

NATIONAL COLLEGE OF MIDWIFERY
BSM GUIDELINES FOR RESEARCH PROPOSALS
(revised 8/04)

Research Project and Proposal Requirements:

All NCM candidates must adhere to the following guidelines for independent research projects in fulfillment of requirements for a Bachelors of Science Degree in Midwifery. Research proposals must:

- be submitted and approved prior to the commencement of data collection.
- consist of primarily original research – that is contribute something new to the field of midwifery.
- be firmly grounded in, and informed by, existing research. Your proposal should demonstrate knowledge of existing research and show where the new data or perspective provided by your project may contribute to ongoing analyses.
- contain data collection methods that can be demonstrated to be safe for study participants. First and foremost, do no harm.
- adhere to standards of informed consent and voluntary participation for all study subjects.
- demonstrate that the candidate has reflected adequately on the possible ethical and political ramifications of the proposed research.

Proposal Format:

A written proposal containing the following components must be sent to, and approved by, the college prior to the commencement of data collection.

1. Introduction/Purpose – This section provides some brief introductory and summary statements on the area you propose to study. It should be very succinct (1-2) paragraphs and provide the reader with an immediate idea of what you are proposing to do. The final sentence of this section is your thesis, purpose or hypothesis statement. This is a one-sentence summary of the entire research proposal. For example, a study on optimal fetal positioning might have the following purpose statement: The purpose of this study is to examine the effects of prenatal pelvic rocking exercises on fetal presentation at the onset of labor.
2. Thesis/hypothesis – This section provides more detailed information on the purpose statement put forth in the introduction. This is generally a statement of what you expect to find and should include one or more hypotheses to be tested. For example, in the case of the optimal fetal position example above one hypothesis might be that women who spend 30 minutes per day between 37 weeks gestation and delivery in the hands and knees position performing pelvic rocking exercises will be less likely to have a baby in a posterior position at the onset of labor.
3. Literature Review – This section is a brief overview of the literature available on your topic. The point of the literature review section is to summarize what has been done so far on the topic and to demonstrate areas where more research is needed. In this section, students make a case for why their proposed study is necessary based on gaps in the literature.
4. Methods – In this sections students cover all of the methods that will be used. These should be presented in the order they will be implemented in. These usually include:
 - A) Recruitment: How will participants be recruited (letters, email or flyer posting etc.)? The most important part of this section is to demonstrate that you will guard

against coercion and insure that participation is fully voluntary. See sample recruitment questionnaire (Appendix A).

B) Projected sample size: How large will your sample size be? Provide justification for your projected sample size. Will your sample be randomly collected or will you collect data on all individuals who volunteer?

C) Informed Consent: Demonstrate that informed consent will be insured for each participant. See sample informed consent form (Appendix B). How will you provide informed consent without biasing the results of your study?

D) Confidentiality: How will you insure confidentiality for participants? Pseudonyms? Coded numbers for participants?

E) Data collection methods: Once your sample is selected how will you go about collecting data, i.e. direct observation, questionnaire, survey, interviews, etc.?

F) Data Analysis: How will you analyze your data? For example, a specific software program for statistical analysis? Or qualitative analysis of themes from birth stories or other text based data?

G) Funding: If students have applied for or received funding from an external granting institution to cover research expenses, a list of these institutions and any guidelines or specific requirements/restraints dictated by them should be listed. Explain how your project conforms to these guidelines.

5. Results – In this section students describe expected results and the format that will be used to present findings, i.e. text, tables, graphs, charts, video footage and/or photographs etc. The latter two require additional informed consent documentation. See sample visual representation forms (Appendix C).

6. Conclusion – This section includes a discussion of the projected significance of your project. What might it lead to and what further work needs to be done? This is also where researchers discuss how they will disseminate results. What will you do with your findings? Presentation at a conference or a meeting of local midwives in your community? Attempted publication in *Midwifery Today*, *Mothering Magazine* or a refereed journal? All research that is published in any format must have documented informed consent and strict confidentiality of participants.

7. Bibliography – Include full citations for all of the sources pertinent to your topic. See Keene and Adams (2002) for help with formatting.

Research Project Format:

The following is an outline for submission of the final project. All NCM research projects must:

1. be based on the original research outlined in your proposal. If unforeseen circumstances force a change of project, a new proposal must be submitted and approved prior to the commencement of data collection. If it necessary to change or modify only a small portion of the approved study, NCM must be notified in writing of proposed amendments to the original proposal.

2. demonstrate that the candidate has a grasp of the scientific method and how to write using established scientific formats.

3. relate original findings to what has already been done in the field. This should include a detailed review of the work of others and a discussion of how your findings contribute to, refute, and/or expand upon existing knowledge in your field.

