



3.3.1: The Institution ensures implementation of its stated Code of Ethics for research. The Institution has a stated Code of Ethics for research, the implementation of which is ensured by the following:

- 1. There is an Institutional ethics committee which oversees the implementation of all research projects**
- 2. All the projects including student project work are subjected to the Institutional ethics committee clearance**
- 3. The Institution has plagiarism check software based on the Institutional policy**
- 4. Norms and guidelines for research ethics and publication guidelines are followed**

INDEX SHEET

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**CERTIFICATE OF THE HEAD OF INSTITUTION
FOR
CODE OF ETHICS OF RESEARCH**



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Dr.ANIL MELATH, MDS.,
PRINCIPAL

TO WHOMSOEVER IT MAY CONCERN

This is to certify that our Institution ensures implementation of its stated Code of Ethics for research. The Institution has a stated Code of Ethics for research, the implementation of which is ensured by the following:

- 1. There is an Institutional ethics committee which oversees the implementation of all research projects**
 - 2. All the projects including student project work are subjected to the Institutional ethics committee clearance**
 - 3. The Institution has plagiarism check software based on the Institutional policy**
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- details are given:**

PRINCIPAL



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CODE OF ETHICS



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Code of ethics of research:

In an era where it is 'Publish - or- Perish', Mahe Institute of Dental Sciences strives hard to adhere to every aspect of research ethics. Right from the inception of the topic of interest, we focus on providing maximum benefits to the participants involved. We provide a non competitive environment for the young researchers as well , by sticking to certain precautions. We ensure that the participant has all of the information regarding the study, that might reasonably influence their willingness to participate in a form that they can understand and comprehend.

Our Patient Information Sheet, discuss the following :

- Participants' rights to decline to participate and to withdraw from the research once it has started, as well as the anticipated consequences of doing so.
- Reasonably foreseeable factors that may influence their willingness to participate, such as potential risks, discomfort or adverse effects.
- Any research benefits.
- Limits of confidentiality and when confidentiality must be broken.
- Who participants can contact with questions.

Other than the above, we encourage the students to discuss the intellectual property frankly with their guides, thus ensuring each and every one involved in the study gets adequate information as well as reflecting on the fact that - authorship relies on contribution. Gift authorship is discouraged by any means at our institution.

By encouraging the researcher to honestly report the data, results, methods and procedures, and publication status we aim to bring out world class research materials. The experts/guides take special care to not allow any fabrication, falsification or misinterpretation of any data. Mahe Institute of Dental Sciences put forth in its agenda of research ethics - not to deceive one's own colleagues, research sponsors, or the public.

Our team of experts in the research area strive and help the students to avoid bias in experimental design, data analysis, data interpretation, peer review and personnel decisions. They also keep a check for avoiding or minimizing self-deception, disclosing personal or financial interests that may affect research etc.

There is significant emphasis given for each proposal in every department. The guides scrutinize the work carefully and at every stage it is critically examined by the principal investigator and the peers. We emphasize on the need of keeping good records of research activities, such as data collection, research design, and correspondence with journals.

Through out the journey at the college, a student/ researcher learns to respect their colleagues, treat them fairly, and be open to criticism and new ideas.



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Institutional ethics Committee:

The Institutional ethics Committee is responsible for developing and monitoring policies and guidelines in proper conduction of research, publishing, possible violations and assisting in investigations of possible violations of code of ethics.

Disciplinary Actions:

The Institutional ethics Committee of the college, with the following members will establish and take care of the issues and complaints regarding the plagiarism or any others and will submit the report after thorough investigation. The committee also recommends the disciplinary action be imposed within a period of 3 weeks from the day of complaint.

