

RESEARCH MANUAL
RESEARCH TOOLS AND GUIDELINES
FOR
STUDENTS AND FACULTY

2025

(According to HEC, PMDC Policies)



RESEARCH CELL' IRB AND
DEPARTMENT OF COMMUNITY MEDICINE
AL-ALEEM MEDICAL COLLEGE, LAHORE

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Preamble

The research manual is objectively developed to fulfill the minimum standards of research being conducted in the Al-Aleem Medical College Gulab Devi Teaching Hospital, Lahore. The research tools and guidelines for faculty and the students are compiled by consultation of research guidelines of national and international universities and accreditation bodies such as Pakistan Medical & Dental Council, Higher Education Commission (HEC) and University of Health Sciences, Lahore. A general uniform template is developed for the graduate degree program (MBBS) and postgraduate degree programs for the clinical and applied medical sciences. However the template can be modified and adopted with consultation of supervisors of the relevant postgraduate degree programs. In case of HEC or donor funded research grant proposals the separate financial proposal will be required according to the template provided by the grantee institution or donor agencies. Faculty in the Department Community Medicine will provide technical support and guidance for preparation of financial proposal in case of donor funded research projects. The proposal format also fulfills the minimum requirement of Institutional Review Board (IRB) of Al-Aleem Medical College, Lahore. IRB of Al-Aleem Medical College also considers the ethical approval of the research proposals. All the proposals submitted by the undergraduate and postgraduate students will be subject to approval from the IRB of Al-Aleem Medical College, Lahore before data collection.

The research manual consists of:

- Synopsis and research report process
- Synopsis or proposal format
- Formatting Standards of synopsis and research report
- Referencing Guide

Currently the guidelines are in accordance with the institutional policies of Al-Aleem Medical College and its accreditation bodies however the guideline can be amended or supplements can be issued time to time as the policies of the institutions are revised.

PROF. DR. FATIMA MUKHTAR

PROF. DR. M. ASHRAF MAJROOH
Director Research Cell & Chairman
Research Advisory Committee AAMC

Synopsis Submission and Approval Process for PG and Faculty

All the postgraduate students and faculty members of AAMC and Gulab Devi Teaching Hospital will initiate research work/research projects with the consultation of the supervisors of the respective specialties according to the requirement of degree program for which they are enrolled. The faculty members will initiate research work and proposal development with the consultation of HODs and Supervisors in respective departments.

Topic Selection and Technical Assistance

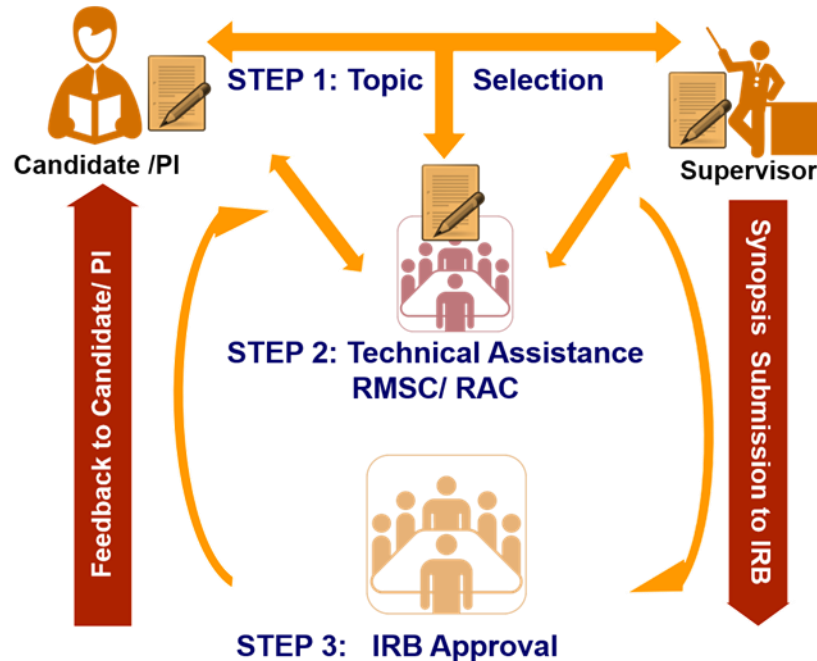
Topic selection by the postgraduate students and the faculty will be with the mutual discussion of the researcher and the supervisor/HOD of the respective specialty or department. The research proposals will be developed by the candidate under the supervision of the supervisors and submitted to the Institutional Review Board of AAMC/GDH. However, for the technical assistance of the postgraduate students and faculty members two Research Management Sub-committees (RMSC) are established under the Research Cell to help and support for proposal development. One of the sub-committees is the clinical RMSC, located in the Hospital, chaired by Prof. Dr. Atiq Ambreen, HOD Pathology. Another RMSC preclinical/basic sciences is located in the Biochemistry Department in AAMC campus chaired by Prof. Dr. Farah Deeba, HOD Biochemistry. PG students and faculty members of clinical sciences can consult any member of the committee with prior appointments with the respected members of clinical RMSC. Faculty member and PGs of basic/preclinical medical sciences can consult the members of the preclinical RMSC. Principal investigator of the research team nominated by the supervisor/HOD of the respective department will endorse the letter of submission of the proposal to the Institutional Review Board (IRB). IRB has authority for the grant of technical and ethical approval of submitted proposals by the candidates/principal investigator. The steps for proposal submission and approval are given below.

