King AbdulAziz University Faculty of Medicine

Students' Research Guidelines Version 1.0 (1436 – 1437 H)

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List of Abbreviations

FoM-KAU: Faculty of Medicine at King AbdulAziz University

KAUH: King AbdulAziz University Hospital

RAC: Students' Research Assessment Committee

REC: Research Ethics Committee

TAC: Students' Thesis Assessment Committee

SOPs: Standard Operating Procedures

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Executive summary

The committee for reviewing the academic programs at the Faculty of Medicine at King AbdulAziz University (FoM-KAU) recommended in its third meeting, held on the 20/05/1436, to include research thesis for its students at the clinical phase of the curriculum and approved a road map therefore. Consequently, his Excellency the Dean of FoM-KAU has formed a Concept Note Approval Committee to evaluate students' researches (administrative decree number 80187/ D/ 36 issued on 17/06/1436 Hijri). We recommend renaming this committee as Students' Research Assessment Committee (RAC).

A small group of students (Students' Panel), working as a team, will design, conduct, analyze and interpretate a study of high relevance and high quality. Each students' panel will be supervised by a supervisor of its choice and assisted by a back stopper assigned by the supervisor (see appendix 1 on Thesis Supervision Agreement). A students' panel is required at the beginning to submit a concept note outlining the title, the research question and the study objectives. The concept note will be reviewed by the RAC for public health relevance and acceptability. After approval of the concept note by the RAC, the students' panel is required to submit a proposal to the RAC. Proposals of student's researches will be evaluated for methodological rigor and feasibility by the RAC. After the technical approval of the proposal by the RAC, the students' panel is required to obtain the ethical approval for the proposal from the Research Ethics Committee (REC) at FoM-KAU. After approval of the proposal by the REC, the students' panel is required to conduct the research according to the proposal and to submit a thesis to the RAC. The students' thesis will be evaluated for public health relevance, methodological rigor and impact on practice and further research by a Students' Thesis Assessment Committee (TAC).

Types of Students' Researches

There are a variety of research methods that can be used to design and conduct students' researches at FoM-KAU.

1.1 Primary Studies

Primary research is the research generated by asking questions, conducting primary data collection and collating results. This research can take the form of quantitative or qualitative research. Students at FoM-KAU are often required to conduct this form of research.

1.2 Systematic Reviews and Meta-Analysis

The FoM-KAU realized the rising need for evidence based policy in the Kingdom of Saudi Arabia (KSA). The modern conception of evidence based policy relies heavily on summaries of the primary literature in the form of systematic reviews and meta-analysis. Both medical practitioners and policy makers regularly use these summaries when making important decisions. Therefore, the FoM-KAU introduced the systematic review and meta-analysis as an option for the thesis.

The FoM-KAU encourages students to systematically review medical research situation. These reviews encompass the systematic identification, critical appraisal and synthesis of current public health research. They aim at summarizing the evidence, mapping the research field and scanning its horizon.

These research projects have also synergetic effects such as contributing to the capacity building of current researchers and allied employees, provision of thesis projects for the students at FoM-KAU, networking with researchers, research centres, funders, sponsors, patient groups and health actors at all levels.

1.3 Secondary Data Analysis

The FoM-KAU recognizes the importance of secondary data and aims to utilize existing data through further analysis to produce evidence. Students can make use of available data of national surveys data such as National Chronic Metabolic Diseases Survey, National Coronary Artery Disease in Saudis (CADiS), STEPS survey or data of disease registries such as National Cancer

Registry, National Epilepsy Registry and Congenital Heart Defects Registry. This type of data source is valuable and it saves time and resources.

2. Students' Panels

Supervising a research thesis requires proficiency and expertise. The number of potential supervisors of students' researches at FoM-KAU relative to the number of students is low. Students' panels aim to provide supervision to as much students as possible. A panel will consist of a group of 5-7 students, a supervisor and at a back stopper. Each panel is assigned to that specific supervisor to seek guidance and support throughout the thesis phase.

