



وزارة التعليم العالي والبحث العلمي

جامعة تكريت

كلية الطب



How to perform a medical research ?

اعداد: ا.م.د. نسرین محمد ابراهيم/فرع طب المجتمع

Research

***Research:** Systematic search for information and new knowledge, it depends on systematic collection, analysis and interpretation of data to answer a question or solve a problem.

***Characteristics of research:**

1. It demands a clear statement of the problem.
2. It requires a plan (it is not aimlessly looking for something in the hope that you can find a solution)
3. It is based on existing data with consideration of positive and negative findings.
4. New data should be collected as required and be organized in such a way that they answer the original research question.

***Types of research:**

1. Theoretical research: It is based on theory and observation.

2. Empirical research: It is based on observation and experiments as in biomedical and health system researches. Health research includes epidemiological (biomedical, evidence based medicine), health system research, and behavioral / socio-economic and cultural research.

***Research implementation activities**

1. Choosing a topic.
2. Literature search.
3. Formulate objectives.
4. Determination of sample.
5. Design a questionnaire.
6. Pretest.
7. Data collection.
8. Data analysis.
9. Computing.
10. Writing.
11. Typing.
12. Presentation.
13. Publication.
14. Application.

Components of thesis:

1. Title:

- . A good title should adequately describe the contents of the paper in the fewest possible words.
- . It should not be too long or too short generally, it should consist of 10–12 words.
- . It should not include any unnecessary words, nor waste space with phrases such as “Observations on” or “A study of”.
- . It should not contain abbreviations

2. Summary or Abstract:

- Many may read it only.
- . Not more than 2 pages.
- . Should contain: why, what, where, and how of your work.
- . It must include some important findings.
- . Conclusion must be clear in the last line
- . It should be included at the beginning of the thesis.
- . Abstracts are generally written in the past tense.
- . It should not include references to literature or to figures and tables in the body of thesis.
- . It should not include information that is not in the paper.
- . It should not contain abbreviations or acronyms unless standard or very well known.

3. Acknowledgment:

- . Simple sentences.
- . Includes supervisor, typist, and people who helped in work

4. Contents:

- . Must be clear, use separate headings for the text, figures, & tables.

5. Abbreviations:

- . Arranged in alphabetical order.

6. Introduction:

- . Start with scientific bases of the work.
- . State the major facts and means related to the subject.
- . What other people discovered.
- . Aim of your work clearly.

.It should not be over-referenced; it should give only strictly important references

.It Should include definition, bases, history, & progress.

7. Material (subject or patients) and method:

.The methods section should provide a detailed exposition of the research design.

.The methods section should be organized under meaningful subheadings and describe techniques used in sufficient detail to allow others to replicate the study.

.New or substantially modified methods should be clearly described, with reasons given for using them and with their limitations outlined.

.Sample details should be explained in detail (size, gender, age, included and excluded criteria of sample)

.Time and place of work should be clearly identified.

.Where , & when was the work conducted?

.What was the source o your sample?

.How was the procedure?

.What was done?

.No results, no conclusions, no references

8. Results

.Results that do not relate to the research objective should not be mentioned.

.Sufficient detail should be given to allow other scientists to assess the validity and accuracy of the results.

.Tables:

-A table should be readily understood without reference to the text.

-A table should be cited in the text,

be numbered, and have a title which exactly describes the content of the table.

-It should have short or abbreviated headings for columns and rows and, if necessary, a footnote for explanation of non-standard abbreviations that are used, and for identification of statistical measures of variations.

-Columns should be arranged from left to right in a logical sequence.

-Rows should be arranged from top to bottom in a logical order.

.Illustrations

-Graphs are used to illustrate relationships.

-Titles and detailed explanations belong in the legends for illustrations not on the illustrations themselves.

-Figures should be numbered consecutively according to the order in which they have been first cited in the text.

-When symbols, arrows, numbers, or letters are used to identify parts of the illustrations, each one should be explained clearly in the legend.