Members of Institutional ethics Committee at Mahe Institute of Dental Sciences:

Sl no:	Designation	Name	
1	Chairperson	Dr. Babu Ravindran	External Member
2	Member Secretary	Dr. Rajani Mary George	Internal Member
3	Member	Dr. Biju Thomas	External Member
4	Basic Medical Scientist	Dr. Selvamani M	Internal Member
5	Basic Medical Scientist	Dr. Selvakumar C	Internal Member
6	Pharmacologist	Dr. Manohar Herle	Internal Member
7	Basic Medical Scientist	Dr. Teenu Thomas	Internal Member
8	Legal Advisor	Adv. OG Premarajan	External Member
9	Social Scientist	Mr. Cibin C	Internal Member
10	Layperson	Mrs. Civi Ramesh	External Member



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INSTITUTIONAL ETHICS COMMITTEE CLEARANCE



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REQUEST LETTERS SENT TO THE MEMBERS



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
A Unit of Mahe Educational & Charitable NRI Trust
Accredited by NAAC with "A" grade

04.04.2023

Adv.O.G.Premarajan,
Ethical Committee Member,
Mahe Institute of Dental Sciences & Hospital,
Mahe.

Respected Sir,

Sub:-Institutional Review and Ethical Committee Meeting.

As the 8th batch of Post Graduate Students are submitting their Synopsis of the dissertation to Pondicherry University, we would like to humbly request you to be a part of **Institutional Review and Ethical Committee** meeting to give Ethical Clearance for the Post Graduate Students.

Kindly consider our request and let us know about your willingness to be part of **Institutional Review and Ethical Committee Meeting** to be held on 11.04.2023 (Tuesday) at 3.00 P.M.

Venue:-Conference Hall.

Waiting your reply.

Thanking you,

Yours sincerely,

Dr.Anil Melath
PRINCIPAL

Principal
Mahe Institute of Dental Sciences & Hospital
MAHE

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MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
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Accredited by NAAC with "A" grade

04.04.2023

Dr. Anjali K.
Assistant Professor,
Department of Microbiology
MINDS. Mahe

Respected Madam,

Sub:-Institutional Review and Ethical Committee Meeting.

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Yours sincerely,

Dr. Anil Melath
PRINCIPAL

Principal
Mahe Institute of Dental Sciences & Hospital
MAHE



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MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL

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04.04.2023

Dr.Teenu Thomas,
Senior Lecturer,
Department of Public Health Dentistry,
MINDS-Mahe

Respected Madam,

Sub:-Institutional Review and Ethical Committee Meeting.

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Thanking you.

Yours sincerely,

Dr.Anil Melath
PRINCIPAL

Principal

Principal



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MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL

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04.04.2023

Dr.Biju Thomas,
Professor & HOD,
Department of Periodontics,
A B Shetty Memorial Institute of Dental Sciences,
Mangalore.

Respected Sir,

Sub:-Institutional Review and Ethical Committee Meeting.

As the 8th batch of Post Graduate Students are submitting their Synopsis of the dissertation to Pondicherry University, we would like to humbly request you to be a part of **Institutional Review and Ethical Committee** meeting to give Ethical Clearance for the Post Graduate Students.

Kindly consider our request and let us know about your willingness to be part of **Institutional Review and Ethical Committee** Meeting to be held on **11.04.2023 (Tuesday) at 3.00 P.M.**

Venue:-Conference Hall.

Waiting your reply.

Thanking you.

Yours sincerely,

Dr.Anil Melath
PRINCIPAL

Principal

Mahe Institute of Dental Sciences & Hospital
CHALAKKARA



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MINUTES OF MEETING



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MINDS/PG-ETHICAL/2022-23

Date: 11.04.2023

Minutes of the 8th Ethical Committee Meeting held 11.04.2023 at 3.00P M at Conference Hall. All the postgraduate are presented their synopsis from the respected postgraduate department of the Mahe Institute of Dental Sciences and Hospital. Dr. Babu Raveendran, Chairman, Ethical Committee welcomed the gathering and Dr. Anil Melath, Convenor, briefed members and started with proceedings. Dr. Selvamani M read out minutes of last ethics meeting also informed the committee that All the committee members are undergone the Good Clinical Practice and informed that institution is under the process of registration of Ethics from ICMR, New Delhi. Dr. Anil Melath introduced the External Observer Dr. Biju Thomas, Professor and Head, Dept. of Periodontics and he is also secretary for Institutional Ethical Committee NITTE University, Mangalore. He also mentioned that this year four new guides were included – Dr. Adarsh V J, Dr. Abhinav Mohan, Dr. Sharath Chandrasekhar, and Dr. Arjun M R.