The supervisor should be a consultant or a PhD holder. A back stopper is a facilitator and a coordinator with a bachelor or a master degree, who works as a teaching assistant at FoM-KAU or a resident at King AbdulAziz University Hospital (KAUH). This mechanism will ensure continuous and close mentoring and guidance for the student throughout their thesis journey, especially with the longitudinal mode of students' researches adopted at FoM-KAU. Moreover, it will also build the capacity of the back stoppers in the area of research as part of their career pathway and skills development.

Members of Students' Research Assessment Committee (RAC) at FoM-KAU are allowed to supervise students' panels. However, at the stages of assessment, the concerned RAC member will act as a supervisor not as a RAC member.

3. Avoiding Plagiarism, Fabrication and Falsification

Students are expected to refrain from any form of plagiarism, fabricated, falsified work or research misconduct during the course of thesis. Only 15% quotation is acceptable. iThenticate© will be used as a plagiarism detection software. If a student copies text from an author they should state the name of author, year of publication and page number.

Definition:

Plagiarism as defined as "deliberate or reckless representation of another's words, thoughts, or ideas as one's own without attribution in connection with submission of academic work, whether graded or otherwise." [The University of North Carolina at Chapel Hill. Instrument of Student Judicial Governance. 2014. Page 5.

https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf#acad emicdishonesty, Accessed on 31.08.2015].

In simple language it means stealing of other people's words or ideas. It arises when work submitted by a student is not their own, but has been taken from another source and the original material then hidden from the reader, either by not referencing it properly, by paraphrasing or rephrasing it or by not referencing it at all.

The commonest types of plagiarism may involve the following:

- Copying a paragraph word for word from a book, journal, webpage, lecture notes or other printed or electronic source without acknowledgement.
- Copy the work of another student (past or present).
- Copying a paragraph, but making small changes, such as replacing a few verbs or adjectives with words which mean the same thing.
- Cutting and pasting a paragraph by using a few sentences of the original but leaving one or two out, or by putting one or two sentences in a different order.
- Putting a paragraph together by cutting and pasting a few choice phrases from a number of different sources and adding in some words of your own.

4. Concept Note Approval Guidelines

A students' panel is required at the beginning to submit a concept note outlining the title, the research question and the study objectives. Students' panel should use the Concept Note Format developed by RAC (see appendix 2). Every students' panel should provide a written approval of the supervisor that the concept note is acceptable for assessment (see appendix 3). The concept note will be reviewed independently by two members of the RAC for public health relevance and acceptability. Disagreement between the two reviewers will be resolved by discussions or the vote of the RAC chairman. After approval of the concept note by the RAC, the students' panel is required to develop and submit a proposal to the RAC.

5. Proposal Evaluation Guidelines

Proposals of students researches will be evaluated for methodological rigor and feasibility by the RAC. Students' panel should use the Proposal Format developed by RAC (see appendix 4). Every students' panel should provide a written approval of the supervisor that the proposal is acceptable

for assessment (see appendix 5). After the technical approval of the proposal by the RAC, the students' panel is required to obtain the ethical approval for the proposal from the Research Ethics Committee (REC) at FoM-KAU. After approval of the proposal by the REC, the students' panel is required to conduct the research according to the proposal and to submit a thesis to the RAC.

Assessment of a proposal is conducted in a face-to-face meeting of the students, their supervisors and the RAC. This meeting has the advantages of allowing the students and their supervisor to explain and defend their study plan/ proposal in front of the RAC and give the RAC the chance to assist the students and supervisors in focusing their research scope and improving their methods. The meeting will assure that the students understand their proposal and empower them to implement it.

In order to standardize the proposal evaluation process, Standard Operating Procedures (SOPs) for pre-meeting arrangements, during-meeting arrangements and post-meetings arrangement are developed. RAC members, supervisors, back stoppers and students are expected to adhere to these SOPs.

5.1. Pre-Meeting Standard Operating Procedures

Arrangements of meetings of the RAC are the responsibility of the RAC Research Coordinator. The RAC should meet at least once every month, with the exception of holiday times. The meeting should be held on the last Wednesday of the month. Urgent meeting can be arranged within at least five notice days prior to the meeting day. The Research Coordinator of the RAC arranges for the meetings by sending the invitations and calling the supervisors, students and RAC members. This is preceded by receiving the submitted proposals. The RAC should not accept the proposal without a written supervisor's approval.