Synopsis Approval

- PG students and the faculty members who are nominated as principal investigators will submit the completed synopsis with approval and signatures of the concerned supervisor/HOD of the Department to IRB.
- The completed signed copy of the final synopsis (prepared as per guidelines of IRB, AAMC) along with documents mentioned in checklist (Annexure-2) will be submitted to Department of Medical Education, AAMC.
- The Department of Medical Education, AAMC, will place the synopsis in Institutional Review Board (IRB) meeting, AAMC, in the earliest available slots for approval.
- Principal Investigator will appear before the IRB for defense of the research synopsis and will present the key methodology aspects of the proposal.
- IRB will issue either the approval letter or the feedback comments of the honorable members of the board to be addressed before the issuance of approval letter to the principal investigator.

- The principal investigator will address all the comments of the honorable members of the board and re-submit the proposal along with Compliance Matrix.
- Chairman, IRB, will issue the approval letter of proposal after the satisfaction of the compliance to the comments of the honorable members of the board.
- Principal Investigators or the research team are not allowed to proceed for data collection before the issuance of the approval letter of the IRB.

Proposal Development and Approval Process AAMC



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Director Research Cell & Chairman
Research Advisory Committee
HOD Community Medicine AAMC

Synopsis and Research Report Process for MBBS Students

All 4th year MBBS students will initiate work on their research projects at the start of their academic session. They will be divided into research batches comprising of 4 students each. Each research batch will be allocated a tutor, who will be a faculty member in the Department of Community Medicine, Al-Aleem Medical College (AAMC), Lahore. And all batches will work under the supervision of Prof. Ashraf Majrooh, Head of Department and Prof. Fatima Mukhtar, Department of Community Medicine, AAMC.

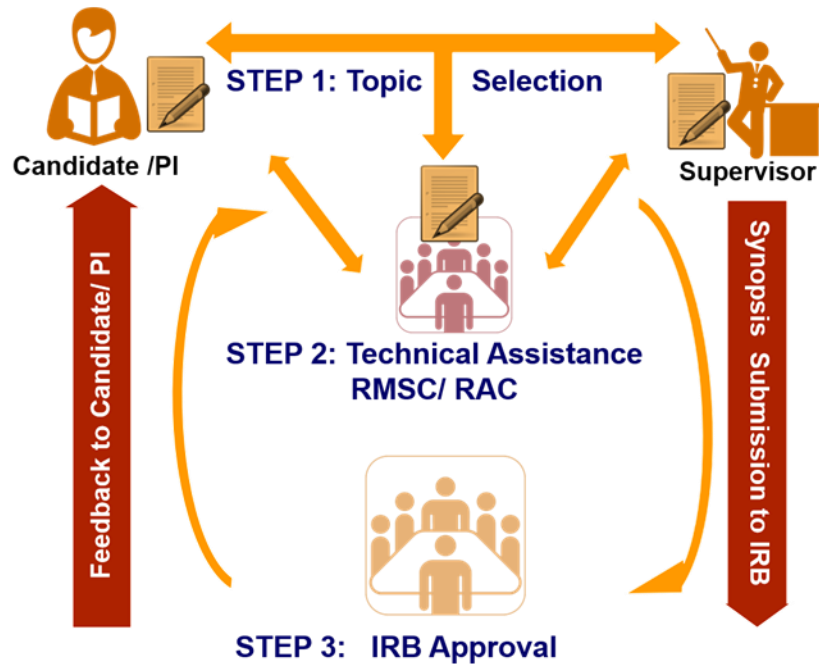
Topic Selection and Synopsis Writing

Students will finalize the research topic in consultation with their tutors and supervisors in the first month of their academic calendar. Once the topic is finalized, students will start developing their synopses in line with the guidelines provided. Synopsis should be printed on A4 paper on single side of page. Prescribed font should be Times New Roman in size 14 for headings and 12 for body text. The text should be justified with line spacing of 1.5. Preliminary pages of the synopsis i.e., those preceding the 'Text' (Title Page, Synopsis forwarding proforma, Table of Contents, List of Abbreviations, etc.) are to be numbered in lower case Roman numerals i.e. (i), (ii), etc. and placed in the middle at the bottom of each page. Pages of the text itself, starting from the Project Summary, and all following sections should be numbered consecutively throughout in numeric numbers i.e. 1, 2, 3 etc. shown in the middle at the bottom of each page. Page number should not be shown on the Title Page.

Synopsis Approval

- The completed synopsis will be thoroughly reviewed by the concerned tutors and required revisions will be incorporated based on their feedback.
- The synopsis will then be submitted to supervisors for review. They will give their comments and suggestions to the students.
- The completed signed copy of the final synopsis (prepared as per guidelines of IRB-AAMC) along with documents mentioned in checklist (Annexure-2) will be submitted to Medical Education Department, AAMC.
- The Department of Medical Education AAMC will place the synopsis in Institutional Review Board (IRB) meeting, for approval.
- One student from each batch (Principal Investigator) along with supervisor will appear before the IRB for defense of the research synopsis.
- Student will address any comments and suggestions provided by IRB on the synopsis and re-submit it to Department of Medical Education AAMC.
- On approval of synopsis an ethical approval form will be issued to each research batch.