Dr. Anil Melath informed the committee that Dr. Rajani Mary George is included in the committee. Madam is heading the Department of Public Health Dentistry and having good knowledge of Statistics. Dr. Manohar Herle Professor & Head in Department of Pharmacology is also included in the committee as Basic Scientist. Dr. Anil sir also informed the committee that our Post graduate won many awards in the national conferences.

Dr. Babu Raveendran Chairperson Institutional ethics committee expressed the happiness about the institution progress. Sir congratulated all postgraduate for award they won. Sir also



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informed the committee that Institution conducting good number of research work.

Congratulated to all the guides involved in the Projects.

Dr. Biju Thomas congratulated the Principal, Faculty and Management about the NAAC accreditation. He said it is difficult for standalone institution to get the "A" grade in first attempt.

Later the committee started with presents the Postgraduate presentation

Members Present:-

Dr.Babu Raveendran

Dr.Anil Melath

Dr.Selvamani M

Dr.Biju Thomas

Basic Medical Scientist

Chairman

Legal Advisor

Social Scientist/Philosopher/Ethicist/Theological

Member

:-Chairperson,EthicalCommittee

:-Convenor, Ethical Committee

:-Member Secretary

:-External Observer

:-Dr.Selvak Kumar C

:-Dr.Manohar Herle

:-Dr.Teenu Thomas

:-Dr.Anjali K*

:-Dr.Raj A C*

:-Mr.O G Premarajan

:- Rev.Fr.Vincent Pullickal

:-Mr.Cibin C*

:-Mrs.Civi Ramesh



Recommendations

- Dr. Babu Ravindran asked all members to undergo training in for ethical workshop conducted by recognized ethical bodies and also Good Clinical Practice. GCP is also available as online training program which one can take online training.
- Consent from other institutions required if part of studies is done in that institution. It should be clearly mention about conflict of interest in studies as well in financial mater if any.
- Technical committee should check the studies before forwarded to ethical committee.
- Dr. Sreelakshmi R advised to keep questionaries in local language also.
- Dr. Thavithavakar, Dr. Rabees K P asked to modify title of the study as per the committee recommendation.
- Consent forms should be signed from parents if subject is minor.
- In consent form along with patient, one/two witness should also sign.
- To brief the procedures to the subject (if above 18 years) and parent (person is below 18 years) before initiating the experiment.
- Conflicts of interest if any, should be mentioned.
- Consent form is also required for those who are doing in-vitro studies by using human teeth
- All researcher has to follow the ICMR guideline for carrying on scientific study.

Both External Observer & Chairperson conveyed best wishes to Postgraduate.

Meeting is adjourned at 5.30 PM with the approval of the abovementioned dissertation topics.



LIST OF PROTOCOLS FOR SUBMISSION:

Department of Prosthodontics

Student 1	:- Dr. Harishini S
Dissertation Topic	:-“Comparison of Different essential oils used to preserve removable prostheses from candida albicans-An Invitro study”.
Nature of Project	:-Master of Dental Surgery
Guide Name	:-Dr. Prasad Aravind.
Student 2	:- Dr. Peter S
Dissertation Topic	:-“Comparison of the color stability of various provisional Prosthodontic materials subjected to different stain-inducing agents using spectrophotometer”-An invitro study .
Guide Name	:-Dr. Abhinav Mohan K

Department of Conservative Dentistry:-

Student 1	:- Dr. Shelja Mohan A
Dissertation Topic	:-“Evaluation of Antibacterial and smear layer removal efficacy of contemporary chelating agents with sodium hypochlorite”-An Invitro study.
Guide Name	:- Dr. George Thomas.
Co-Guide	:-Dr.Sona Joseph.
Student 2	:-Dr.Sibi Aboobacker
Dissertation Topic	:-“Assessment of canal configuration and remaining dentin thickness of mesial roots of lower first molars prepared by four newer rotary file systems using CBCT evaluation.
Guide Name	:-Dr.Sunil Jose
Student 3	:-Dr.Kanakamani M



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Dissertation Topic :-“Comparative Evaluation of white spot lesion treatments using resin infiltrant and remineralising agents”-A spectrophotometric analysis.