5.1.1. Research Coordinator SOPs

- 1. A named RAC Research Coordinator should be officially assigned by the FoM-KAU and known to all RAC members.
- 2. RAC Research Coordinator should screen the submitted proposals and ensure that all required items of the Proposal Format developed by the RAC are filled out.

- 3. Proposal copies should be prepared for each member of the RAC and should be distributed as a hard copy at the start of the meeting together with the meeting agenda.
- 4. Arrangement for venue reservation for the meeting should take place at least 3 days prior to the meeting date.
- 5. Arrangements for refreshments and a meal should all be prepared beforehand.
- 6. The RAC Research Coordinator should circulate meeting agenda and candidate proposal forms at least one week prior to the meeting.
- 7. The RAC Research Coordinator should circulate meeting report and decision to the concerned supervisor or students during a maximum period of one week from the date of the meeting.
- 8. All the required documents and formats should be made available to the students and supervisors by the RAC Research Coordinator.

5.1.2. Students Preparations SOPs

- The students should submit their proposals to the RAC Research Coordinator (using Proposal Format developed by the RAC) in an electronic form at least 10 days before the RAC meeting date.
- 2. The RAC Research Coordinator should send the student proposals to the RAC members through email at least 7 days before the meeting date.
- 3. All students submitting their proposals must attend the RAC meeting and prepare a 15-minute power point presentation according to the specified format.
- 4. The students' supervisor should attend the RAC meeting together with the students.
- The students should actively participate during the discussion of their proposal with the RAC members and answer all their queries.
- 6. The students should comply with the final decision of the RAC and follow their recommendations after discussion with his/her supervisor.
- 7. In case of acceptance with minor/major modifications, students should send their modified proposals to the RAC Research Coordinator within 3 weeks.
- 8. In case of rejection, student should resubmit to the RAC Research Coordinator in a period not more than 3 months.

5.2. During-Meeting Standard Operating Procedures

The chairman of RAC shall preside at all meetings. However, in the event of his/her absence,

another RAC member assigned by the chair will take over as chairman. By the time of the meeting the students should present a power point presentation to the RAC, whereby the presence of the supervisor is mandatory. Then the floor will be opened for comments and discussion. At the end of the discussion, a secret voting should be arranged by the Research Coordinator of the RAC. The chairman should announce the final decision after voting.

The decision can be one of four; accepted without modifications, accepted with minor modifications, accepted with major modifications, or rejected to be resubmitted to the RAC. In case of acceptance without modifications, an approval letter should be awarded by the RAC one week after the meeting. In case of minor or major modifications, the proposal should be resubmitted to the RAC with the required modifications in 2-3 weeks. In case of rejection, the students are allowed to resubmit to the next RAC meeting.

5.2.1. Meeting SOPs

- 1. The quorum of meeting should be one third of the RAC members.
- 2. If the quorum is not reached the meeting should be deferred within 1-2 weeks.
- 3. The next meeting could be held even if the defined quorum is not reached.
- 4. If any member fails to show up for five meetings without apology, he/she should be excused from the RAC.
- 5. The RAC should review not more than 6 proposals per meeting.
- 6. The RAC meeting should not be longer than 4 hours.
- 7. The RAC may call independent consultants who may provide special expertise to the RAC on research proposals. These consultants may be specialists in ethical, methodological or medical aspects.
- 8. The chairman should lead the meeting.
- 9. The students should present their proposals and defend it.
- 10. The supervisor is allowed to contribute to the discussion of the proposal.
- 11. Voting should be performed at the conclusion of each students' presentation in a confidential anonymous manner.
- 12. Voting procedure implies each RAC member to write his/her decision in a paper slip stating one of the four options: accepted without modifications, accepted with minor modifications, accepted with major modifications, rejected.
- 13. The RAC Research Coordinator should collect all papers slips and communicate the final decision to the chairman.

- 14. At the end of the each voting, the chairman should declare the final decision.
- 15. The RAC Research Coordinator should document the meeting minutes throughout the whole meeting.