9. Discussion:

. Statement of principal findings, This should not normally be more than a few sentences.

. Strengths and weaknesses of the study.

. Strengths and weaknesses in relation to other studies.

. Meaning of the study, possible mechanisms and implications for clinicians and policymakers

. Unanswered questions and future research.

9. Conclusions:

. It should be linked with the goals of the study.

. It should be limited to the boundaries of the study.

. Avoid unqualified statements and conclusions not completely supported by the data.

10. Recommendations:

. Suggestion for future work

11. References

. The number of references should be restricted to those that have a direct bearing on the work described.

. In the Harvard system, the order of references at the end of the paper is strictly alphabetical, regardless of the chronology.

. In Vancouver system references should be numbered consecutively in the order in which they are first mentioned in the text. References in text, tables and legends should be identified by Arabic numerals (1,2,3...) in parentheses. References cited only in tables or figure legends should be numbered in accordance with the sequence established by the first identification in the text of the particular table or figure

. In Tikrit medical college, references written by Vancouver style.

12. Appendix.

Criteria for a good research topic

A good research topic should be feasible (can be done), interesting, novel, ethical and relevant (has an implication)

FINER :

F = feasible

I = interesting

N = novel

E = ethical

R = Relevant

Feasibility :

Before doing a research the researcher must be sure that research can be done and complete according to these factors:

It should be possible in order the time frame of the planned research.

Equipment, supplies and other requirements to undertaken the research should be available.

The researcher must have the required expertise

The cost of doing the research must be affordable and the financial resources available.

The research objectives must not be too many.

Interest :

The research topic must be of interest to investigator and to scientific community.

Novelty :

It is essential that the investigator is familiar with the up – to –date literatures on the topic of research.

Ethics :

General ethical principles:

Ethics are principles of right conduct, there are generally no disagreements on the ethical principles in themselves, since they represent basic human.

The research process begins with the choice research topic, followed by selection of the appropriate research design, development of research

protocol, writing and analysis and interpretation of the research results and finally communicating the research; including its publication .ethical consideration apply throughout research process.

Relevance :

Also it called " so-what " test for the research to be considered relevant it must have the potential to advance scientific knowledge policy , or guide further research.

Sample:

*Sample: It is a part of the population. Characteristic of population called parameter, and of sample called statistics. The differences between probability and non probability sampling, the results in probability can be generalized, and in non probability sampling can not.

1. Sample of entities.
2. Sample of value.

***Types of sample:**

A. Probability sample:

A.1. Simple random sampling: Each member of population has an equal possibility of being chosen for the sample with chance alone responsible for selection of any member can be chosen by table of random number. Simple random sampling (not haphazard) selected by the following methods:

1. Lottery method.
2. computer generated random sampling.
3. Using the random number table.

A.2. Systematically sample: A random starting point at the beginning of sample chosen according to the predominant selection schedule e.g. 100 students are ranked by age then begin with 4th students and every 10th student chosen (4th, 14th, 24th,...).

A.3. Stratified sampling: The population is divided into sampling unites that contain individuals and then a random sample of individuals proportionate to the size of the sampling unites. E.g. in your college four classes then chose 20% from each class.

A.4. Clustered sampling: The population is divided into unites (or groups) not individuals , then a random sample of these clusters will be chosen, clusters include e.g. schools, districts, hospitals, villages, clinics, factories....

A.5. Multistage sampling: This procedure is carried out in phases (stages) and can involve more than one of the above sampling methods. It is used on a very large number of population. E.g. as if we study Iraqi people so we divide them into governments, then districts, village, and so on

B. Non probability sample:

B.1. Convenience sample: Members of population are chosen for the sample, or e.g. If a doctor wants to study typhoid he will not study each patient with typhoid, but chose cases that reach him in his clinic.

B.2. Quota sampling: The composition of the sample regarding certain characteristics is decided from the beginning, & the only requirement is to find the right number of people to fill these quotas.