Guide Name :- Dr. Adarsh v J

Co-Guide :- Dr. George Thomas

Department of Paedodontics:

Student 1 :- Dr. Pushpasanthi M

Dissertation Topic :-“To compare the microhardness of primary teeth after Application of two fluoride varnishes containing amorphous calcium phosphate”-An Invitro study.

.Guide Name :- Dr. Rena Ephraim

Student 2 :- Dr. Shemnidha Saleem

Dissertation Topic :-“A Comparative evaluation of remineralizing potential of nano silver fluoride, CPP-ACPF, Fluoride Varnish and their effect on Microhardness of enamel using Vickers Microhardness test”-An Invitro study.

Guide Name :- Dr. Ambili Ayilliath

Student 3 :- Dr. Athira R

Dissertation Topic :-“Impact on colour stability and tensile bond strength of restorative material with liquid medicaments commonly used in pediatric patients with special health care needs.”- An Invitro study.

Guide Name :- Dr. Sharath Chandrasekhar

Department of Periodontics:-



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Student 1 :-Dr.Sindhuja S
Dissertation Topic :-“Influence of fibronectin and vitronectin on phenotypic markers expression and osteogenic potential of gingival-derived mesenchymal stem cells(GMSCs)in vitro”.

Guide Name :- Dr. Anil Melath
Co-Guide :- Dr. Veena Shetty A

Student 2 :- Dr. Marjana Shukoor
Dissertation Topic :-“Effect of inflammatory cytokines on cellular and immunological responses of human periodontal ligament stem cells”-An /invitro study.

Guide Name :- Dr. Subair K
Co-Guide :- Dr. Mohan Kumar

Student 3 :- Dr. Paventhan Jolie Coeur R
Dissertation Topic :-“Comparative evaluation of Aerosol contamination using extra oral suction and pre-procedural mouth rinse during ultrasonic scaling:A randomized controlled clinical trial”.

Guide Name :-Dr.Arjun M R

Department of Orthodontics

Student 1 :- Dr. Roshan B
Dissertation Topic :-“Evaluation and comparison of the efficiency of titanium molybdenum alloy and stainless steel arch wires during total arch distalization using infrazygomatic crestal mini screws”- An invitro study.

Guide Name :-Dr.Jithesh Kumar K
Dissertation Topic :-“Evaluation and comparison of cytotoxicity of different clear aligner materials” An Invitro study.



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Student 2

:-Dr.Sherin Shahana

Guide Name

:-Dr.Jithesh Kumar K

Dissertation Topic

: Comparative Evaluation of Mechanical and thermal properties of different aligner materials after thermoforming and aging-An In vitro study

Student 3

:-Dr.Manoly Shabnam

Dissertation Topic

:-“Comparative Evaluation of Mechanical and thermal properties of different aligner materials after thermoforming and aging”-An invitro study.

Guide Name

:-Dr.Panjami Marish



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COPY OF CLEARANCE CERTIFICATES

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MINDS/PG-ETHICAL/009/2023-24

Date: 11.04.2023

ETHICAL CLEARANCE CERTIFICATE

Dissertation Topic :- "Effect of inflammatory cytokines on cellular and immunological responses of human periodontal ligament stem cells"-An /invitro study.

Nature of Project :- Master of Dental Surgery.