Proposal Development and Approval Process AAMC



Research Work, Data Collection and Report Submission

- After the approval from the IRB, AAMC students will conduct field work according to the study plan agreed in the synopsis. During the research work students will remain continuously engaged with their tutors and supervisor.
- The student will submit the final report as per Formatting guideline.

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Formatting Standards

Virtually all synopses/research reports submitted are now being written and produced with the assistance of word processors and computers. Preparing a research report with word processor offers many advantages. The limitations of software or hardware, limited knowledge of the capabilities of software or hardware, and ignorance of approved format and style do not absolve the candidate from the responsibility of meeting the guidelines. The general text of the manuscript must have 1.5 spacing. Tables, long quotations, footnotes, bibliographies and captions may be single spaced. Only single sided copies will be accepted. Strike-overs and chemical corrections such as Sno-Pake, Ko-Rec-Type or Liquid Paper are not acceptable on the final copies.

Paper

White paper, A4 size must be used and both original and reproduced copies should be on 65-70 gram paper. Standard photo-duplication paper is generally acceptable for the submitted final copies. Onionskin and erasable papers are not accepted.

Margins

To allow for binding and trimming the following margins must be maintained: 3.5 cm on the left margin and 2.5 cm on the other three margins (right, top and bottom) must be used. Page numbers and other elements separated from the main text of a page must also fall within these margins. Somewhat larger margins should be set to allow for error and for the enlargement produced by some forms of reproduction.

Most word processors i.e. MS-Office can justify the right and left margin. If right justification is used unhyphenated words may not be accommodated in the same line and a large amount of space may be created. Excessive dead space may not be acceptable.

Pagination

Page numbers are to appear in the middle at the bottom of each page and at least two single spaces above the nearest line of text and within the margin boundaries. The page number for the first page of section/chapter should appear at the bottom of the page. Every page must be numbered and page numbers should appear in the same location on the page except first page of the chapters of the body of the research report.

Preliminary Pages

Numbers must not be typed on the Title Page or the Thesis Approval pages. The next page is numbered "iv-starts from abstract" and all other pages followed the abstract of preliminary material are numbered consecutively in lower case Roman numerals.

Text and Reference Matter

Use Arabic numerals beginning with "1" starts from section/chapter-I i.e. "Introduction" on the first page of the text and continue throughout the rest of the thesis including the reference matter. Every page must be numbered consecutively including pages containing non-textual materials such as illustrations, plates, figures, etc. The insertion of manually prepared tables, figures and illustrations and other last minute changes may make it difficult to accomplish the required sequential

pagination. In such cases, page numbers may be added manually using a typewriter after the entire thesis has been assembled provided that all page numbers are of the same type face and type size.

Research Report Writing

The detailed organization of the research report should be as follows:

Preliminary Pages

1. Blank page (optional)
2. Title page (unnumbered)
3. Research project approval pages (unnumbered)
4. Abstract (first numbered preliminary page is **iv**)
5. Dedication (optional).
6. Acknowledgements (optional).
7. Table of Contents.
8. List of Tables (optional).
9. List of Figures & Illustrations (optional)
10. List of Symbols (optional)
11. List Abbreviations (optional).

Text pages

1. Introduction
2. Literature Review
3. Methods and Materials.
4. Results.
5. Discussion.
6. Conclusions and Recommendations.
7. References

Annexure

1. Tables or charts discretion of supervisor about the tables /graphs to be reflected in the text or in the annexures
2. Questionnaires, Checklists and other data collection tools and guidelines
3. Resource materials like specific criteria, treatment protocol, diagnostic criteria and evaluation scales like Glasgow Coma Scale or any other relevant reference material used in the thesis and dissertation.

Description of preliminary pages

Title Page

The title page should have title, candidate name, supervisors name, insignia of the medical college, name of the department, and year. The title should be brief but should show the nature of the research reported. Formatting of the title page, which includes spacing and the use of capital and small letters, must be exactly as in the sample title given in annexure no. 4

Abstract

An abstract should immediately follow the research project approval page and must be numbered accordingly, i.e. page iii or iv. It should contain approximately 200 words, be single spaced, and briefly discuss the rationale, objective, methodology, results (findings) and conclusion.

Dedication (Optional)

Dedication should appear on a separate page; the spacing should be as the body of the thesis

Acknowledgements (Optional)

Though students acknowledge help of supervisor, Chairman, Dean of faculty, members of the supervisory committee, friends etc.; however, it is their duty to provide reasonable help, which should not be acknowledged. However, it is logical to acknowledge those who helped you beyond their duty; organizations or persons who gave financial support for research, who provided of equipment's, from whom you borrowed equipment, who provided material: who helped you and it was not their duty like help in research method, analysis, etc. Help of friends should not be acknowledged

Table of Contents

Each research report must have a Table of Contents that shows all major sections, including References and Appendix. The amount of detail used in listing, sub-sections within section/chapters is left to the discretion of the investigator in consultation with the supervisor. The wording and presentation of all entries (capitalization, fonts, characters etc.) must be identical to the body of the thesis. All entries must have a corresponding page number with leader dots or dashes connecting the entry to the page number. No section preceding the Table of Contents, nor the Table of Contents itself, may be listed in the Table of Contents. The preliminary sections should follow the Table. The table of content may be simple listing of some preliminaries, section chapter headings and Annexure or detailed table of content showing major sections in the chapters.

