

STANDARD OPERATING PROCEDURE (SOP) / GUIDELINES FOR WRITING STSH FINAL REPORT

Guidance for Students

Planning and organization are essential components of report writing. It is understood that through effort and practice you can try to improve your writing abilities. This may probably go a long way in future as an important learning experience in the field of research. Suggested below is a guide to organize writing your STSH report.

Title

The title should summarize the main idea of your study. It should be complete, concise and clear reflecting the purpose of the study, its population, intervention, comparator (if any) and the design. Avoid using abbreviations in the title. Correct use of grammar is strongly recommended.

Introduction

The introduction should be about one and half to two pages. The purpose of an introduction is to provide the rationale behind the work, so that the reader may understand and appreciate your objectives. Please describe the importance (significance) of the study. Defend the model - why did you use this particular organism or system? What are its advantages? Provide a rationale and describe the reasoning that led you to selecting them. Very briefly describe the experimental design and how it accomplished the stated objectives. Try to provide appropriate references whenever necessary.

Analyze the research work done in a particular topic and identify the gaps in knowledge for which you would like to seek an answer. The research question you intend to ask during the study should be able to provide you a new insight into the problem under question.

Review of Literature

The literature review is a critical look at the existing research that is significant to the work that you are carrying out. You must do a thorough literature search on the topic of your research in order to understand the current status of knowledge on the particular subject which is published in National as well as International journals. You may carry out a PUBMED, GOOGLE SCHOLAR or MEDLINE search complemented by taking out the full research papers from the library and carefully reading them in order to obtain the most recent and relevant information.

When you have taken out the original articles from the Internet/ Library, you need to summarize relevant research, by first *evaluating* the particular work, show the *relationships* between different works, and show how it *relates* to your work. In other words, you cannot simply give a concise description of, for example, an article: you need to select what parts of the research to discuss (*e.g.* the methodology), show how it relates to the other work as well as *your work*. It should provide the context for your research by looking at what work has already been done in your research area.

Please Note:

- When you do a literature search remember to keep all references as you would need to put in the References when you prepare your report.
- Do not provide the well known textbook information with textbook references (unless essential), rather give the latest status of research on the topic by quoting recent research papers/ articles on the subject published in journals.
- Do not attach downloaded abstracts from MEDLINE/ PUBMED/ or mention there point wise in with the report as part of review of literature. Analyze and present only the relevant details from the abstracts/full papers.

Aims and Objectives

State your specific Hypothesis(es), Aim(s) or Objective(s). You may write the aim of the study and primary and secondary objectives if any. Your objectives should be specific and should clearly state what you would be trying to achieve. The objectives should also be to the point and achievable for a two month research study.

Materials and Methods

Materials and methods may be reported under separate sub-headings or incorporated together. Please document all specialized materials and general procedures. Give the study design, type of study, study site, duration of study, number of subject/ samples that were used, inclusion / exclusion criteria, choice of subjects and control, informed consent procedures *etc.* Report the methodology and procedure employed. Describe the methodology completely, including sample collection, processing, lab analysis (if any), statistical tests used for dataanalysis *etc.*

If well documented procedures were used, report the procedure by name, with reference. Mention about scales or scores used as a part of the study.

Remember to mention about the Institutional Animal Ethics Committee (IAEC)/Institutional Ethics Committee (IEC) clearance obtained before beginning your study and attach it with the report. Attach format of any questionnaires if used, and also a blank format of Informed consent form (ICF) and Case report form (CRF) in English language. The enclosures can be added in the report or can be separately submitted.

Please Note: Please attach only the blank formats that you use in the study and do not submit the filled/signed in actual CRF's or ICF's with identifiable information about the subjects.

Results

Under this section present and illustrate your findings objectively. Be concise, use figures or tables, to present results most effectively.

- Summarize your findings in text and illustrate them, if appropriate, with figures or tables by numbering the illustration(s) used separately (Example- Table 1, Figure 1 etc.)
- In text, describe each of your results, pointing to observations that are most relevant.
- Provide a context, such as by describing the question that was addressed by making a particular observation.
- Describe results of control experiments and include observations that are not presented in a formal figure or table, if appropriate.
- Analyze your data, by statistical tools and then prepare the analyzed (converted) data in the form of a figure (graph), table, or in text form.
- Both figures and tables, properly numbered, can be placed at the end of the report or within the text of your results section.