Students Name :- Dr. Marjana Shukoor

Guide Name :- Dr. Subair K

Co-Guide :- Dr. B Mohan Kumar and Dr. A Veena Shetty

On behalf of the Mahe Institute of Dental Sciences & Hospital, Mahe, U.T. of Puducherry, Ethical Committee, hereby give ethical approval in respect of undertakings contained in the above mentioned Research work. The Researcher Student may therefore commence with the research work as from the date of this certificate, using the reference number indicated above.


Dr. Babu Raveendran,
Chairman


Dr. Anil Melath,
Principal



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MINDS/PG-ETHICAL/011/2023-24

Date: 11.04.2023

ETHICAL CLEARANCE CERTIFICATE

Dissertation Topic :- "Influence of fibronectin and vitronectin on phenotypic markers expression and osteogenic potential of gingival-derived mesenchymal stem cells (GMSCs) An in vitro study".

Nature of Project :- Master of Dental Surgery.

Students Name :- Dr. Sindhuja S

Guide Name :- Dr. Anil Melath

Co-Guide :- Dr. Veena Shetty A and Dr. B Mohan Kumar B

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Dissertation Topic :- "To compare the microhardness of primary teeth after application of two fluoride varnishes containing amorphous calcium phosphate"-An Invitro study.

Nature of Project :- Master of Dental Surgery.

Students Name :- Dr. Pushpasanthi M

Guide Name :- Dr. Rena Ephraim

Co-Guide :- Dr. Mridhul M U.

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MINDS/PG-ETHICAL/003/2023-24

Date: 11.04.2023

ETHICAL CLEARANCE CERTIFICATE

Dissertation Topic :- "Evaluation of Antibacterial and smear layer removal efficacy of contemporary chelating agents with sodium hypochlorite"-An Invitro study.

Nature of Project :- Master of Dental Surgery.

Students Name :- Dr. Shelja Mohan A

Guide Name :- Dr. George Thomas.

Co-Guide :- Dr. Sona Joseph.

On behalf of the Mahe Institute of Dental Sciences & Hospital, Mahe, U.T. of Puducherry, Ethical Committee, hereby give ethical approval in respect of undertakings contained in the above mentioned Research work. The Researcher Student may therefore commence with the research work as from the date of this certificate, using the reference number indicated above.


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NORMS AND GUIDELINES FOR RESEARCH ETHICS



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MINDS - STANDARD OPERATING PROCEDURE			
TITLE: COMMITTEE- ETHICAL			
DOC. CODE: CE	REV. NO.: 0	DATE: 26.04.2021	PAGE 1 OF 2

1.0 Purpose and Scope

- 1.1 This SOP enables in establishing the Ethical committee and provides a guidelines
- 1.2 This includes the basic responsibilities of the IEC, composition, appointment of the members and conduct of the meeting.
- 1.3 This is applicable to ensure a competent review of scientific and ethical aspects of the research project proposals received from faculties, post graduates and students of the various departments of the dental college.

2.0 Inputs required:

- a) ICMR guidelines
- b) List of PG students
- c) List of staffs undertaking research projects
- d) List of guides

3.0 Processing of inputs

3.1 Constituting the Committee

- 3.1.1 Principal at the beginning of the academic year, identifies the person to be the Chairperson, convenor and members of the committee. Thus, the validity of the committee constitution is for one year. There is no limitation on the number of times a person can be in the committee as it is the discretion of Principal.

3.2 Functioning of the committee

- 3.2.1 The committee meets once in 6 months.
- 3.2.2 The convenor intimates about the date, place, agenda and time of the meeting to the members after ensuring everyone's availability. This information is provided as per CE-01 at least 2 to 3 days in advance.
- 3.2.3 The purpose of this committee is to ensure that every research proposal received is reviewed and evaluated and the possible risks to the subjects, expected benefits and adequacy of documentation for ensuring privacy, confidentiality and justice are checked. This committee also looks into the cardinal principles of ethics in research viz. Autonomy, Beneficence, Non-maleficance and Justice are taken care of in planning, conduct and reporting the proposed research. For this purpose, the IEC looks into the aspects of informed consent process and risk benefit ratio.