Questionnaire design

A questionnaire: It is a document designed for the purpose of seeking specific information from the respondents.

Types: The questionnaire may be

1-self-administered

2- Administered by interviewers.

The self-administered questionnaire approach is cheap, less susceptible to interviewer bias and can be administered by mail. At the same time, the rate of non-response may be high, and may bias the results. Also, answers may be incomplete.

Types of questions: There are two major question formats:

1- The open-ended and closed-response types.

2- closed-response question, the respondent is provided with a list of pre-determined response options.

Open-ended questions elicit more detailed responses, but the responses require more effort to encode for data analysis.

A questionnaire may include both question formats.

Closed-response questions may be used to elicit attitudes of the respondents to a certain statement. In the forced-choice format, the respondent chooses from among: strongly agree, agree, undecided, disagree, strongly disagree. In the forced-choice format, responses are limited to:

strongly agree, agree, disagree, and strongly disagree. This format does not allow an undecided answer.

Questions should be well worded to avoid any ambiguity. Questions should not be phrased in a way that influences the response in one direction or another. The questionnaire should always be pre-tested in a pilot study before the main survey. Interviewers should be trained to make sure that the questionnaire is administered in a uniform way.

A questionnaire typically includes the following components:

- an introductory statement by the interviewer to introduce herself/himself and explain the purpose of the questionnaire; the respondents should also be informed about the confidentiality of their responses;
- demographic questions to collect relevant information about the background of the respondent;
- factual questions; opinion questions: opinion questions require reflection; it is generally easier for the respondent to answer factual questions; putting the factual questions first serves as a “warm up” to the opinion questions;
- closing statement by the interviewer to thank the respondents, and where appropriate to ask if s/he wants to provide any additional comment.

A method commonly used to test for reliability in results obtained by questionnaires is to look for internal consistency, that is the extent to which the responses on different questions correlate with each other. If they tend to be highly correlated with each other, then the test is said to be internally consistent. The computer program can be built up to detect inconsistency. There is a tendency among investigators to put too many questions. This has been encouraged by the introduction of computer-assisted analysis. Information collected in a questionnaire should be based on and limited to the objectives of the study.

Data Resources

1. Primary
2. Secondary sources

You may be required to use primary sources for an assignment. This is common for history coursework but can occur for any subject. Secondary sources are also important to help inform your research, and are usually acceptable sources to cite. Learn about the differences between Primary and Secondary sources below. For places to find primary sources, see the

About primary sources" document or record containing first-hand information or original data on a topic..."

1. Primary sources can include:

- Interviews, letters, journals, speeches, autobiographies, and witness statements
- Articles containing original research, data, or findings never before shared
- Original hand-written manuscripts
- Government documents and public records
- photographs, films, maps
- Newspaper and magazine clippings



2. secondary sources

"Any published or unpublished work that is one step removed from the original source, usually describing, summarizing, analyzing, evaluating, derived from, or based on primary source materials..."

Secondary sources are works that are one step removed from the original event or experience, provide criticism or interpretation of a primary source. Secondary sources can include

- Textbooks
- Review articles and critical analysis essays
- Biographies
- Historical films
- Articles about people and events from the past

Health studies (research)

Epidemiological Studies:

Epidemiological Design Strategies

A. Descriptive:

A.1: Population:

*Correlation studies.

A.2: Individuals:

*Case report and case series.

*Cross section

B. Analytic:

B.1: Observational studies:

*Case control.

*Cohort.

B.2: Interventional studies: Experimental (clinical trial, lab. Animal)

Descriptive studies: Describe pattern of disease as person, place, time.

A. Descriptive

A.1. Population:

A.1.1: Correlation studies: Describe the disease in the entire population in relation to factor of interest, it describe the relation as linear association, but sometime may be U shape or J shape. It uses the correlation coefficient, which is measure of association and lies between (-1,1+) which means strong association, but (0) means no association.

Advantage:

.Quick.

. Not expensive.

