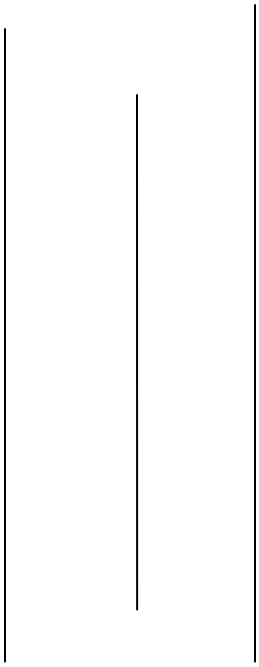
SHAHID GANGALAL NATIONAL HEART CENTRE
BANSBARI, KATHMANDU, NEPAL



INSTITUTIONAL REVIEW COMMITTEE

THE STANDARD OPERATING PROCEDURE FOR HEALTH RESEARCH

2022

Background

This revised document is a primary Standard Operating Procedure (S0P) of Shahid Gangalal National Heart Centre (SGNHC) Institutional Review Committee (IRC) "The Standard Operating Procedure (S0P) for Health Research". It will provide a basic framework for the development of quality and consistency in the ethical review processes which is solely based on revised Nepal Health Research Council (NHRC) guideline, 2022.

SGNHC = Shahid Gangalal National Heart Centre

NHRC = Nepal Health Research Council

IRC = Institutional Review Committee

1. Objectives

The overall objective of this SOP is to establish a framework for the research conducted within SGNHC.

The specific objectives of this SOP are:

- To ensure that all studies conducted within SGNHC are conducted in an ethical manner.
- To ensure consistency in the supervision and monitoring of health researches, and
- To protect rights of human involved in the research

Appointment of IRC Members in SGNHC

A clear procedure for recruiting potential IRC members will be established. The IRC members will be appointed by the Executive Director of SGNHC. Provision should be made to appoint an expert consultant on an ad-hoc basis to the IRC, but the consultant should not be considered as a voting member of the IRC.

1. Formation of IRC shall be as following:
    a. Chairman: One
    b. Member Secretary: One
    c. Members: Five to seven (Including one non-member of the institution)
2. In the foregoing member, there shall be total five to seven members with inclusion from following departments of the SGNHC:
    a. Department of Cardiology
    b. Department of Cardiac Surgery
    c. Department of Pediatric Cardiology
    d. Department of Anesthesia
    e. Department of Nursing
    f. One non-member of the Institution (Compulsory)
3. The Executive Director of SGNHC will appoint all the members, chairman and member secretary.

Terms and Conditions of Appointment

Tenure of nominated members shall be of three years and shall be eligible to be re-nominated for the next one tenure. A rotation system for membership should be considered that allows for continuity, the development and maintenance of expertise within the IRC, and the regular input of fresh ideas and approaches. Institution should keep on eye that not more than 50 percent of the members retire at onetime to allow continuity of IRC.

2. IRC Office

The IRC office will be in an academic block of SGNHC.

3. Reviewing Process and Communicating a Decision

The IRC will provide independent, competent and timely review of the ethical aspects of research proposals. The IRC may decide the reviewer for a particular proposal. Depending upon the nature of the research proposal, it can be reviewed by more than one reviewer. A scoring checklist or format need to be sent to the reviewer in order to maintain the consistency and objectivity of the review process.

If only a few proposals (two to three) need to be assessed at a time, it would be practicable for all IRC members to review the full applications including all associated documents. If a large number of applications need assessment at each meeting, one IRC member (principal reviewer) undertakes an in depth review including all forms, questionnaires, etc. and other members review a summary containing essential details of a proposal.

Research proposals reviewed and approved by the NHRC ERB, do not require further review, approval and ethical review processing fee by IRC. However, for multi-centric studies, researchers should obtain the acceptance letter from the IRC and submit it to the ERB.