Quorum: A minimum of five members or one third of the total members must be present at a meeting besides Member Secretary and Chairperson in order to issue a valid advice and/or decision, provided quorum is met.

Professional qualifications of the quorum requirements should consist of:

- a) One legal expert
- b) One Clinician
- c) One socio-behavioural scientist/ one basic scientist depending on the projects to be discussed.
- d) At least one member who is independent of the institution/research site.
- e) At least one member whose primary area of expertise is in a non-scientific area
- f) Lay person or community member.

3.3 Agenda of each committee meeting:

- a. Regularly attend and actively participate in the EC meetings
- b. Review, discuss and consider research proposals submitted for evaluation. Reviewers for each proposal will review the study. Later, if any other issues the other IEC members can voice their comments/suggestions.
- c. Discuss serious adverse event reports and recommend appropriate action(s).
- d. Review the progress reports and monitor on-going studies as appropriate.



Dr. Anil Melath, MDS
Principal
Mahe Institute of Dental Sciences & Hospital
Chalakkara, P.O. Pallor, Mahe - 673310
U.T. of Puducherry



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
 Affiliated to Pondicherry Central University, Recognized by Dental Council of India
 Chalakkara, P.O. Pallor, Mahe-673 310
 U.T. of Puducherry. Ph : 0490 2337765

MINDS - STANDARD OPERATING PROCEDURE			
TITLE: COMMITTEE- ETHICAL			
DOC. CODE: CE	REV. NO.: 0	DATE: 26.04.2021	PAGE 2 OF 2




- e. Evaluate final reports and outcomes
 - f. Maintain confidentiality of the documents and deliberations of IEC meetings. Declare any conflict of interest
 - g. Participate in continuing education activities in biomedical ethics and biomedical research
 - h. If deemed necessary, should suggest any changes that may be necessary to be included in the SOPs of the IEC.
 - i. Conduct monitoring visits for any research proposal, if needed.
- 3.4 Convenor prepares the minutes of the meeting as per CE-02 and circulates to all the members with a copy to Principal's office.

- 4.0 Process Outputs**
- 4.1 Decisions taken and executed (Minutes of meeting)
 - 4.2 Number of research projects taken up
 - 4.3 Number of projects cleared by ethical committee
 - 4.4 Number of ethical committee meetings conducted

5.0 RECORDS

Sl. No.	Doc. Code of Format	Title of Record	Retained		Mode of Disposal
			With	For	
1	CE-01	Notice cum Agenda for conduct of Ethical Committee meeting	Ethical Committee Convenor	5 Years	Shredding
2	CE-02	Minutes of meeting-ethicalCommittee			

6.0 AUTHENTICATION

PARTICULARS	DESIGNATION	SIGNATURE
PREPARED BY	CONVENER- ETHICAL COMMITTEE	
REVIEWED BY	VICE PRINCIPAL	
APPROVED BY	PRINCIPAL	



Dr. Anil Melath, MDS
 Principal
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TITLE: ETHICAL COMMITTEE PROCEDURES			
DOC. CODE: C-ETH-A	REV. NO.: 0	DATE: 26.04.2021	PAGE 1 OF 2

1.0 Purpose and Scope

- 1.1 This SOP ensures the procedures for issue of ethical clearance of the research project proposals received from faculties, post graduates and students of the various departments of the dental college.
- 1.2 The ethical committee convener is in-charge for monitoring the process and concerned guides as well as researchers are responsible and accountable for the compliance to the applicable regulatory requirements in their research projects.

