MODULE-II

LITERATURE REVIEW

Methods for Literature Reviews

Among other methods, literature reviews are essential for:

✓Identifying what has been written on a subject or topic;

✓Determining the extent to which a specific research area reveals any interpretable trends or patterns;

✓Aggregating empirical findings related to a narrow research question to support evidence-based practice;

✓Generating new frameworks and theories; and

✓Identifying topics or questions requiring more investigation.

Overview of the Literature Review Process and Steps

There are six generic steps involved in conducting a review article:

- ✓ formulating the research question(s) and objective(s),
- ✓ searching the extant literature,
- ✓ screening for inclusion,
- ✓ assessing the quality of primary studies,
- ✓ extracting data, and
- ✓ analyzing data.

Types of Review Articles and Brief Illustrations

- **Narrative Reviews**
- **Descriptive or Mapping Reviews**
- **Scoping Reviews**
- **Forms of Aggregative Reviews**

  The main procedures of a systematic review involve:

  - ✓Formulating a review question and developing a search strategy based on explicit inclusion criteria for the identification of eligible studies (usually described in the context of a detailed review protocol).
  - ✓Searching for eligible studies using multiple databases and information sources, including grey literature sources, without any language restrictions.
  - ✓Selecting studies, extracting data, and assessing risk of bias in a duplicate manner using two independent reviewers to avoid random or systematic errors in the process.
  - ✓Analyzing data using quantitative or qualitative methods.
  - ✓Presenting results in summary of findings tables.
  - ✓Interpreting results and drawing conclusions.

- **Realist Reviews**
- **Critical Reviews**

Conditions of adequacy
- ✓ **Fitting language use**
- ✓ **Precision**
- ✓ **Reliability**
- ✓ **Theoretical fruitfulness**
- ✓ **Relevance for normative purposes**
- ✓ **Simplicity**

Plagiarism

- ''Plagiarism is the appropriation of other people's material without giving proper credit'' (The European Code of Conduct for Research Integrity);
- ''Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit'' (US Federal Policy on Research Misconduct).
- So the basic ideas seem to be that someone deliberately takes someone else's work, whether in the form of an idea, a method, data, results, or text, and presents it as their own instead of giving credit to the person whose ideas, results, or words it is.
- This is mirrored in the definition given by Merriam-Webster: ''to steal and pass off (the ideas or words of another) as one's own: use (another's production) without crediting the source''.

Two components of plagiarism

(1) To appropriate the work of someone else and
(2) Passing it off as one's own by not giving proper credit.

- plagiarism is characterised as stealing.
- However, if plagiarism by definition concerns stealing, then it is not theft in the traditional sense of taking a thing, where if person A takes it from person B, then B will no longer have it.
- What is appropriated in such instances of plagiarism is intellectual property, as when people download copyright-protected films or music from the Internet.
- Thus, to the extent that plagiarism is theft, it is stealing someone else's intellectual work by copying.

Research Ethics

(1) Honesty
(2) Objectivity
(3) Integrity
(4) Carefulness
(5) Openness
(6) Respect for Intellectual Property
(7) Confidentiality
(8) Responsible Publication
(9) Responsible Mentoring
(10) Respect for colleagues
(11) Social Responsibility
(12) Non-Discrimination
(13) Competence
(14) Legality
(15) Animal care
(16) Human Subjects Protection

Other deviations

✓Publishing the same paper in two different journals without telling the editors

✓Submitting the same paper to different journals without telling the editors

✓Not informing a collaborator of your intent to file a patent in order to make sure that you are the sole inventor

✓Including a colleague as an author on a paper in return for a favor even though the colleague did not make a serious contribution to the paper

✓Discussing with your colleagues confidential data from a paper that you are reviewing for a journal

✓Trimming outliers from a data set without discussing your reasons in paper

✓Using an inappropriate statistical technique in order to enhance the significance of your research

✓Bypassing the peer review process and announcing your results through a press conference without giving peers adequate information to review your work

✓Conducting a review of the literature that fails to acknowledge the contributions of other people in the field or relevant prior work

✓Stretching the truth on a grant application in order to convince reviewers that your project will make a significant contribution to the field

✓Stretching the truth on a job application or curriculum vita

✓Giving the same research project to two graduate students in order to see who can do it the fastest

✓Overworking, neglecting, or exploiting graduate or post-doctoral students

Other deviations

✓Failing to keep good research records

✓Failing to maintain research data for a reasonable period of time

✓Making derogatory comments and personal attacks in your review of author's submission

✓Promising a student a better grade for sexual favors

✓Using a racist epithet in the laboratory

✓Making significant deviations from the research protocol approved by your institution's Animal Care and Use Committee or Institutional Review Board for Human Subjects Research without telling the committee or the board

✓Not reporting an adverse event in a human research experiment

✓Wasting animals in research

✓Exposing students and staff to biological risks in violation of your institution's biosafety rules

✓Rejecting a manuscript for publication without even reading it

✓Sabotaging someone's work

✓Stealing supplies, books, or data

✓Rigging an experiment so you know how it will turn out

✓Making unauthorized copies of data, papers, or computer programs

✓Deliberately overestimating the clinical significance of a new drug in order to obtain economic benefits.