The guidelines of NHRC for individual IRC are as follows:

(Source: National Ethical Guidelines for Health Research in Nepal 2022)

Do's

- Proposal having less than minimal and minimal risk that are self-funded by the students, faculty and staff of the institute and/or published publically and proposals with a national funding of up to two lakh.
- Single centered study/thesis submitted by the students from any university of Nepal (i.e. bachelor and master's)
- Single centered study submitted by another institute faculty having less than minimal and minimal risk can be reviewed, if there is an academic collaboration.

Don'ts

- Research proposals in high risk category (trial using drugs, vaccination, invasive procedure involving human)

— Externally sponsored/funded multicentric studies at national and international level (the term "externally indicates sponsored from outside and within the country")

Students from other universities/institution should have ethical clearance for their research proposal from their respective IRCs. In case of Universities/Institutions that do not have IRC, and students/researcher from institute with academic collaboration should submit research proposal according to SGNHC research proposal format. In addition, in above mentioned two conditions, there should be one co-investigator from SGNHC that will be responsible for proper and ethical research conduct.

The students should oblige SGNHC rules and regulations and pay the required SGNHC fees to SGNHC administration during the submission of proposal.

Start of the research

After the approval from the NHRC/respective IRC, the researcher must submit the application to SGNHC IRC along with the photo copy of the NHRC/respective IRC approval letter. The researcher is allowed to conduct the research in SGNHC only after obtaining the permission from SGNHC IRC.

The following ethical issues will properly be evaluated during the review process:

- Any related research conducted within 5 years of previously approved similar research will not be evaluated by IRC.
- Potential risk to participants should reasonably be less than anticipated benefits.
- Selection of participants is equitable. If the research involves vulnerable population, additional safeguards should be included in the research protocol to protect the rights of these people.
- Informed consent should be taken in an appropriate language understandable by the participant. The participant can withdraw from the research at any time without explanation.
- There should be adequate provisions to protect the privacy of participants and maintain confidentiality of data.
- The research plan makes adequate provisions for monitoring the data collected to ensure the safety of participants. The mechanism for compensation in case of injury should be well documented.
- Duration of research should be specified prior of approval. In case of amendments, prior approval needs to be taken.
- The IRC should receive periodic and final reports from researchers and a copy of which need to be submitted to NHRC ERB.

3.1. Review Process:

The SGNHC IRC will review all the submitted health research proposals (Appendix I) processed through the SGNHC Research Unit in a timely manner and in accordance with the set review process.

Conduct of Meetings:

Meetings will be held on 4th Monday of each Month of Nepali Calendar at a time and place convenient to all IRC members. The frequency of meetings can be increased depending upon the number of applications that need review. Members will have sufficient time to review the applications prior to the meeting. The principal reviewers, especially, will have had adequate time to review the applications assigned to them and to consult with applicants if necessary.

Depending upon the nature of research proposal, the IRC can invite the applicant to present the proposal to the panel of experts and IRC members. This will help the IRC to better understand the proposal and guide the researcher appropriately. The same procedure should be followed if an independent (expert) reviewer is invited to advice on any particular topic. Minutes of IRC meetings will be maintained in a confidential manner in a standard format.

Quorum requirements for SGNHC Research Unit:

1. At least 51 percent SGNHC IRC members must be present to compose a quorum in order to maintain valid advice and/or decision.
2. Presence of members of only one gender does not constitute a quorum.
3. At least one-member or subject expert who is present during the meeting should have expertise in an area of the subject under discussion.
4. No decision is valid without fulfillment of the quorum.
5. Invited expert should not be counted in meeting quorum requirement.

Decision Making

The SGNHC IRC must consider the following while making a decision about the research proposal.

1. SGNHC IRC meeting has met required quorum.
2. Normally the decision can be taken by consensus; if a consensus is not possible, the voting process can be initiated.
3. All SGNHC IRC members present during the meeting have the right to express their opinion or vote to make a decision independently.
4. The decision must be taken either by a consensus or majority vote (>50% of the present members) and should be recorded. Any undesirable opinion (if any) should also be recorded with reasons.
5. All relevant documents must be included before decision making.
6. The decisions that can be taken are:
    a. Approved
    b. Approved after minor corrections
    c. Approved after major corrections
    d. Needs further evaluation in next meeting after mentioned corrections
    e. Rejected

Conflict of Interest:

A conflict of interest is present and interferes with the ability to make an objective evaluation when any of the SGNHC IRC members are investigators/co-investigators in a research study being reviewed. Conflict of interest might be financial conflict; non-financial

conflict; conflict of roles; or predetermination. In such a situation, the member(s) should disclose the conflict of interest and refrain from participating in the review process by leaving the meeting room or logging off from online meeting.