List of Tables (Optional)

For the convenience of the reader, a List of Tables may be included. It should be separate from, and immediately follow the Table of Contents. Each entry should have the same number and title as that which accompanies the corresponding table in the body of the thesis. Exceptionally long captions may be abbreviated to the extent of using only the first full sentence. The format of the List of Tables should follow that of the Table of Contents.

List of Figures/Illustrations (Optional)

These are all governed by the same rules as the list of Tables and immediately follow the list of Tables.

List of Symbols (Optional)

For sample list of symbols follow the list of figures.

List of Abbreviations (Optional)

For sample list of abbreviations follow the list of symbols if any.

Description of Text Section of Research Report

The major body of a research report consists of:

- Introduction
- Literature Review
- Methods and Materials
- Results
- Discussion
- Conclusions and Recommendations.
- References

Introduction

The body of the research report starts with the Introduction (Page 1). It presents the specific problem, purpose, study, and the objectives of the study. The hypotheses are stated and how they relate to the problems. The theoretical implications are discussed and how the present study adds to the foundation of knowledge. Throughout the research report, care should be taken that the author's personal opinions are not interjected. Writing in the first person should be avoided. The introduction of the research report should be in more detail and elaborated than presented in the synopses.

Literature Review

This indicates the historical background for the study and as a result of this section gaps should be identified of which the present study helps to fill. A logical continuity between the previous and present work should be maintained. Do not report each study separately but synthesize findings and make one analysis. If a number of previous studies have similar results, cite all studies and report the results at once. Logical order should be followed and not alphabetical or chronological as one. The review should be relevant to the research conducted and presented in the exposition. The literature review must sketch the landscape on which the present research is being conducted. The end paragraphs of literature review must be concluded in such a way that the rationale of the current study can be inferred. For example if you are conducting research on some new diagnostic procedure the previous diagnostic procedures available in the literature must be reviewed and their merits in clinical practice must be depicted from the literature and expected benefits of the new diagnostic procedure will provide the basis for the rationale of the study and addition of knowledge in the existing pool of knowledge. It should be remembered that minimum two third of the references should be of recent publications, that is, within the past five years. More than two third of the references must be from the peer review journals and rest should be from the other published or unpublished literature, documents, reports, books, conferences, news articles, lectures and presentations. Specific methodology for text citation and end listing of reference must be followed for each category of literature referred.

Methodology Section (Material and Methods)

This section presents a detailed description of the materials used, and the process and procedures of the research. It should be remembered that these should be written in more elaboration as compared to the synopsis and it should cover any changed course of methodology due to difficulty in the implementation of actual plan given in the submitted synopsis. It must include the study design of quantitative or qualitative research methods, the description of the reference population and study populations, intervention details, sample size and its rationale and method of estimation, and sampling techniques and data collection procedures. In data analysis appropriate study variables for description, dependent and independent variables for comparison and to establish the associations must be identified. The descriptive and comparative analysis must be separately given according to the study objectives. In comparative statistical analysis the associations, correlations and the statistical test of significance applied to accept or refute the statically stated null hypothesis must be clearly mentioned.

Results Section

This section describes the data analysis outputs in the forms of the tables, graphs interpretation and inferences drawn from the data. The section should follow a logical sequence and each objective or hypothesis should be addressed. Descriptive summaries must be reported with 95% confidence limits of the normal distribution. If analytic and comparative studies are used then statistical association must be estimated and proved with the test of significant where the association are significant or not. Report the data in sufficient detail to justify conclusions. All the data proposed to be recorded in the synopsis must be reported in this section. The discussion of implications is not appropriate here. Generally, the data will be presented in tables and charts; data presented in table must not be presented in charts/figures as it is duplication. Bar graph should be used for presenting the results of levels of qualitative factor and line graph should be used to present results of quantitative factors. It is better to present key findings and significant interactions graphically. Provide results with statistical associations and p-values.

Discussion

Discussion places your research as addition in the existing knowledge so in this section the inferences drawn from the results must be discussed in the context of existing knowledge. Discussion is actually the inductive reasoning on the deductions of the results. Give the why's of the results. Relate your results to previous findings and how they support or negate previous findings and why. It is better to relate different types of data with each other and extract meaningful important findings. If your results are grossly different from the existing finding then justify your results in the context of research methodology limitations and artifacts that could arises in previous or your own results also mentioned the limitation for interpretation of your study results

Conclusions and Recommendations

Conclusions are the comprehensive summary of the findings, which must be written at the end of discussion. Conclusions must be based on data drawn inferences and facts not the

personal opinions or literature based findings. Conclusions at the end may lead to some solutions of the problems depicted from the data inferences. The recommendation must be framed on the basis of conclusion and inferences drawn from the data based facts.

