

A GUIDE FOR STUDENTS AND SUPERVISORS ON WRITING A 30 ECTS THESIS FOR THE DEGREE *MASTER OF PHILOSOPHY IN GLOBAL HEALTH*

Introduction

The Master's programme in Global Health is a two-year full time post graduate degree at the Centre for International Health (CIH), Department of Global Public Health and Primary Care, University of Bergen (UiB).

Benchmarks

- Preparation of research proposal starts in December during the first semester. The proposal is due in the second semester, by 20th May.
- The work on the thesis should take place either in the third or fourth semester. The time set aside for gathering data should be no more than one calendar month. This applies to fieldwork-based theses, literature reviews and theses using secondary data.
- The thesis must be submitted no later than May 15th in the fourth semester.
- The final exam is scheduled for the end of the fourth semester, on a date set by the Centre for International Health. The deadline for application to defend the thesis is 2nd May.

The core courses and the agreed elective courses must be successfully fulfilled before the student can apply to sit for the exam.

Designs:

Default design:

- Scoping review of literature on a global health topic.

Alternative designs:

- A short narrative literature review combined with new collection of qualitative data.
- A short narrative literature review combined with analysis of secondary quantitative data.

For scoping reviews-based theses

The recommended design for a 30-credits thesis in global health is the scoping review. Scoping reviews are tools to map the coverage of literature on a given topic including the volume and nature of existing knowledge. It offers an effective way for a student to record available evidence, and to clarify concepts and definitions. The topic of the scoping review should, to the extent possible, be aligned with the topic of the 30-credit internship. If the scoping review topic is not aligned with the internship, the student must ask for clearance for the topic beforehand.

The thesis based on a scoping review uses the same outline as any other thesis design and should have an introduction, methods, results/findings, and discussion sections. For scoping reviews, the results/findings & the discussion can be combined. The total length for the expected thesis should be between 30 to 40 pages, with no more than 50 references, including those that are part of the scoping review.

For theses using primary or secondary data

Theses based on primary or secondary data require clearance from the course leader and a clear justification and rationale must be provided. Due to the limited time and financial resources, it might be difficult to plan a large-scale quantitative survey or a long-term, in-depth qualitative study. Hence, we suggest the following:

- Thesis based on quantitative data: students should use already existing datasets for their analysis. Students should not gather any primary data as that requires more time and resources than a 30-credit study allows for.
- Thesis based on qualitative data: students should use simple one method descriptive designs, like an interview study. Students should not undertake grounded theory nor phenomenological designs as they are of a wider scope than a 30-credit study allows for.

The thesis should follow the IMRaD structure (introduction, methods, results/findings & discussion). The thesis should be 30-40 pages, with no more than 30 references.

Thesis requirements

The thesis must:

- Be concerned with a global health research problem, and the relationship to the internship INTH317 should be clearly formulated and justified
- Have clear objectives/research questions
- Be based on relevant and appropriately described materials and methods
- Present results in a clear and balanced way
- Present a relevant and critical discussion of materials, methods and results and relate this to pertinent literature within the field
- Fulfil the usual formal demands for scientific presentations and include a title page, a table of contents, an abstract, list of references, and correct use of language and good structure or layout.
- Work according to scientific principles adhering to predefined research questions or objectives, justify use of methods and adhere to methods according to systematic principles

Writing up the thesis

Monographs are the recommended format for a 30-credit thesis. A paper-based thesis is highly discouraged and requires clearance from the course leader before writing the proposal

The monograph that makes up the thesis should be maximum 12.000 words or 30-40 pages in length. This excludes tables, figures, references & annexes. It should be written with 1.5-line space.

The structure includes:

- a) Cover page with title of project, name of student and supervisors (see template)
- b) Content list
- c) c) Foreword (voluntary), including acknowledgements
- d) d) Abstract (maximum 500 words)
- e) e) Introduction/background
- f) f) Aim/objectives

- g) g) Design methods/data collection and theories or models where relevant
- h) h) Findings/results with in-depth analysis of the phenomena under study
- i) Discussion, including the strengths and limitations of the study, recommendations.
- j) j) Conclusions
- k) k) Reference list
- l) l) Annexes

What should each section of the thesis contain?

Title:

- Should be informative and descriptive, reflecting aim, study design and main outcomes/phenomena under study

Abstract:

- Should concisely describe background, aim, method, results/findings and conclusions
- The conclusion should be clearly connected to the aim

Introduction

- Describe the national and global public health relevance of the topic and support the text with relevant literature.
- Describe the research problem/area through a literature review based on relevant and up to date publications.
- If relevant, present a theoretical or conceptual framework.
- Study justification: Describe the rationale for the study and link it to existing body of knowledge and current knowledge gaps.
- Make sure the research question(s) are clear and relevant in relation to the rationale and the design of the study.

Aim

- Clearly describe the overall aim and specific objectives and structure using the SMART design (Specific, Measurable/researchable, Achievable, Relevant, and Time bound). Ensure it is linked to the introduction and study rationale, research question and study design.