4. include a brief historical overview of work in your field.

5. include the following sections:

- A. Introduction – As with the introduction/purpose section of the proposal, the introduction in the final research project should include brief summary statements on

the area or subfield of midwifery research you have examined. It should provide the reader with an immediate idea of what you have done and found. The final sentence of the first or second paragraph is your thesis, purpose or hypothesis statement. This is the same or (more likely) the modified one-sentence summary of the project used in your proposal. Introductions generally include:

- i. A quotation or illustrative story/example that captures initial attention of your intended audience (avoided if intended for a clinical journal).
- ii. Brief summaries of information on the background, nature, and scope of the problem.
- iii. Brief narrative of how you came to select the research topic (again avoided if intended for a clinical journal).
- iv. Summary of the entire project – thesis or purpose statement, methods and findings.

B. Literature Review - This section is a comprehensive overview of the literature available on your topic and is generally expanded and modified from the review in your proposal. Given the hindsight of having completed the project, students should make sure the literature review provides the reader with all of the pertinent background they will need to understand original findings and interpretations. The point of the literature review section is to summarize what has been done so far on the topic and to demonstrate areas where more research is needed. In this section, students make a case for why their study was necessary based on gaps in the literature.

C. Methodology – this section expands on and provides more specific details on the actual methods implemented. It should include all of the components listed above for the methods section in the proposal with the following additions:

- i. Any modifications made to the project while you were implementing it. Almost every research project entails some modifications of the original methods proposed.
- ii. Justification for the methods you used. “Methods” refers to the actual activities engaged in during data collection while “methodology” literally means the study of methods. Methodology sections, thus, generally include a description of methods and a justification of, and critical reflection on, the methods you employed. Why did you use them? Generally this is because other researchers have tried them with success in the past. You should cite a handful of these researchers. How well did they work? What, if any, problems did you encounter, and how did you modify methods as needed? Researchers are generally self critical in this section preempting any attacks on methodological flaws. For example, if you know that the midwives you studied did not keep accurate records of transports, you might note that your data can only provide estimates of transport rates. Based on what you know of the practice, is the estimated rate high or low in your opinion? This section equips the reader to evaluate the accuracy and validity of your findings.

D. Results – In this sections students describe pertinent findings, but do not offer any interpretations of them. Charts and graphs are almost always used to summarize results. Readers should be able to read this section and know exactly what you found. Particular methods dictate values that should be reported (see learning objectives for the NCM Introduction to Statistics for Midwives course). For example, sample size, means and standard deviations should be reported for all statistical analyses. Only the results pertinent to your thesis/hypothesis statement should be reported here as extraneous findings generally confuse the issue. Save those for future papers.

E. Discussion – In this section students discuss the significance of findings and relate them to the other research available.

i. Make clear what your arguments are and then summarize the evidence for each assertion.

ii. What do your findings mean for childbearing women and for midwifery as a field? The significance of your findings should be made clear here and supported by all available evidence. Describe the theoretical and /or applied significance of your findings. This usually involves critiquing and debunking competing explanations.

iii. Point out any exception or problems with the data that muddy or complicate your interpretations. How might you address unsettled points?

F. Conclusion – No new information should be presented in the conclusion. The conclusion is simply a place to restate your thesis/hypotheses and your main findings. At the end of the conclusion, it is common for researchers to point out areas of future study and to pinpoint information needed to further clarify their own arguments/findings on the topic.

G. Acknowledgements – This section generally includes acknowledgment of:

i. The institution/s that supported your research like NCM.

ii. Study participants.

iii. Any granting institution/s that provided funding.

H. References – Include full citations for all resources cited in the final research paper. See Keene and Adams (2002) for help with formatting.

Essential Writing and Style Guides:

Keene, M. and K. Adams

2002 Easy Access: The Reference Handbook for Writers, third edition. Boston: McGraw Hill.

Matthews, J., J. Bowen, and R. Matthews

2001 Successful Scientific Writing: A Step-by-Step Guide for Biomedical Scientists. Cambridge: Cambridge University Press.

Williamson, C. and H. Goodare

2000 ETHICAL RESEARCH WITH PATIENTS: Guidelines for researchers. Written for Consumers for Ethics in Research (CERES), and Breast-Cancer Research Ethics & Advocacy Strategy (BREAST UK), October 2000. Available at: http://www.ceres.org.uk/assets/docs/charlottes_charter.pdf.

Zeiger, M.

1999 Essentials of Writing Biomedical Research Papers. McGraw-Hill Professional.

See also:

A Charter for Ethical Research in Maternity Care. Association for Improvements in Maternity Services. The National Childbirth Trust: 40. Kingswood Avenue, London NW6 6LS, (0180) 960-5585.