Illustrative Materials

In most cases, the body of the thesis will include certain materials other than ordinary text, e.g. illustrations, formulas, footnotes, etc. In such cases the following guidelines should be observed. Illustrations may be inserted wherever the author feels appropriate, but as a general rule, should appear as near as possible to, the part of the text relating to them. Sometimes, illustrations cannot be inserted easily into the body of the thesis, without involving the breaking of a paragraph. Possible solutions to this problem include: inserting the illustration at the end of the paragraph; on a separate, non-textual page that immediately follows the page of text on which the illustration was first mentioned; having materials grouped together at the end of the chapter. In any event, all illustrations should be numbered consecutively throughout the entire thesis. Illustrations running longer than one page such as a Table may be continued on one or more pages. In such cases all subsequent pages of the illustration must include the illustration number and the notation that it is continued.

Tables

Tables are effective ways of presenting quantitative data. They should be self-explanatory and stand alone. When referring to a table in text, refer to it by its number, e.g. the PCR data are shown in Table 1. The title of the table should give full details; units must be given.

Figures

Illustrations, not tables, are usually called figures. They include photographs, graphs or charts. The number and title of a figure is shown at the bottom of the figure rather than at the top. Non-professional lettering is not acceptable for figures. Simple type face is preferred.

Quotations

Any material that is duplicated from another source must be given appropriate credit. In the text it should be enclosed with double quotation marks. Long quotations must be indented from both sides.

Formulas

Mathematical and chemical formulas may be printed or neatly hand lettered. Complex mathematical formulas of two or more lines should not be included in text lines but should be placed in the proper position in the center of the page between lines of text. The lines in structural chemical formulas and hand letter mathematical formulas must be drawn with an ink that will allow the production of clear photocopies. For example:

$$\text{Standard Error} = SE = \frac{SD}{\sqrt{n}}$$

Equations in a text should not project above or below the lines. Those that cannot be displayed on a line of text should have a double space above and below them. Equations can be drawn using MS-Word.

In text Citations

Text citation in the literature review and introduction must be according to Vancouver referencing style.

In Vancouver style of text citations appear in consecutive sequential numbers. For details please consult the Vancouver Style Referencing Guide at Annex 5 of the manual

Annexures (Optional)

In some research reports, it may be desirable to include certain materials e.g. test forms, blank record forms, detailed apparatus descriptions, extensive tables of raw data, computer programs, statistical analysis, etc. that do not actually form a part of the text. These materials should be included in the Appendix. The Annexure is not given a chapter section. If there are two or more types of materials, they should be headed as appendices.

Typing and punctuation Standards

The following standards should be adhered to:

Colons (:), semi-colons (;), commas (,) should all be followed by a single space. Full stops (.) should be followed by two spaces except after an abbreviation where only a single space is needed. The type size should be 12 point. Photocopies should be very clean and text should be acceptable.

Referencing Guide

Literature Citation

Each research report must have a list of references entitled "References" which cites all books, articles, and any other sources of material related to the thesis research (cited in the text). Citations must be arranged according to Vancouver style. In Vancouver style the end list of the references is arranged in consecutive sequential numbers as the citations appear in the text. It is customary for this section to be placed at the end of the thesis. The identified literature only cites references used in the text. Other documents should not be listed. Each entry usually contains the author name /author's names, title, journal/book name, year of publication, volume, issue, and page number.

The comprehensive description of Vancouver style is not in the scope of this manual however a brief description with examples is given below and a brief guideline is annexed in the Annexure of this manual.

Article in Journals or Periodicals

Give surname and initials of all authors. Use commas to separate surnames and initials. When there are two or more authors use "and" before the name of the last author. A period will follow authors. For the first author, the family name should be followed by the initial. For subsequent authors give initial followed by the family name. Use the name of the organization as the author where the name of the author is not given. Capitalize only the first name of the title and subtitle and finish with a period. Give the name of the journal in accordance with the recommendation in the International Standards for Abbreviations. Give the year the article was published. Finish with a period. If a periodical, give month and date following year. Provide volume and issue number of journal. Give inclusive page numbers and finish with a period.

Vancouver Style article in Journal

In the Vancouver style, a consecutive number is allocated to each reference as it is cited for the first time in the text of the assignment. This number becomes the unique identifier of that source and if the source is cited again the same number is repeated. Numbers are inserted to the right of commas and full stops, and to the left of colons and semi-colons. Multiple sources can be listed at a single reference point. The numbers are then separated by commas and consecutive numbers are joined with a hyphen. Vancouver uses superscript numbers, or standard numbers in brackets, in the text, e.g. ^{1-4,10,12} or (1-4,10,12). The references are listed at the end of your assignment in the numerical order in which they are cited in the text.