Methods

- Scoping reviews: describe the search strategy including inclusion & exclusion criteria, and clearly show how PRISMA guidelines were followed
- Analysis of primary or secondary data: describe the methods for data collection & analysis in sufficient detail for the reader to understand exactly how data was collected, support the description by references to methodological literature where relevant and justify design choices made.
 - Include how you decided on the sample size and how you chose participants
 - Describe ethical considerations
 - Describe potential risks or benefits of the study

Results/Findings

- Present the findings in a systematic manner, logical order and in accordance with the stated research tradition. They should be relevant to the aims of the study.
 - Scoping reviews:
 - Present tables and figures with information about selection, characteristics of included studies and risk of bias.
 - Describe the most important findings from the included studies.
 - For primary or secondary data-based studies
 - Quantitative:
 - Ensure the titles of tables and figures are informative.
 - Summarize the results of the tables/figures concisely, without unnecessary repetition.
 - Qualitative:
 - Explain categories and subcategories/themes and sub-themes, ensure that labels of categories/themes correspond to the content.
 - Include rich, thick quotes or cases validating the text.

Discussion

- Discuss the findings in accordance with the aim of the study, research tradition, context, and theoretical framework (if relevant), and recent and relevant scientific publications.
- Reflect on strengths and weaknesses of the methods and the various sources of information you have used and discuss the uncertainties, reliability, and validity/ trustworthiness of findings.
- Discuss future implications and recommendations for policy and research of the research findings, as well as consequences for society / patients. Do not make recommendations that are not based on your own findings and avoid generic recommendations that could be based on any data set.

Conclusion

- Ensure the conclusion reflects *your* findings, answers the research question and is not generic.
- Describe the implications of the findings in relation to the aim of the study.

References

- Use the same reference style throughout.
- Ensure the reference list is complete, i.e. with all the required details to allow others to find the references including page number.
- Ensure that the majority of the references are peer reviewed publications.
- Make sure that statements that do not refer to common knowledge are supported by references.

Submission

The Master thesis should be submitted through *Inspira* within the deadline of 15th May in the fourth semester of study. In addition, the confidential authorship statement prepared by the student(s) and uploaded as an attachment. The supervisor's statement about co-authorship should be sent via email to the student advisor Linda.Forshaw@uib.no.

PS! The confidential statements by the student and by the main supervisor include information on how independently the student has worked with the thesis. The statements are confidential, which implies that the student and supervisor should not share the authorship statements with each other, only with the examiners.

Supervision

The Master thesis is written up under the supervision of a scientific employee, usually from the Faculty of Medicine. Dependent on needed expertise/specialisation one or more co-supervisors may also be appointed. Such co-supervisors could be specialists working in other parts of the university, other universities, research institutions, or international organisations. In some cases, the main supervisor may be external, and in such cases, there must be a co-supervisor from UiB.

The Faculty of Medicine provides no payment to external supervisors for master supervision. At least one of the supervisors must have a PhD.

Identification of supervisors

Supervisors will be identified for each student in the first semester. Each student has a right to 20 hours of supervision during the second year, on average about one hour per week. This includes group supervision, and the time supervisors need to read drafts. If a student has more than one supervisor, the 20 hours will be divided, with the majority of the hours normally being assigned to the main supervisor.

Roles and responsibilities

As a student, you are expected to:

- If undertaking primary research, discuss with the supervisors any ethical issues associated with it and secure ethical approval from relevant bodies
- Produce work in accordance with the schedule agreed with your supervisors
- Ensure that material is presented in sufficient time to allow for comments, discussion, and alterations before proceeding to the next stage
- Keep a record of meetings with supervisor and agreed action points
- Share drafts of the thesis text *before* each of the four writing workshops (focusing on the Aims & Methods, Results, Introduction, and Discussion parts, respectively) and review the drafts of two other students before each of the workshops,
- Take part in the writing workshops to give and receive feedback from peers and scientific staff.
- Participate in dissemination workshop

Be familiar with:

- Research ethics guidelines
- Referencing guidelines
- Rules about plagiarism

Feedback on supervision and plan for next meeting:

After each meeting with the supervisor, the student should write a short summary of the major points discussed and agreed upon, and a confirmation of the next meeting. This can be shared with the supervisor through e-mail. You are of course free to agree on other arrangements with your supervisor(s).

Make sure you meet the submission deadlines!

Supervisor(s) are expected to:

- Assist the student in choosing a relevant study subject and research questions
- Consider appointment of (an) appropriate co-supervisor(s)

The main supervisor will be responsible for:

- Discussing the type of guidelines and form of contact that would best suit the student and agree on a schedule of meetings.
- Advising the student on the workplan.
- Providing guidance in the chosen field of study, including application for ethical approval.
- Advising on data and literature sources.
- Supervising the student during the process of identifying sources for the scoping review. If an exception has been granted, also on supervising data collection/acquisition and data analysis.
- Supporting the student in the preparation of presentations for two research seminars (one in the first year about the proposal and one in the second year about the findings) and be present at these two research seminars.
- Suggesting specialists whom the student may consult for additional advice.
- Providing the supervisory sessions as contracted.
- Giving advice on the necessary completion dates of successive stages of the work to meet the thesis submission deadline.
- Reading through drafts and giving feedback.
- Assessing whether the thesis is acceptable for submission.
- Agree on a date and time for the thesis defence
- Finding an internal and external examiner to evaluate the thesis.
- Fill in supervisor's confidential statement.

Assessment:

The student will be required to sit for an oral exam to defend the thesis. See guidelines for examiners for details.