5.2.2. Meeting Report SOPs

- 1. Meeting date and time of the meeting should be well documented.
- 2. Duration of the meeting should be well documented.
- 3. List of attendees, apologizers and absentees should be well documented.
- 4. The quorum should be well documented.
- 5. All minor and major recommendations should be well documented.
- 6. Voting procedures and results should be well documented.
- 7. Student and RAC members discussions should be well documented.
- 8. Final decision per students' panel should be well documented.
- 9. Presence of the supervisor should be well documented.
- 10. Meeting minutes report should be sent to RAC members within one week after the meeting day.
- 11. The RAC Research Coordinator should keep a full documentation of all meetings.

5.3. Post-Meeting Standards Operating Procedures

5.3.1. Follow-Up SOPs

- 1. Student tracking and follow up of the proposals which needs minor or major modifications is the responsibility of the RAC Research Coordinator.
- 2. The main correspondence person for the RAC Research Coordinator should be the back stopper.
- 3. The follow up of students includes receiving the modified proposals as well as reviewing them for compliance with all the modifications recommended by the RAC as documented in the RAC meeting report.
- 4. The RAC is responsible for the monitoring and evaluation of the follow up process.
- 5. The RAC Research Coordinator should submit a quarterly report to the RAC regarding student proposals milestones and tracking.

- 6. Students who are required to modify their proposals should submit the proposal with all the modifications to the RAC Research Coordinator in not more than 3 weeks after the RAC meeting date along with an approval of the supervisor for the modified proposal.
- 5. The RAC Research Coordinator should have a well established documentation system for proposals, modified proposals and a list of all supervisors, back stoppers and students and their contact information (full names, phone numbers and e-mails).

5.3.2. Awarding Technical Clearance SOPs

- 1. The technical clearance is awarded by the RAC to the accepted proposals with no modifications or after the modifications submitted and reviewed by the RAC.
- 2. The clearance certificate is given in 1-2 weeks after the final approval.
- 3. The RAC chairman should sign the technical clearance certificates.
- 4. The RAC Research Coordinator keeps a copy of all awarded clearance certificates.
- 5. Students should seek the ethical approval after the technical clearance from Research Ethics Committee at the FoM-KAU.
- 6. The ethical approval of a proposal is not the responsibility of the RAC.

6. Thesis Assessment Guidelines

Students' thesis will be evaluated for public health relevance, methodological rigor and impact on practice and further research by a Students' Thesis Assessment Committee (TAC).

Assessment of a thesis is divided into two steps:

- 1. Assessment of the thesis with a weight of 50% and a success in this step is considered as a prerequisite for step 2
- 2. Disputation of the thesis with a weight of 50%

The following guidelines should be adhered to:

1. Students' panel should use the Thesis Format developed by RAC (see appendix 6). Every students' panel should provide a written approval of the supervisor that the thesis is acceptable for assessment (see appendix 7). This approval along with three hard copies (i.e. paper-based) and two electronic copies in Word- and PDF-format (e.g. CD, removable disc) of the thesis should be submitted by the students' panel to the RAC.

- 2. The RAC should form a Students' Thesis Assessment Committee (TAC) for every submitted thesis. The TAC should consist of an internal examiner (from RAC), an external examiner (from FoM-KAU staff other than the RAC) and the supervisor. The TAC members should be consultants or hold a doctor title in their speciality and are required to assess the thesis and participate in the disputation of the thesis
- 3. A double blinded procedure should be developed and maintained for every thesis up to the date of the disputation. This means that the identity of the internal and external examiners should be concealed from the student and the identity of the student should be concealed from both examiners up to the date of the disputation.
- 4. After the formation, every member of the TAC should independently conduct, document and submit a critical appraisal of the thesis to the RAC within 2 weeks, showing strengths and limitations, giving suggestions for amendments and improvements and awarding a numerical score out of 100%.
- 5. An average score for the thesis should be calculated by the RAC. If the average score of the thesis is ≥60%, this will be regarded as a success in step 1 and a date for the disputation within 1-3 weeks will be negotiated by the RAC. If the average score of the thesis is <60%, this will be regarded as a failure in step 1 and all critical comments of the TAC members should be provided to the students' panel and the supervisor to be taken into consideration before a resubmission to step 1 could take place.
- 6. The disputation should be attended by the interested FoM-KAU faculty and other students, in order to enhance the learning process. The disputation should begin with a 30-minutes oral presentation of the thesis by the student and then the TAC members will conduct a disputation of thesis with the students alone within 30-minutes. A protocol writer should document the whole process. The external examiner should chair the disputation and is expected to ask questions. The following generic questions are provided as guidance for the TAC members:
- What is the relevance of your research question?
- Are your methods adequate for answering the research question?
- How can your findings be used in practice?
- What would you undertake to strengthen your thesis?
- What suggestions would you give for future research and practice?
- 7. A closed consultation, including only the TAC members, should decide according to the above mentioned weights of step 1 and 2, whether the thesis could be approved or not. The TAC will not assign a grade to the thesis.