Books

For author and date of publication refer to section on Journals. If the book is edited, place "ed" or "eds" in parenthesis after the name of the last editor. Capitalize only the first word of the title and the subtitle. If there are more than one edition (ed) or volume (vol), they

should be included in parenthesis. Give the publisher, followed by a colon, and the name of the city. End with a period. For examples consult the Annexure at the end

Annexures

1. Application for IRB
2. Checklist for research proposal submission-IRB
3. Template for Synopsis Title Page
4. Template for Research Report Title Page
5. Vancouver Referencing Guide



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A-1 Checklist for research proposal submission to IRB



AAMC/IRB/Form_____2022

Application for Institutional Review Board

Title:

Researcher Name: _____

Supervisor/ H.O.D: _____

For Administration:

Title:

Principle Author Name: _____

Application #: _____

Proposal #: _____

Received On: _____

IRB Meeting Date: _____

Research Proposal Status

Approved

Not Approved

A-2 Checklist for research proposal submission to IRB

Checklist

Please ensure that the following documents (if applicable) are completed with this form.

1 copy of filled IRB application for along with the required documents.

The following documents, if applicable, will be attached with each form.

15 copies of research proposal written according to research proposal guidelines

(Appendix 1).

A copy of drug brochure or any supplementary information enclosed (if applicable).

A copy of “informed consent” in English and/or Urdu or any other local language of the population study.

A copy of the questionnaire in English and/or Urdu administered during the study (if applicable).

A signed permission from the University and Supervisor to allow allotment of Co-Supervisor from Gulab Devi Teaching Hospital.

Note: Please make a copy of this entire application for your files

I have submitted the application form, research proposal and informed consent.

Principle Researcher

Date

Supervisor

Date

A-3 Template for Synopsis Title page

Research Synopsis

**Immune Response to Natural Exposure and Vaccination against
the COVID-19 in Gulab Devi Hospital Lahore**

**Student
Aizza Chaudhry**

Supervisor

Prof. Dr. M. Ashraf Majrooh



**Department of Community Medicine
AL-ALEEM MEDICAL COLLEGE LAHORE**

A-4 Template for Research Report Title Page

**Research Report
Immune Response to Natural Exposure and Vaccination against
the COVID-19 in Pathology Department Al-Aleem Medical
College Lahore**

**Student
Noor Fatima**

Supervisor

Prof. Dr. M. Ashraf Majrooh



**Department of Community Medicine
AL-ALEEM MEDICAL COLLEGE LAHORE**

A-5 Vancouver Referencing Guide

Note: this page is only an introduction to the Vancouver referencing system. For an authoritative guide please refer to:

International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. Med Educ 1999;33:66-78. This is available online at <http://www.icmje.org/> with examples at http://www.nlm.nih.gov/bsd/uniform_requirements.html.

For a comprehensive guide, please refer to the American Medical Association's publication manual:

American Medical Association manual of style: a guide for authors and editors. 9th ed. Baltimore: Williams & Wilkins; 1998

It is very important that you check your department's or school's assignment guide as some details, eg punctuation, may vary from the guidelines on this page and the above sources do differ on some points. You may be penalised for not conforming to your school's requirements

What is Referencing?

Referencing is a standardised method of acknowledging sources of information and ideas that you have used in your assignment in a way that uniquely identifies their source. Direct quotations, facts and figures, as well as ideas and theories, from both published and unpublished works, must be referenced.

There are many acceptable forms of referencing. This information sheet provides a brief guide to the Vancouver referencing style. The Vancouver style of referencing is predominantly used in the medical field.

When referencing your work in the Vancouver style, it is very important that you use the right punctuation and that the order of details in the reference is also correct. In this style, the journal titles used in the references are abbreviated from an authoritative list (see below).

A reference list at the end of the assignment contains the full details of all the in-text citations.

Why Reference?

Referencing is necessary to avoid plagiarism, to verify quotations, and to enable readers to follow-up and read more fully the cited author's arguments.

Steps Involved in Referencing

1. Note down the full bibliographic details including the page number(s) from which the information is taken.

In the case of a **book**, 'bibliographical details' refers to: author/editor, year of publication, title, edition, volume number, place of publication and publisher as found on the front and back of the title page. (Not all of these details will necessarily be applicable).

In the case of a **journal article** the details required include: author of the article, year of publication, title of the article, title of the journal, volume and issue number of the journal, and page numbers.

For all **electronic information**, in addition to the above you should note the date that you accessed the information, and database name or web address (URL).

2. Insert the citation at the appropriate place within the text of the document (see examples below).

3. Provide a reference list at the end of the document (see examples below).

In-Text Citations

In the Vancouver style, a consecutive number is allocated to each reference as it is cited for the first time in the text of the assignment. This number becomes the unique identifier of that source and if the source is cited again the same number is repeated. Numbers are inserted to the right of commas and full stops, and to the left of colons and semi-colons. Multiple sources can be listed at a single reference point. The numbers are then separated by commas and consecutive numbers are joined with a hyphen. Vancouver uses superscript numbers, or standard numbers in brackets, in the text, e.g. ^{1-4,10,12} or (1-4,10,12).

The references are listed at the end of your assignment in the numerical order in which they are cited in the text.

The main advantage of the Vancouver style is that the text reads more easily, without the intrusion of in-text citations which can be difficult to keep brief. The reader can also check the references as they read through the text, without having to search through the list alphabetically for the first author of a particular reference.

How to Create a Reference List

In the Vancouver style, the reference list is arranged numerically in the order in which references are cited in the text.