2.0 Inputs required:

- a) ICMR guidelines
- b) List of PG students
- c) List of staffs undertaking research projects
- d) List of guides
- e) Academic calendar

3.0 Processing of inputs

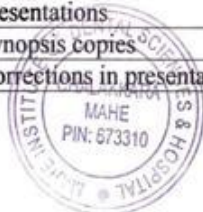
- 3.1 PG students list is prepared for the academic year.
- 3.2 Circular is sent to the concerned departments with the date, time and venue of the presentation for ethical clearance as per C-ETH-A-01.
- 3.3 Students or researcher submit 4 printed copies of the synopsis to the Principal office as C-ETH-A-02.
- 3.4 Students present their dissertation synopsis in front of the ethical committee members.
- 3.5 Any corrections or suggestions in the study are mentioned by the committee members as C-ETH-A-03.
- 3.6 Corrections are done by the students in their dissertation and corrected copies are submitted to the Principal's office.
- 3.7 On approval of the dissertation topics by the ethical committee, ethical clearance certificate-C-ETH-A-04 is given.
- 3.8 The students' list with copies of their synopsis is sent to Pondicherry University as C-ETH-A-05.
- 3.9 On receiving the synopsis, the copy of covering letter is signed with seal from the Examination wing of Pondicherry University and is received by the institution as C-ETH-A-06.
- 3.10 On completion of the thesis dissertation by the students, 4 copies of the printed thesis are submitted to the Pondicherry University with covering letter as C-ETH-A-05.
- 3.11 On receiving them, the copy of the covering letter is signed and sent to institution as C-ETH-A-06.
- 3.12 The ethical committee convener keeps up-to-date on the ethical rules and regulations. The convener informs all concerned to ensure awareness and compliance to the latest requirements of the regulatory body.

4.0 Process Outputs

- 4.1 Number of research projects taken up
- 4.2 Number of projects cleared by ethical committee

5.0 RECORDS

Sl. No.	Doc. Code of Format	Title of Record	Retained		Mode of Disposal
			With	For	
1	C-ETH-A-01	Circular with details about presentations.	Ethical Committee	Permanent	Not applicable
2	C-ETH-A-02	Synopsis copies	Convenor		
3	C-ETH-A-03	Corrections in presentation			



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Sl. No.	Doc. Code of Format	Title of Record	Retained		Mode of Disposal
			With	For	
4	C-ETH-A-04	Ethical clearance certificate	Ethical Committee Convenor	Permanent	Not applicable
5	C-ETH-A-05	Approved list from Institution			
6	C-ETH-A-06	Received letter from University			

6.0 AUTHENTICATION

PARTICULARS	DESIGNATION	SIGNATURE
PREPARED BY	CONVENER- ETHICAL COMMITTEE	
REVIEWED BY	VICE PRINCIPAL	
APPROVED BY	PRINCIPAL	



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PLAGIARISM CHECK SOFTWARE

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Gingivitis and periodontitis are by far the most common forms of human periodontal diseases. Gingivitis develops within 4- 7 days of plaque accumulation. Bacteria are the accepted etiologic agents in its (1) initiation as well as progression. Essential oils carry some of the most potent antibacterial and anti- (2) fungal properties. Oil pulling therapy or oil swishing is an ancient Ayurvedic remedy procedure which involves the swishing of oil in the (3) mouth for oral and systemic health benefits. It has been in use, since time immemorial, to prevent decay, oral malodor, bleeding gums, dryness of the throat, cracked lips and for strengthening teeth, gums, (4) and the jaw. Oil pulling works by sucking out the toxins from the (2) mouth, thus detoxifying the... (only first 800 chars shown)



Analysis complete. Our feedback is listed below in printable form. Some of the items have been truncated or removed to provide better print compatibility.

Plagiarism Detection

Original Work

Originality: 75%



This paper appears to be original, but be certain that any included text is properly cited.

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<https://www.studymode.com/essays/Types-Of-Corro...>

<http://www.jisppd.com/article.asp?issn=0970-438...> (<http://www.jisppd.com/article.asp?issn=0970-4388;year=2011;volume=29;issue=2;spage=90;epage=94;aulast=Asokan>)

<https://www.termedia.pl/Evaluation-of-efficacy-...>

<http://dx.doi.org/10.1155/2018/6285813> (<http://dx.doi.org/10.1155/2018/6285813>)

<https://en.wikipedia.org/wiki/Anheung%20Proving...>

Grammar

Grammar Suggestions

Error	Suggestion
diseases.	disease.
antibacterial	antibacterials
	An
	is
	a
	the

Word Choice

Usage of Bad Phrases

Bad Phrase Score: 1.85 (lower is better)

The Bad Phrase Score is based on the quality and quantity of trite or inappropriate words, phrases, egregious misspellings, and cliches found in your paper. You did equal or better than **58%** of the people in your education level.