7. Duties and Responsibilities of RAC Members

The RAC members' duties and responsibilities are as follows:

- 1. The RAC members should review and update its duties and responsibilities at least once every five years.
- 2. The RAC members should have sufficient skills, experience and expertise in research methodology.
- The RAC members should understand what is expected from them both individually and collectively.
- 4. The RAC members should exercise their own judgment; voice their own opinions independent of the FoM-KAU management and act freely from any conflicts of interest.
- 5. The RAC members should declare any conflict of interest and act accordingly.
- 6. The RAC members should work together constructively as a team.
- 7. The RAC members should respond to the invitations and all meetings or apologize in case of absence.

7.1. Duties and Responsibilities of RAC Chairman

The RAC chairman duties and responsibilities are as follows:

- 1. The RAC chairman should reflect a positive leadership style, being decisive, open minded and courteous.
- The RAC chairman should allow members to contribute and hold members to high standards and should also deal effectively with discussions constructively and facilitate consensus.
- 3. The RAC chairman should announce the final decision following the voting process on each proposal.
- 4. The RAC chairman should summarize the decisions at the end of the meeting.

7.2. Duties and Responsibilities of RAC Research Coordinator

The RAC Research Coordinator duties and responsibilities are as follows:

- The RAC Research Coordinator should execute all the administrative operations of the RAC.
- 2. The RAC Research Coordinator should contact all the RAC members and supervisors at least 3 days before the meeting date.
- 3. The RAC Research Coordinator should arrange for venue reservation at least 3 days prior to the meeting date.
- 4. The RAC Research Coordinator should arrange for refreshments and a meal beforehand.
- 5. The RAC Research Coordinator should send the invitations to all RAC members at least one week before the meeting together with the meeting agenda and the proposals which will be reviewed.
- 6. The RAC Research Coordinator should perform the voting procedures at the end of each proposal presentation and communicate the results to the chairman.
- 7. The RAC Research Coordinator should take detailed minutes of the RAC meeting.
- 8. The RAC Research Coordinator should send the meeting report to all RAC members three days after the meeting.
- The RAC Research Coordinator should ensure the execution of all actions and recommendations of the RAC and follow up the strict compliance to those recommendations.

Appendix 1: Thesis Supervision Agreement¹

Supervision is a two way process that involves both the supervisor (teacher) and supervisee (student). The role of the supervisor is crucial to a student's research activity and is one of the most important variables in determining the success of the research process. Along with the student, the supervisors must take responsibility for ensuring that satisfactory progress is being achieved throughout the entire duration of the research.

Supervisors and Students Responsibilities

The supervisor has the prime role for overseeing the thesis progress and should have the expertise and time to provide ongoing support. While a back stopper supports and assists the supervisor and ensures the student has a continuity of supervision especially if the supervisor is away

During the period of supervision; from the time of the selection of a thesis supervisor until the submission of the thesis, students are responsible for choosing their thesis topic, carrying out the research and submitting on time. The role of the supervisor is to provide guidance and advice; they are not essentially responsible for the quality of the submitted work.

The means of contact with supervisors may involve a combination of face to face meetings, email, and telephone. The frequency and nature of the meetings between student and supervisor will vary depending on the characteristics of the research topic and the type of research, however, a minimum of six meetings between student and supervisor with a minimum length of 30 minutes is required during the supervisory period which extends for at least 6 months.

Students' Roles and Responsibilities

- To choose the thesis topic, carry out the research and submit it on time.
- To initiate and maintain regular contact with the supervisor and seek appropriate advice achieving at least 6 meetings during the supervisory period.