When referencing your work in the Vancouver style, it is very important that you use the right punctuation and that the order of details in the reference is also correct.

Book and journal titles are not italicised or placed in quotation marks. Journal titles are abbreviated. A list of abbreviations for the titles is available online. Connect to PubMed at <http://www.ncbi.nih.gov/entrez/query.fcgi>, click on "Journals Database" and then enter the full journal title to view its abbreviation.

Examples of referencing:

Books	In-Text Example	Reference List Example
<i>Single author</i>	The theory was first propounded in 1993 by Comfort ¹ that ... OR Comfort ¹ claimed that '...'	1. Comfort A. A good age. London: Mitchell Beazley; 1997.
<i>2 – 6 authors</i>	'... new definition of disability.' ² OR Madden and Hogan have stated that '...' ²	2. Madden R, Hogan T. The definition of disability in Australia: moving towards national consistency. Canberra: Australian Institute of Health and Welfare; 1997.
<i>More than 6 authors</i>	Numerous academic librarians ³	3. Rodgers P, Smith K, Williams D, Jones A, Brown W, Green B, et al. The way forward for Australian libraries. Perth: Wombat Press; 2002.
<i>No author</i>	'...the most-accepted definition.' ⁴	4. Oxford dictionary for scientific writers and editors. Oxford: Clarendon; 1991. p.56
<i>Multiple works by same author</i>	University research ⁵⁻⁶ has indicated that... [if not previously cited]	5. Brown P. Corals in the Capricorn group. Rockhampton: Central Queensland University; 1982. 6. Brown P. The effects of anchor on corals. Rockhampton: Central Queensland University; 1988.
<i>Editor</i>	The most comprehensive work on the subject ⁹ ...	9. Kastenbaum R, editor. Encyclopedia of adult development. Phoenix: Oryx Press; 1993.
<i>Different Editions</i>	The latest preferred style ... ¹⁰	10. Renton N. Compendium of good writing. 3rd ed. Milton: John Wiley & Sons; 2004. An edition number is placed after the title of the work - this is not necessary for a first edition.
<i>Encyclopedia or Dictionary</i>	'is defined as ...' ⁴	4. Oxford dictionary for scientific writers and editors. Oxford: Clarendon; 1991. p.89

<i>Article or chapter in a book</i>	As discussed by Blaxter ¹¹ ...	11. Blaxter M. Social class and health inequalities. In: Carter C, Peel J, editors. Equalities and inequalities in health. London: Academic Press; 1976. p.369-80
<i>Article or chapter in a book – no author</i>	Achieving a life of its own ¹² ...	12. Solving the Y2K problem. In: Bowd D, editor. Technology today and tomorrow. New York: Van Nostrand Reinhold; 1997. p.27-40
<i>E-book</i>	Pettinger's work on the topic ¹³ ...	13. Pettinger R. Global organizations [monograph online]. Oxford: Capstone Publishing; 2002 [cited 2004 Sep 28]. Available from: Curtin University Library and Information Service E-books.
Print Journals	In-Text Example	Reference List Example
<i>Article</i>	As mentioned by Wharton, ¹⁴ ...	14. Wharton N. Health and safety in outdoor activity centres. J Adventure Ed Outdoor Lead 1996;12(4):8-9.
<i>Article – no author</i>	It's a growing problem in the U.K. ¹⁵ ...	15. Anorexia nervosa. Br Med J 1969;2(1):529-30.
<i>Newspaper article – with or without author</i>	'... not responsible'. ¹⁶	16. Towers K. Doctor not at fault: coroner. The Australian. 2000 Jan 18;3.
<i>Newspaper article – no author</i>	'...not responsible'. ¹⁷	17. Doctor cleared by coroner. Sydney Morning Herald. 2000 Jan 24;12
<i>Press release</i>	As stated by the company ¹⁸ ...	18. Watersmith C. BHP enters new era [press release]. Melbourne: BHP Limited; 2000 Mar 1.
Electronic Journals	In-Text Example	Reference List Example
<i>Full text from an electronic database</i>	The economic policy issues raised by the Internet are discussed in detail by Madden ¹⁹ ...	19. Madden G. Internet economics and policy: an Australian perspective. Economic Record [serial online]. 2002 [cited 2002 Oct 16]; 78(242):343-58. Available from: ABI/Inform.
<i>Full text from an</i>	The internet has had a huge impact on	20. Internet economics and policy: an Australian