. It is the first step in searching for exposure-disease relationship.

* Limitation:

. The true in population (correlation between disease and exposure) may be not true on individuals.

A.2. Individuals

A.2.1: Case report and case series: Describe the experience of a single patient or small group of patients with a similar diagnosis, it reflecting unusual representation of a disease(unusual cases e.g. polyvinyl chloride factory that cause liver angiosarcoma).

*Advantage:

. Formulate hypothesis.

*Limitation:

. Not population based that means not represent population (no generalization).

A.2. Individuals:

1:A.2. Cross sectional (prevalence- transverse): Most important

The presence of disease and factor (exposure) are assessed among individuals in our sample at same present time.

Advantage:

1. Measure prevalence.
2. Rapid, easy, inexpensive.

Limitation:

- . Do not know which come first disease or exposure.

Analytic studies:

B.1.Observational:

B.1.1. Case control (retrospective, trohoc): Begin with group of patient (cases) and comparable group without diseases

*Advantage:

1. Easy, not expensive.
2. Used in a rare disease.
3. Proves association.

*Limitation:

1. Selective survival.
2. Bias: recall (person not remember)
3. Difficult to select control (control must be has the same sociodemographic and other characteristic with the case to minimize bias)
4. Direct measures of risk is not possible, but odds ratio is used as indirect risk measures.

$$\text{Odds ratio} = (a/c) / (d/b) = a/c \times d/b = ad/cb$$

$$\text{Odds ratio} = \frac{\text{Percentage of event among cases}}{\text{Percentage of same event among control group}}$$

B.1.Observational:

B.1.2. Cohort (longitudinal, incidence): These are observational analytic studies where group(s) of individuals are defined on the basis of presence or absence of exposure to a suspected risk factor o a disease, then followed for a period of time to assess the occurrence of a disease. Start with free from disease individuals.

*Types of cohort:

1. Retrospective cohort: .
2. Prospective cohort.
3. Ambidirectional cohort: Combination of both retrospective and prospective cohort.

$$RR = I_e / I_o$$

$$RR = \frac{a/a+b}{c/c+d}$$

$AR = I_e - I_o$

RR= relative risk, risk ratio.

AR= attributable risk, risk reduction.

$I_e = \frac{\text{No. of cases in exposed (a)}}{\text{Total population exposed (a+b)}}$

$I_o = \frac{\text{No. of cases in non exposed (c)}}{\text{Total population in non exposed (c+d)}}$

Attributable Risk % = $\{ (I_e - I_o) / I_e \} \times 100$

Advantage:

1. Measures incidence.
2. Risk is directly measured by relative risk and attributable risk.
3. Proves causation.

Limitation:

1. Long time and costly.
2. Not for rare disease but for rare exposure.
3. Loss to follow up (migration, or death).

B.2: Interventional studies:

Like cohort studies but investigators themselves allocate the exposure.

B.2:A. Lab animal: Infect animal or give a carcinogen or new drugs.

B.2:B. Clinical trial: On human, either therapeutic on a diseased people as evaluating the effect of a certain drugs , or preventive on a healthy people as giving a vaccine (prophylactic).

* Advantage:

. It is a golden type of the epidemiological studies.

*Limitation:

1. Expensive, long time.

2. Ethical problem.

* **Confounding factor:** It is a third factor which is associated with the exposure and affect the outcome. Confounder can lead to over and under estimation of the true association and can change the direction of the observation effect.

* **Generalization:** The relation between exposure and outcome among individual true in a population, in other word we can generalize the results on a population.

Evidence Based Medicine

Evidence based medicine (EBM): In simple term, integrating the current best evidence with expertise or experience, and expectation & values of patients, people, medicine, health care is evidence based medicine. Some experts think that the word “medicine” in EBM relates to doctors` profession, and distinguish EBM from evidence based nursing or EB public health, evidence based health care. Etc...

***Goal of EBM:**

EBM has one goal : To improve the health of people through decision that maximize their health related quality of life and life span. The decision may be in relation to public health, health care, clinical care, nursing care or health policy.