3.2. Communicating a Decision: A decision will be communicated in writing to the applicant according to the IRC procedures.
The communication of the decision will include, but not be limited to the following:

- The exact title of the research proposal reviewed.
- The name and title of the research applicant.
- The name of the site(s) for the research.
- The date and place of the decision.
- A clear statement of the decision reached.
- Any suggestion by the IRC concerning the research study.
- IRC approval letter will not be issued until all recommended corrections are made.

In the case of approval of the study, the communication should include: **(a)** the need to notify the IRC in case of protocol amendments, **(b)** the need to notify the IRC in the case of amendments to the recruitment of research participants, or the informed consent form, **(c)** the need to report serious and unexpected adverse events related to the conduct of the study, **(d)** the need to report unforeseen circumstances, the termination of the study and the information the IRC expects to receive in order to perform ongoing monitoring and supervision of the research study, and **(e)** the final report and research article published in scientific journals.

The signature along with the name and title of the authorized person of the IRC or the institution along with the date of approval should be clearly mentioned.

If the proposal is either rejected or recommended for amendment, clearly stated reason(s) will be provided.

IRC's will maintain a record of all research protocols received and reviewed including the following:

- Name and responsible institution or organization or group or individual
- Proposal identification number(s)
- Principal investigator/Co-investigator(s)
- Title of the research proposal
- Ethical approval or non-approval or pending or in process with date
- Approval or non-approval of any changes to the protocol
- The terms and conditions, if any, of approval of any protocol
- Whether approval is by expedited review
- Action to be taken by the IRC to monitor/supervise the research

Expedited Review: Most projects will require formal review by the full IRC, but there are some studies that do not pose any ethical problems (ethically minor investigations), where there is minimum risk of distress or injury, physical or psychological, to the human participants e.g. outbreak, assessment of patient information and education. Such projects should be the subject of an application but may not require review by the full Board. Similarly, under exceptional

circumstances of urgency (e.g. a patient with some rare or ill understood condition, epidemics, etc) the chairperson in consultation with IRC member may give expedited approval, and should get these approvals by the next meeting of the Board. In any confusion, an application should be reviewed by the full Board.

The IRC may also use the expedited review procedure to review minor changes in previously approved research during the period covered by the original approval. The reviewer(s) may exercise all authorities of the IRC except disapproval. Research may only be disapproved following review by the full Board.

4. IRC's Role in Supervising and Monitoring Health Research

The IRC and its parent institution have the responsibility to ensure that the conduct of all health research approved by the IRC need to be monitored and supervised by procedures and/or by using existing appropriate mechanisms within the institution.

The IRC will establish a follow-up procedure for following the progress of all research studies for which a positive decision has been made, from the time of the decision until the termination of the research. The communication between the IRC and the principal investigator will clearly be specified. The frequency and type of monitoring and supervision will be determined by the IRC. The IRC will monitor the progress of the research to observe whether it has followed the research proposal approved by IRC.

Review the proposed revision in the original research proposal (if necessary) and approve or disapprove it. An IRC shall require that principal investigator immediately report anything which might warrant additional review of ethical approval of the protocol including:

- Serious or unexpected adverse effects on research participants and community,
- Proposed changes in the protocol, and
- Unforeseen events that might affect the continual ethical acceptability of the project.

During supervision and monitoring process, an IRC will review the problems (if any) in the implementation of the research proposal and guide the study team to solve them. It is also recommended that an IRC may provide feedback to the study team in the research process particularly on problem identification, methodology, data analysis, lacunae identified in the ethical and scientific aspects of research (if any) and advice on corrective steps to be taken. IRC may advice regarding the soundness of the conclusions reached on the basis of results of the study and their relevance to the scientific body of knowledge as well as to the health services. It may also advise on the dissemination process, application of research findings into practice and its use in further research.