<i>electronic database – no author</i>	the Australian economy ²⁰ ...	perspective. Economic Record [serial online]. 2002 [cited 2002 Oct 16]; 78:343-58. Available from: ABI/Inform.
<i>Full text newspaper, newswire or magazine from an electronic database – no author</i>	Promoted as a 'frontier state' ²¹ , Western Australia is seen by overseas tourists as ...	21. WA packed with overseas appeal. The West Australian [serial online]. 2003 [cited 2004 Nov 13] Nov 12;47. Available from: Factiva.
<i>Full text from the internet</i>	Recreational venues of a seasonal nature can still be profitable ²² ...	22. Sopensky E. Ice rink becomes hot business. Austin Business Journal [serial on the Internet]. 2002 [cited 2002 Oct 16];10(4). Available from: http://www.bizjournals.com/austin/stories/2002/10/14/s_mallb1.html .
<i>Article from Curtin E-Reserve</i>	'...tips on speaking to groups of health care professionals.' ²³	23. Davidhizar R, Dowd, SB. The art of giving an effective presentation. Health Care Supervisor [serial online]. 1997 [cited 2002 Oct 16];15(3):25-31. Available from: Curtin University Library and Information Service E-Reserve.
<i>Article from a CD-ROM (BPO)</i>	Marketing is money well spent, even in hard times, according to La Rosa. ²⁴	24. La Rosa SM. Marketing slays the downsizing dragon. Information Today [serial on CD-ROM] 1992 [cited 2002 Oct 16];9(3):58-9. Available from: UMI Business Periodicals Ondisc.
World Wide Web	In-Text Example	Reference List Example
<i>Document on WWW</i>	A good example of how students can learn online about referencing at their own pace can found at Curtin University. ²⁵	25. Department of Health. Creutzfeldt Jakob disease: guidance for healthcare workers [web page on the Internet]. 2003 [cited 2003 Nov 9]. Available from http://www.doh.gov.uk/pdfs/cjdguidance.pdf
<i>Document on WWW – no article title</i>	... Curtin University Library launched an improved version of their homepage. ²⁶	26. Curtin University of Technology [homepage on the Internet]. 2004 [cited 2004 Dec 21]. Available from: http://www.curtin.edu.au
<i>Document on WWW – No</i>	Both Leafy Seadragons and Weedy Seadragons are protected species. ²⁷	27. Leafy seadragons and weedy seadragons [web page on the Internet]. 2001 [cited 2004 Dec 10]. Available from:

<i>author</i>		http://www.windspeed.net.au/~jenny/seadragons/ .
<i>Document on WWW – No date</i>	A link between these conditions has been noted by McCook. ²⁸	28. McCook A. Pre-diabetic condition linked to memory loss [web page on the Internet]. No date [cited 2003 Feb 7]. Available from: http://www.nlm.nih.gov/medlineplus/news_11531.html
Government Publications	In-Text Example	Reference List Example
<i>Acts of Parliament</i>	The <i>Environmental Protection Act</i> 1986 ²⁹ ...	29. Environmental Protection Act of 1986, WA [statute on the Internet]. 2002 [cited 2004 Dec 21]. Available from: State Law Publisher .
<i>Cases</i>	State-federal relations in this issue were tested in court as far back as 1915 ³⁰ ...	30. The State of New South Wales v. The Commonwealth (1915) 20 CLR 5
<i>Australian Bureau of Statistics Bulletin</i>	... change from the figures published in 1999 by the ABS. ³¹	31. Australian Bureau of Statistics. Disability, ageing and carers: summary of findings. Canberra: ABS; 1999. ABS publication 4430.0.
<i>Australian Bureau of Statistics from AusStats</i>	... change from the figures published in 1999 by the ABS. ³²	32. Australian Bureau of Statistics. Disability, ageing and carers: summary of findings [serial online]. 1999 [cited 2004 Oct 14]; ABS publication 4430.0. Available from: AusStats.
<i>Census Information</i>	... information from the 2001 census now becoming dated. ³³	33. Australian Bureau of Statistics. Census of population and housing: 2001 Census Basic Community Profiles and Snapshots: Postal Areas: postal area 6050: B01 selected characteristics. First release processing [data table online]. 2001 [cited 2002 Nov 20]. Available from: AusStats.
<i>Government Reports</i>	... a new approach to resource assessment on the macro level. ³⁴	34. Resource Assessment Commission. Forest and timber enquiry. Volume 1. Draft report. Canberra: Australian

Other Sources	In-Text Example	Reference List Example
		Government Publishing Service; 1991.
<i>Personal communication, e-mail, discussion lists (no web archive)</i>	It was confirmed by S. Savieri (personal communication, April 24, 1999) that an outbreak occurred in London at this time.	Not included in reference list as they cannot be traced by the reader.
<i>Films and videorecordings</i>	... as seen in the Lonergan film, <i>You Can Count on Me</i> . ³⁵	35. Scorsese M, producer; Lonergan K, director. <i>You can count on me</i> [motion picture]. United States: Paramount Pictures; 2000.
<i>Television and radio programmes</i>	... then AMA chief, in a television interview. ³⁶	36. The medical profession in the 1990's [television broadcast]. <i>The MacNeil/Lehrer news hour</i> . New York, Washington D.C.: Public Broadcasting Service; 1993 Oct 11.
<i>ERIC document (microfiche)</i>	... examined the advantages and disadvantages of country education. ³⁷	37. Davis RK, Lombardi TP. The quality of life of rural high school special education graduates. In: <i>Rural goals 2000: Building programs that work</i> [microfiche]. ERIC document No.: ED394765.
<i>E-mail discussion list – web archive</i>	... as discussed by Little. ⁸	38. Little L. Two new policy briefs. ECPOLICY [discussion list on the Internet]. 2002 Apr 16 [cited 2002 Nov 13]. Available from: http://www.askeric.org/Virtual_Listserv_Archives/ECPOLICY/2002/Apr_2002/Msg0003.html