***Components of EBM:**

Evidence.

Expertise of decision makers.

Expectation and values of patient/people.

***Steps in practicing EBM:**

The main (but not only) objectives o EBM is the application of the right and complete information by health care professionals in decision making. To meet this objective four keys are necessary:

Step -1: Ask for the needed information.

Step-2: Acquire(find) the information by searching resources.

Step-3: Assess or appraise the relevance, quality importance and applicability of the information this done by critical appraisal which need 4 issues:

Relevance.

Validity.

Consistency.

Importance or significance of results.

Step-4: Applying the results to your patient.

***Clinical question:**

To summarize, you need to specify the following in your clinical question(PICO):

Patient or population: type of patient.

Intervention :the new approach or strategy of treatment, or observation.

Comparison: the control intervention.

Outcome: clinically meaningful outcome that are important for the patients.

Classification of Evidence Levels:

Grade I

Ia: Meta analysis*** of randomized controlled trials.

Ib: At least one randomized controlled trial.

Grade II:

Ila: At least one well designed controlled study without randomization.

Ilb: At least one other type of well designed experimental study.

Grade III: Well designed non experimental descriptive studies, comparative studies, correlation studies, and case (report, series) studies.

Grade IV: Expert committee reports or opinions and/or clinical experience of respected authorities.

Grade V: I always do it in this way.

Grade VI: I was told so.

***Meta analysis:** Meaning “analysis among” , is a statistical method in which the results of several trials or studies devoted to the same topic or research question are combined . It is being used increasingly in medicine to try to obtain a qualitative or a quantitative synthesis of the research literature on a particular issue , and to obtain greater statistical power or more accurate estimates in other sentence meta analysis can be defined as a systematic, organized and structured evaluation and synthesis of a problem of interest based on the results of many independent studies of that problem (disease cause, treatment effect, diagnostic method, and prognosis, etc) .

***Objectives:**

1: To confirm information.

2: To find errors.

3: To search for additional findings (induction).

4: To find new ideas for further research (deduction).

Screening Test

Definition: Application of simple test on asymptomatic people (have no signs and symptoms) to sort out the apparently healthy from those had illness. It is important in prevention and control, after screening we should confirm diagnosis by golden test for positive cases in screening and treat them.

Criteria for good screening test:

- 1: Easy and quick test.
- 2: Acceptable and safe to people.
- 3: Not expensive.
- 4: Used for searching serious problems.
- 5: Treatment should be available for the problem.

Criteria for disease or problem suitable for screening:

1. Highly prevalent.
2. Serious consequence of a disease.
3. No symptoms or signs at early stage.
4. Can be detected at relatively low cost before the clinical stage starts.
5. Early treatment is available and accessible that has been shown to reduce morbidity and mortality.

Types of screening:

1. Mass screening: involve screening of whole population e.g. chest X-ray to detect T.B. in Iraq in 1980.
2. Multiple or multiphasic screening involve the use of a variety of screening tests on the same occasion e.g. to detect peptic ulcer use Barium meal then endoscopy
3. Targeted screening: involve screening of a group of people with specific exposure e.g. workers in high noise environment to detect hearing defect (this type of screening used to detect environmental and occupational hazards).
4. Case finding screening or opportunistic screening: is restricted type to patients who consult health practitioner for other purpose (screening for ca-breast in female who come for urinary tract infection).

***Sensitivity:** It is the ability of a test to give a positive finding when the person tested truly had a disease.

$$= \frac{a}{a+c}$$

***Specificity:** It is the ability of the test to give a negative finding when the person tested is free of the disease.

$$= \frac{d}{d+b}$$

$$b+d$$

* **False positive:** Person without a disease who were positive in the test.

$$= \frac{b}{b+d}$$

* **False negative:** Person with a disease who were negative to test.

$$= \frac{c}{a+c}$$

Golden Test (diagnostic)

	Diseased	Non diseased	Total
Screening test			
+Ve	a	b	a+b
-Ve	c	d	c+d
Total	a+c	b+d	a+b+c+d

Representation of Data

1-Mathemetical Representation of Data.