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¹ Each group of students should seek a supervisor and the supervisor should assign a back stopper to them. It is not the duty of RAC to organize the initiation, progress and ending of students' supervisory process.

- To make notes in supervisory meetings, preparing concise minutes from those meetings and email or send these to the supervisor for approval.
- To meet agreed deadlines.
- To prepare, edit and proof-read the thesis
- To maintain high standards of academic conduct, including avoiding plagiarism, fabrication, fraudulence or malpractice.
- To raise any problems or difficulties that might impact the student's progress in the program of study.
- Where work from a thesis leads to subsequent publication, to acknowledge the role of the supervisor. In some cases, this may be a simple acknowledgement, in other cases, joint authorship.

It is recommended that supervision meetings are guided by the timetable. Students should prepare carefully for the meetings, and should email their supervisor the information that s/he needs to prepare for the meeting at least two days.

Supervisor's Roles and Responsibilities

Roles:

- Guiding and monitoring a student's learning process
- Advising on the technicalities of a student's topic
- Ensuring the student follows the rules and regulations
- Acting as a resource person (and referrer) for learning resources and support systems at the FoM-KAU.

Responsibilities:

- To ensure that students are assigned to a back stopper at the start of their proposal.
- To ensure student is familiar with the FoM-KAU policies and RAC guidelines
- To provide students with the RAC format for concept note, proposal and thesis.

- To be accessible to the student at appropriate and reasonable times when advice and feedback may be needed.
- To advise and discuss with the supervisee the focus and feasibility of the proposed topic.
- To advise on the critical use of literature and other appropriate sources of information.
- To advise on planning and executing the work, including writing up.
- To inform the student in advance (3 days or more) of any major periods when they will be absent from the office and therefore unavailable for supervision.
- To advise on any issues of concern to the student which have implications on the student's progress on the program of study.
- To encourage submission of work for publication when appropriate.
- To help a student who is required to resubmit/revise the thesis after assessment. This will involve one meeting to discuss the detailed guidance prepared by the examiners on the submitted work.
- To keep a retrievable records of monitoring reports

Things the supervisor should not do

- The supervisor is not responsible for chasing students who fail to arrange or attend meetings.
- The supervisor must not write the thesis outline.
- The supervisor should not write text/commands for the student.
- The supervisor should not run statistical analyses for the student.
- The supervisor is not responsible for ensuring that the thesis is of at least a "pass" standard.
- The supervisor should not rewrite a thesis

Back Stopper's Roles and Responsibilities

- To assist the supervisor
- To provide continuous guidance and mentoring to the student
- To be available to the student on regular basis for consultation and support
- To give technical advices to the student at all stages of the research

- To advise the student for any additional skills required by in order to complete the
 research topic. (e.g. Computer skills, languages, experimental methods, working
 with information sources and bibliographies, or more specialised training related to
 the research area).
- Intervene promptly if the students performance or progress is unsatisfactory
- To coordinate between the supervisor and students at one side and the RAC Research Coordinator at the other side

Developing a plan of work

It is advised that students develop a work plan for their thesis work. An outline with what the student is expected to do and when can prove to be very valuable in meeting the deadline for submission. It also help guide when the student needs to meet with the supervisor and what issues they need to discuss. The plan of work would need to be updated regularly to cater for changes and deviations from the plan. Keeping a research diary is also a helpful tool to help record the different steps taken by the student and can be used when updating the work plan and meeting the supervisor.

Dissemination and publication

Students' panels are encouraged to disseminate their researches via scientific meetings and publications in peer reviewed journals. Students' research proposals of high quality should also seek registration and publication. Authors of students' researches should fulfil the 4 criteria of authorship set by the International Committee of Medical Journal Editors:

- "Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or revising it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- Agreement to be accountable for all aspects of the work in ensuring that questions related
 to the accuracy or integrity of any part of the work are appropriately investigated and
 resolved." [http://www.icmje.org/recommendations/browse/roles-andresponsibilities/defining-the-role-of-authors-and-contributors.html, Accessed on
 01.11.2015]

The students' panel is the owner of the students' research and should lead the authorship. The student who carried out bulk of the design, conduct, analysis and interpretation should be assigned as the first author. Other students in the panel should follow in the sequence of authorship according to their level of contribution. The supervisor could act as the last author, as a major contributor of intellectual content and funding. The back stopper could act as a middle author following the students. Level of authors' contribution could be estimated using the following criteria developed by Stephen M. Kosslyn [http://isites.harvard.edu/fs/docs/icb.topic562342.files/authorship_criteria_Nov02.pdf, Accessed

• Idea: (250 points)

on 01.11.2015]:

- Design (100 points)
- Implementation (100 points)
- Conducting the research (100 points)
- Data analysis (200 points)
- Writing (250 points)

We, the undersigned, herewith understand and approve this Thesis Supervision Agreement and are committed to implement it.

