired glucose tolerance, metabolic syndrome, diabetic complications, population based study, community based study, tribal, India) with no language restrictions. The bibliographies of relevant guidelines, reviews and reports were also inspected to identify further relevant primary reports. A manual search was done in library. Online searches of major conference proceedings were also conducted in order to identify unpublished literature.

https://www.researchgate.net/publication/251234214_Burden_of_diabetes_mellitus_and_pre_diabetes_in_tribal_population_of_India_A_systematic_review

- a. What are all the ways literature search can be made?
- b. Name the data bases available for literature search through online?
- c. What is the sequential order in scientific writing of an article?

3. Case vignette

A postgraduate was told that, he has to publish an article mandatorily in a journal to become eligible for University examination. The student selected an article in journal on his topic of interest. He manipulated the statistics and wrote as if study was done in his institution and send it for publication in a journal. The Institutional Ethics Committee (IEC) came to know that, there was no research proposal received by them on the topic mentioned by the student. They checked for plagiarism and it was detected to be high.

1. What is plagiarism?
2. What are the roles of IEC?

4. Case vignette

Researchers want to evaluate the association between serum 25(OH)D concentration and fracture risk in early childhood. A case-control study was conducted among children younger than 6 years of age. Ethical approval for the study was obtained from the Research Ethics Board and consent was obtained from the parents of all participating children. Cases were recruited from paediatric fracture clinic and controls from children visiting to paediatric care clinic. Data was analysed using R software.

<https://academic.oup.com/aje/article-abstract/185/12/1255/3778245>

1. What is case control study?
2. Why do you think researcher has obtained institutional ethical review board permission?
3. Do you think there is a necessity for the informed consent of parents?
4. What is the sequential order in scientific writing of an article?