2-Tabular Representation.

3-Graphical Representation.

4-Pictorial Representation.

1- Math representation:

1.a. Measures of central tendency.

1.b. Measures of dispersion.

2.Tabular presentation

Its principles

2.1. Table should be understandable this achieved by:

a. Abbreviations or symbols should be explained in detail at a footnote.

b. Row and column should be labeled clearly.

- c. Title should be clear, concise, and written separated from the body of table by lines or spaces.
 - d. Total should be shown.
- 2.2. Table should be simple; therefore; simple two or three tables preferred on single large table, data can be summarized in simple method by master table.

3. Graphical presentation

Graphs used to display a quantitative data using coordinate system where X the horizontal axis (method of classification), and Y is the vertical axis (frequency or rate of occurrence). Its principles include:

- 3.1. Graph should be self explanatory.
- 3.2. The simplest graphs are the most effective.
- 3.3. Title may be placed at the top or the bottom of the graph.

Variables should be labeled clearly by means of key

Types of graphs:

- 1. Arithmetic scale line graph.
- 2. Semilogarithmic scale line graph.
- 3. Histogram: Its used only for presenting a frequency distribution of quantitative data. There is No space between the cells, scale break should not be used in the histogram.
- 4. Frequency polygon: Its used to represent more than one set of data. Its constructed from a histogram by a series of straight lines connecting the midpoints of the class interval.
- 5. Scatter diagram: In a scatter diagram a pair of measurement is plotted as a single point on the graph.

4. Pictorial presentation (charts)

It can convey many different types of information including length, proportion....

*Types of charts:

1. Charts based on length:

- 1.1. Pictogram: Its used a series of small identifying symbols to present data. Each symbols represent a fixed number of items. The figure arranged horizontally or vertically.
- 1.2. Bar chart: Bars should be had the same width, there are spaces between columns. Its used for discontinuous (discrete) data.

2. Charts based on proportion:

- 2.1. Component bar charts: They are used bars that are shaded or colored.
- 2.2. Pie charts: Its use a wedge shaped portions of a circle to illustrate a division of the whole into sements. Start at 12 o'clock position and arrange segments in the order of their magnitude (from largest to smallest proportion). To convert from percentage to degrees, multiply the percentage by 3.6 (360/100).
3. Flow charts: The sequence of a series of events is often illustrated by a flow chart.
4. Geographic coordinate charts: Its used by those who show the geographic distribution of disease using maps.

Bias

It is a systematic error not random in an epidemiological studies that result in an incorrect estimate of association between exposure and outcome.

Sources of Bias:

- 1: Selection bias: selection of study group individuals.
2. Observational bias (information): This include:
 - 2.a. Recall bias: case under study not remember information as in case-control study.
 - 2.b. Interviewer bias: It occur in those collecting data.
 - 2.c. Loss to follow up: Either by migration, death, or case refuse continuation in study this happened in cohort study.
 - 2.d. Misclassification: It occurs when subjects are wrongly categorized with respect to either exposure or disease state.

References (Vancouver style)

Citing a book

The essential details required are in order

Name/s :surname 1space initial “no space or punctuation”

(,)comma 1space (.)full stop

If more than 6authors we write first 6 then add (et al)

Title the first word will be capital letters

when there is volume we put in brackets (title ;semicolon 1space vol 000) full stop(.)

Edition abbreviate the word ed. Full stop (.) 1space

Place of publication : If there are more than one city of publisher, the name of the city that is printed first

Write the place name in full :(colon) 1space

Publisher :(semicolon) 1space

Year of publication .(full stop)

Page : Abbreviate P. page number .(full stop)

Example of citing books

Getzen TN, Lotish HN. Health economics : fundamental & flow of funds. Newyork: John Wiley & son; 1997. p.33-90.