Name of the supervisor:
Signature of the supervisor:
Name of the back stopper
Signature of the back stopper:
Name of the student:
Signature of the student:
Name of the student:
Signature of the student:
Name of the student:
Signature of the student:
Date:

Appendix 2: Concept Note Format

King AbdulAziz University

Faculty of Medicine

Students' Research Assessment Committee

Concept Note Format²

Item	Description
Academic year	
Students' names	
Students' numbers	
Supervisor's name	
Supervisor's phone no.	
Supervisor's e-mail address	
Back stopper's name	
Back stopper's phone no.	
Back stopper's e-mail address	
Title Indicate the study's design in the title	

 $^{^{2}}$ This format is based on the STROBE Statement (www.strobe-statement.org). The STROBE Statement is referred to in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals by the International Committee of Medical Journal Editors.

Research question Provide an explicit statement of research question being addressed with reference to participants, exposure, comparison, outcomes, and study design (PECOS)	
Objectives Provide an explicit statement of study objectives being addressed with reference to the research question	

Appendix 3: Concept Note Approval Format

I, the undersigned, herewith approve the attached concept note. I grade its relevance for the public health in the Kingdom of Saudi Arabia as high. I also consider it acceptable according to religious and social norms in the Kingdom of Saudi Arabia.

Name of the supervisor:	
Signature of the supervisor:	
3	
Date:	

Appendix 4: Proposal Format

King AbdulAziz University

Faculty of Medicine

Students' Research Assessment Committee

Proposal Format³

Item	Description
Academic year	
Students' names	
Students' numbers	
Supervisor's name	
Supervisor's phone no.	
Supervisor's e-mail address	
Back stopper's name	
Back stopper's phone no.	
Back stopper's e-mail address	
Title Indicate the study's design in the title	

 $^{^3}$ This format is based on the STROBE Statement (www.strobe-statement.org). The STROBE Statement is referred to in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals by the International Committee of Medical Journal Editors.

Introduction	
Explain the scientific	
background for the investigation being	
reported. Summarize	
what is known and	
outline research gaps in	
the literature	
Rationale	
Explain the need for the	
investigation in the	
context of what is	
uncertain or unknown	
Research question	
Provide an explicit statement of research	
question being	
addressed with	
reference to	
participants, exposure,	
comparison, outcomes,	
and study design	
(PECOS)	
Objectives	
Provide an explicit statement of study	
objectives being	
addressed with	
reference to the	
research question	
Study setting	
Study location	
Describe the setting,	
locations, and relevant	
dates, including periods	
of recruitment	
Participants	
Give the eligibility	
criteria, and the sources	
and methods of	

selection of participants	
Sample size	
Sampling technique	
Data collection methods	
Data collection tools	
Describe the tools and provide them as appendixes	
Variables	
Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	
Bias	
Describe any efforts to address potential sources of selection and information bias	
Data analysis Plan	
Descriptive statistics	
Analytical statistics	
Ethical consideration	
Provide participant's information sheet and consent form as appendixes	



Appendix 5: Proposal Approval Format

I, the undersigned, herewith approve the attached research proposal. I grade its methodological quality as high. I also consider it feasible to conduct.