5. Right of Appeal and Complaints

There will be clear understanding of who bears ultimate responsibility in the event of complaints and/or litigation by unsatisfied clients of the IRC or research participants. An institution with the IRC shall establish a mechanism for receiving and promptly handling appeals/complaints or

concerns of a research. Principal investigator will take ultimate responsibilities in the event of complain by the research participant and IRC.

The IRC will have the freedom to work independently and be responsible for their decisions. Such decisions should be based on diligent examination of the proposals and the application of approved methodology. Provided there have been no shortcomings in the process, it would just be for the parent institutions or organizations to bear the ultimate responsibility in cases of litigation. Suitable indemnity should be provided for IRC members.

The principal investigator who receives an unfavorable decision by the IRC has the right of appeal. This appeal is initiated by filing a notice of appeal in writing to the head of the institution within thirty (30) days from the date of notice he/she received. In such circumstances, the head of the institution may request IRC for re-review of the proposal. The Board will notify the principal investigator of the rehearing, and the principal investigator will have the right to appear at the rehearing to defend the research proposal.

Any research participants involved in a research project has the right to raise complaints or concerns directly either to the chairperson of IRC or head of its parent institution. In case of an appeal to the Board by a research participant, the IRC will determine the validity of the complaint and notify the principal investigator of its judgment in the matter. The latter will abide by the decision of the IRC.

6. Recording and Reporting/Documentation and Archiving

The following will ***constitute the recording and reporting procedure:***

- Copies of all research proposals reviewed, scientific evaluations (if any) that accompany proposals, approved sample consent documents, progress reports and other related documents.
- Minutes of meetings.
- Records of continuing review activities.
- Copies of all correspondences between the IRC and principal investigators.
- A list of all members, reviewers and experts including their contact telephone numbers.
- Records should be kept at least for ten (10) years even after the completion of the research study. The records shall be accessible for inspection and copying by authorized representatives of the institutions.

The following will constitute the documentation and archiving procedure: All documentations and communication of the IRC will be dated, filed and archived according to written procedures. Proper storage space will be provided for this in the institution. A statement is required to the access and retrieval procedure (including authorized persons) for the various documents, files and archives.

Documents that should be filed and archived include, but are not limited to:

- The constitution, written SOP of the IRC, and regular (monthly/annual) reports.
- The CVs of all the IRC members.
- A record of all expenses (including allowances and reimbursements) of the IRC.

- Agenda of the IRC meetings.
- The minutes of the IRC meetings.
- Copy of all research proposal documents.
- All correspondences of the IRC.
- A copy of all decisions and advice given by the IRC.
- Notification of the completion, premature suspension or termination or all research proposals.
- Final summary or final report of all approved research studies by IRC.

7. Suspension or Discontinuation of Research

When the IRC is satisfied that circumstances have arisen such that a research project is not being or cannot be conducted in accordance with the approved protocol and that, as a result, the welfare and rights of research participants are not or will not be protected; the IRC may be required to take the following steps:

- Withdraw approval
- Inform the principal investigator for such withdrawal
- Recommend that the research project be discontinued, suspended, or that other necessary steps be taken
- Research activities should not be carried out if ethical approval has been withdrawn.
- Any researches that have not been completed for one year later than the proposed completion date will be suspended. Before undertaking such decision, the principal investigator (PI) will be notified by email. If the PI wishes to extend the deadline, the PI is requested for application for extension. The deadline will be two weeks from the date of an email that has been sent. Any unanswered emails will be treated as suspended proposals in the website as well.
- Regarding submitted proposals that are not corrected according to the suggested recommendations, a maximum time limit of one year will be granted for the completion of corrections. If such proposals are not corrected within the period of one year starting from 1st submission date, the pending proposals will be canceled. If the principal investigator of such proposals wishes to continue such research, he/she will need to reapply from the beginning.