Please Note:

- Do not enclose all the raw data without analysis (for e.g, case report forms/clinical proformas of patients/consent forms)
- Please do not discuss or make interpretations of the findings under this section and do that under “Discussion”.

Discussion

Provide an interpretation of your results and make comparisons with other studies providing appropriate references. The significance of findings should be clearly described. If your results differ from your expectations, explain why that may have happened. If your results agree, then describe the theory that the evidence supported.

- Decide if each hypothesis is supported, rejected, or if you cannot make a decision with confidence.
- Explain all of your observations as much as possible.
- Decide if the experimental design adequately addressed the hypothesis or not.
- Try to offer alternative explanations if reasonable alternatives exist.
- One experiment will not answer an overall question, so keeping the big picture in mind, where do you go next?

Please Note: The mistake that students make is to more or less re-state the results. It is necessary to suggest why results came out as they did, focusing on the mechanisms behind the observations.

Conclusion

Draw appropriate conclusions that you can and based upon the results that you have, and treat the study as a finished work. Explain the significance of your findings and suggest what further research is needed on this topic.

Summary

Write your summary in not more than one page after the rest of the report is completed. Economy of words is important throughout the report, but especially in a summary. Summarize the study, including the following elements in any abstract.

- Purpose of the study - hypothesis, overall question, objective
- Brief description of the experiment
- Results, including specific data- if the results are quantitative in nature, report quantitative data; results of any statistical analysis should be reported
- Important conclusions or questions that follow from the experiment(s)

References

Referencing (also called citing or documenting) your sources means systematically showing what information or ideas you are quoting in your text and where they come from by indicating their source. Give references in your text whenever you state any information from any other source than your own work.

All these references should be given with full details only as per **Standard Vancouver/APA format** in the report and under References section. In a proper research paper, only original research articles authored by the original investigators should be cited. In citing a journal, use the journal citation (author name, title, journal, year, volume, page numbers).

Please Note:

- **Do not mix two referencing systems. Use a same Vancouver format for all references in the report. It is not a very good idea to include a website or books as a reference unless it is important.** In case you do so, then also mention the date you accessed the information on that particular website, as website information may change from time to time.

Enclosures with the Report

1. Score/Scale/Questionnaire
2. Patient Information Sheet (No identifying information should be present)
3. Informed Consent Form (No identifying information should be present)
4. CRF (Case Recording Format- must be blank)
5. IAEC/IEC Certificate/IC
6. Report Attestation Form (RAF)

The report should be sent through their email (by which they registered) to this email itself (ccrhstsh1@gmail.com)

SELF CHECKLIST (STSH) [To be used for reference- NOT TO BE SUBMITTED]		
S. No.	REPORT SUBMISSION CHECKLIST ITEMS	(Put ✓ Mark)
A.	Enclosure-I: REPORT ATTESTATION FORM (RAF) STSH 2024 Report Attestation Form (Scanned). Duly filled by the student, signed with seal and forwarded by the Guide.	Yes / No
B.	Enclosure-II: Institutional Ethics Committee (IEC)/ Institutional Animal Committee certificate. ETHICAL APPROVAL <i>Research should not be initiated without an ethical clearance and STSH report will not be accepted by CCRH in such cases.</i> a. Institutional Ethics Committee (IEC) Approval Certificate if work done on Humans (<i>including research on biological material/ retrospective analysis of records etc.</i>) OR b. Institutional Animal Ethics Committee (IAEC) Approval Certificate if work involves use of animals	Yes / No
C.	Enclosure-III: STSH REPORT IN FORMAT STSH 2024 Final Report -as a Single PDF File only <i>Should NOT have name / any other details of the Student / Guide as it may lead to rejection of Final Report)</i> (a) STSH 2024 Reference ID (b) Title (c) Introduction (d) Review of Literature (e) Aims and Objectives (f) Material and Methods (g) Observations and Results (h) Discussion (i) Conclusions (j) Summary (k) References (l) Questionnaire/ Study Tool/Patient Information Sheet (If any) <i>(Blank Format of questionnaire/ data collection sheet / case record form/ scale/any other tool used etc.).</i> (m) Informed Consent Form (If any) <i>(Blank Sample Patient Information Sheet/ Informed Consent Form)</i>	Yes / No
Students must submit the above three enclosures (I, II, III) as separate PDF files (Total: 3 PDFs).		