Name of the supervisor:	
'	
Signature of the supervisor:	
3	
Date:	

Appendix 6: Thesis Format

King AbdulAziz University

Faculty of Medicine

Students' Research Assessment Committee

Thesis Format⁴

Item	Description
Academic year	
Students' names	
Students' numbers	
Supervisor's name	
Supervisor's phone no.	
Supervisor's e-mail address	
Back stopper's name	
Back stopper's phone no.	
Back stopper's e-mail address	
Title	
Indicate the study's	

⁴ This format is based on the STROBE Statement (www.strobe-statement.org). The STROBE Statement is referred to in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals by the International Committee of Medical Journal Editors.

design in the title	
Background Explain the scientific background for the investigation being reported. Summarize what is known and outline research gaps in the literature	
Rationale Explain the need for the investigation in the context of what is uncertain or unknown	
Research question Provide an explicit statement of research question being addressed with reference to participants, exposure, comparison, outcomes, and study design (PECOS)	
Objectives Provide an explicit statement of study objectives being addressed with reference to the research question	
	Methodology
Study setting	
Study location	
Describe the setting, locations, and relevant dates, including periods of recruitment	
Participants	

Give the eligibility	
criteria, and the sources	
and methods of	
selection of participants	
corocaerr or parasiparae	
Sample size	
Compling toobnique	
Sampling technique	
Data collection	
methods	
Data collection tools	
Describe the tools and	
provide them as	
appendixes	
Variables	
Clearly define all	
outcomes, exposures,	
predictors, potential	
confounders, and effect	
modifiers. Give	
diagnostic criteria, if	
applicable	
Dies	
Bias	
Describe any efforts to	
address potential	
sources of selection and	
information bias	
mornation side	
Data analysis Plan	
Descriptive statistics	
Descriptive statistics	
Analytical statistics	
Ethical consideration	
Provide participant's	
information sheet and	
miormation sheet and	

consent form as appendixes	
	Results
Participants	
(a) Report numbers of individuals at each stage of study (e.g. numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed)	
b) Give reasons for non- participation at each stage	
Descriptive data	
(a) Give characteristics of study participants (e.g. demographic, clinical, social) and information on exposures and potential confounders	
(b) Indicate number of participants with missing data for each variable of interest	
Outcome and exposure data	
Report numbers of outcome events in each exposure category	

Main results	
(a) Give unadjusted	
estimates (e.g. odds	
ratio) and, if applicable,	
confounder-adjusted	
estimates and their	
precision (e.g., 95%	
confidence interval)	
(b) Make clear which	
confounders were	
adjusted for and why	
they were included	
Other analyses	
Report other analyses	
done (e.g. analyses of	
subgroups and	
interactions)	
·	
	Discussion
Key results	
Summarize key results	
with reference to study objectives	
with reference to study objectives	
with reference to study objectives Strengths and	
with reference to study objectives	
with reference to study objectives Strengths and Limitations Discuss strengths and	
with reference to study objectives Strengths and Limitations Discuss strengths and limitations of the study,	
with reference to study objectives Strengths and Limitations Discuss strengths and limitations of the study, taking into account	
with reference to study objectives Strengths and Limitations Discuss strengths and limitations of the study, taking into account sources of potential bias	
with reference to study objectives Strengths and Limitations Discuss strengths and limitations of the study, taking into account	
with reference to study objectives Strengths and Limitations Discuss strengths and limitations of the study, taking into account sources of potential bias	
with reference to study objectives Strengths and Limitations Discuss strengths and limitations of the study, taking into account sources of potential bias or imprecision. Interpretation	
with reference to study objectives Strengths and Limitations Discuss strengths and limitations of the study, taking into account sources of potential bias or imprecision. Interpretation Give a cautious overall	
with reference to study objectives Strengths and Limitations Discuss strengths and limitations of the study, taking into account sources of potential bias or imprecision. Interpretation Give a cautious overall interpretation of results	
with reference to study objectives Strengths and Limitations Discuss strengths and limitations of the study, taking into account sources of potential bias or imprecision. Interpretation Give a cautious overall	

from similar studies	
Generalizability	
Discuss the	
generalizability (external	
validity) of the study	
results	
Funding and	
acknowledgments	
Give the source of	
funding and the role of	
the funders for the	
present study and, if	
applicable, give a	
statement of gratitude to	
everyone who indirectly	
assisted in the research	

Appendix 7: Thesis Approval Format

I, the undersigned, herewith approve the attached research thesis. I grade its public health relevance, methodological rigor and impact on practice and further research as high.

Name of the supervisor:	
Signature of the supervisor:	
- g	
Date:	