Appendix I

Guideline for the IRC

The main task of the IRC is to review of research proposals and their supporting documents, with special attention given to the informed consent process, documentation, and the feasibility of the protocol. The IRC also needs to take into account prior scientific reviews, if any, and the requirements of applicable laws and regulations. Following are the possible items to be aware of during the ethical review process by the IRC in SGNHC

1. **Design of the Study**
    a. Research Title
    b. Summary of the Research Proposal
    c. Details of Research Proposal
        - Background of Study including review of recent studies relevant to your current proposal
        - Statement of the Problem and Rationale / Justification for the current study.
        - Research Aims & Objectives
    d. Research Design and Methodology
        - Research Method
        - Study Variables
        - Outcome variables
        - Research Design
        - Study Site and Its Justification
        - Study Population
        - Sampling Methods/Techniques
        - Sample size (with justification)
        - Criteria for Sample Selection
        - Data Collection Technique / Methods
        - Data Collection Tools
        - Pre-testing the Data Collection Tools
        - Validity and Reliability of the Research
        - Potential Biases
        - Limitation of the Study
        - Possible Challenges of the Study
    e. Plan for Supervision and Monitoring
    f. Plan for Data Management and Statistical Analysis
    g. Expected Outcome of the Research
    h. Plan for Dissemination of Research Results
    i. Plan for Utilization of the Research Findings
    j. Work Plan

2. **Involvement of the Research Participants**

a. Review the informed consent form.
b. The characteristics of the populations from which research participants will be drawn (including gender, age, and economic status).
c. Frequencies of use of human participant
d. Be aware of a potential vulnerable population for the study including women, children, and elderly.
e. The means by which initial contact and recruitment is to be conducted.
f. The way and means by which full information is to be conveyed to the potential research participants or their representatives.

3. **Proper Care and Protection of Research Participants**
   a. Verify the suitability of the investigator(s) qualification and experience for the proposed study. (See CV of researcher).
   b. How many participants are required for the research
   c. Sufficient plans to withdraw or withhold information or standard therapies for the purpose of the research and the justification for such action.
   d. The medical care/proper care to be provided to the research participants during and after the course of the research.
   e. The adequacy of medical supervision and psycho-social support for the research participants
   f. Steps to be taken if research participants voluntarily withdraw from the research.
   g. The description of any plans to make the study product available to the research participants following the research.
   h. A description of any financial costs to the research participants.
   i. The compensation/reward for the research participants (including money, services, and/or gifts).

4. Informed Consent Process

   a. A full description of the process for obtaining informed consent, including clear individual responsibility of taking informed consent
   b. Statement required in the informed consent include
      - ✓ Human participants can withdraw from the study at any times without giving reason and without fear.
      - ✓ Guaranteeing the privacy and confidentiality of the research participants
      - ✓ adequate information to participant during the process of study
   c. Clear justification for the intention to include in the research individuals who cannot consent, and a full account of the arrangements for obtaining consent or authorization for the participation of such individuals.
   d. Clear provision for receiving and responding to queries and complaints from research participants or their representatives during the course of the research project.

5. **Expedited Review**

IRC's should establish procedures for the expedited review of research involving minimal risks to participants. These procedures should specify the following:

- The nature of the applications, amendments, and other considerations that will be eligible for expedited review.
- The types of research to which an expedited review procedure is to apply.
- Chairperson delegate the authority to other member of IRC of concerned department or to sub-boards(if exist)
- The quorum requirements for the expedited review.
- The status of decisions (e.g. subject to confirmation by the full IRC or not)
- The method of reporting and ratification of decisions by the full Board
- Research with potential for physical or psychological harm should generally not be considered for expedited review. This includes drug trials, research involving invasive physical procedures and research exploring sensitive personal or cultural issues.

Bibliography

Guideline for Institutional Review Committees (IRC) for Health Research in Nepal 2016

Guideline for Institutional Review Committees (IRC) of Patan Academy of Health Sciences (PAHS)

Guideline for Institutional Review Committee of KIST Medical College

Standards and Operational Guidance for Ethics Review of Health-related Research with Human Participants, WHO, 2011.

National Ethical Guidelines for Health Research in Nepal 2022