Chapter of a book

Author. Title of chapter. In: author of books only one name, then the (editors). title of book. Place: Publisher ; Year. P. .

Citing a journal article

Name/s. 1space

title of article. 1space

title of journal(abbreviate) written italic 1 space Year(&month “”/day only 3 letters if necessary or available). 1space

Volume [(issue no.)if present between bracket] :colon

Page (unnecessary digit not repeated).

Example

Russe FD, Copper AL. In vitro enzymatic processing. *Biochem pharmacol* 1998 Mar 2;55(5): 690-701.

Citing internet

Author/s. (1space)

Title of article .(1space)

Abbreviate title of electronic journal [serial online] (1space)

Publication Year (1space) Month if available space

[cited year month day] in square brackets ; space

Volume (no space) (issue number):

page number or number of screen in [] . space available from :

space URL: address underline

Example Mores SS. Factors in the emergency of infectious disease. *Emerg Infect Dis* [serial online] 1995 Jan [cited 1999 Dec 25]; 1(3):[24 screen]. Available from: URL: <http://www/cdc/EID/eid.htm>

For WWW

Author. space

Title. space

[online]. Space

Publication Year space

[cited year moth day]; space

no. of screens in []. space

Available from: space [URL: spaceadress](#)

Example

Zand JM. The natural pharmacy: herbal medicine for neurosis

[online]. 19998 [cited 1999 Aug 22];[10 screens]. Available from:

URL: <http://ww.rcgp.org/rcff0021.htm>

مواصفات الاطاريح العلمية المقدمة للحصول على شهادة الدكتوراه والماجستير

والدبلوم العالي المهني

١. نوعية الورقة وتفاصيل الكتابة:

- ١, ١. تقديم الاطروحة بشكلها النهائي مطبوعة بالالة الكاتبة ويجب ان يكون الطبع متساوي الحروف ومتناسقا وبلون اسود واضح.
- ٢, ١. يستعمل ورق ابيض من حجم (٢٩٧X٢١٠) ملم ومن نوعية جيدة وتستعمل صفحة واحدة من الورق للكتابة فقط.
- ٣, ١. يترك (٤سم) وبضمنها حافة ربط الاوراق. اما الحافات الاخرى فيجب ان يترك لها (٢سم) وبضمنها حافة النصوص المقتبسة والهوامش.
- ٤, ١. تكون المسافة بين سطر واخر (٥, ١سم) فراغ من فراغات الالة الكاتبة عدا الهوامش في اسفل الصفحة والنصوص المقتبسة اينما وردت فيستعمل فراغ واحد فقط.
- ٥, ١. يبدأ المقطع الجديد بازاحة (٢سم) الى اليسار في اللغة العربية والى اليمين في اللغة الانكليزية.

٢. ترقيم الصفحات:

- ترقم الصفحات بصورة متتابعة بالارقام اللاتينية من التشكرات حتى نهاية الخلاصة وبضمنها قائمة المحتويات وقوائم الجداول والاشكال. ترقم الصفحات بالارقام العربية من المقدمة حتى نهاية الاطروحة. توضع الارقام في الجهة العليا اليمنى من الصفحة اذا كانت الاطروحة باللغة الانكليزية.
٣. **صفحة العنوان** تحتوي على عنوان الاطروحة كما هو مقرر رسميا ويليها اسم الكلية مسبوقا بعبارة (اطروحة مقدمة الى) مجلس الكلية يليها الدرجة العلمية التي يروم مقدم الاطروحة الحصول عليها مسبقا بعبارة (وهي جزء من متطلبات درجة) يليها الاسم الكامل لمقدم الاطروحة مسبقا بعبارة (من قبل) يليها الشهر والسنة التي قدمت فيها الاطروحة في التقويمين الهجري والميلادي.
٦. تليها صفحة الاهداء ان وجد اهداء في الرسالة.
٧. تليها صفحة الشكر والتقدير.