You did an okay job but below are some tips to improve the phrases throughout your writing.

You may wish to use a thesaurus to replace or reduce your usage of the following words and/or phrases in your paper (worst 10):

most, well, some, use, fat, are, far, is

Style

Usage of Transitional Phrases

Transitional Words Score: 116

This score is based on quality of transitional phrases used within your paper. You did equal or better than **96%** of the people in your education level.



Great job! Your usage of transitional phrases is well above average! You may not need to read the info below, but you're such a meticulous

(http://www.PaperRater.com/vocab_builder/show/meticulous) writer that you probably will anyways.



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Variety is the hallmark (http://www.PaperRater.com/vocab_builder/show/hallmark) of a good writer and this is especially true in regards to sentence starts. Creatively arranging sentence beginnings breaks up the monotony (http://www.PaperRater.com/vocab_builder/show/monotony) and choppy style associated with a simple noun phrase followed by a verb. This does NOT mean that all sentences should begin with prepositional phrases, transitions, or adverbial phrases, but it does mean that you should be certain to pay attention to sentence starts and deliberately edit for variety if necessary. Here are some simple sentence starts that we found in your text:

- **Gingivitis develops** within...
- **Bacteria are** the...
- **Essential oils carry** some...
- **Oil pulling** therapy...
- **It has been**...
- **Oil pulling** works...
- **Virgin coconut oil extracted** using...
- **It is** therefore...

Starts by Part of Speech:

Adjective: 9%

Adverb: 9%

Article: 0%

Conjunction: 0%

Noun: 55%

Preposition: 9%

Pronoun: 18%

Verb: 0%

Other: 0%



Helpful Resources:

- Sentence Beginnings - your sentences' first impression (<http://blog.paperrater.com/2015/06/sentence-beginnings.html>)

Vocabulary Words

Usage of Academic Vocabulary

Vocabulary Score: 503.62

This score is based on the quantity and quality of scholarly vocab words found in the text. You did equal or better than **71%** of the people in your education level.



Vocabulary Word Count: 17

Percentage of Vocab Words: 12.15%

Vocab Words in this Paper (top 20):

etiologic, systemic, periodontal, accumulation, initiation, progression, potent, oxidants, microbial, subjected, periodontitis, develops, agents, essential, fungal, properties, remedy



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One sign of an excellent writer is the use of transitional phrases (e.g. therefore, consequently, furthermore). Transitional words and phrases contribute to the cohesiveness (http://www.PaperRater.com/vocab_builder/show/cohesiveness) of a text and allow the sentences to flow smoothly. Without transitional phrases, a text will often seem disorganized and will most likely be difficult to understand. When these special words are used, they provide organization within a text and lead to greater understanding and enjoyment on the part of the reader.

The following transitional phrases were found in your document:
and, since, thus, certainly, therefore

Consider using additional transitions where appropriate:

- consequently (http://paperrater.com/vocab_builder/show/consequently)
- moreover (http://paperrater.com/vocab_builder/show/moreover)
- nevertheless (http://paperrater.com/vocab_builder/show/nevertheless)
- notwithstanding (http://paperrater.com/vocab_builder/show/notwithstanding)
- accordingly (http://paperrater.com/vocab_builder/show/accordingly)
- conversely (http://paperrater.com/vocab_builder/show/conversely)
- ordinarily (http://paperrater.com/vocab_builder/show/ordinarily)

Transitional phrases may be used in various places in a text:

- between paragraphs
- between sentences
- between sentence parts
- within sentence parts

Consider this example:

Form and function are central themes in Biology. **However**, knowing the structure of something does not necessarily reveal its function.

The word '**however**' contributes to greater unity or cohesion between sentences and allows the text to flow more smoothly.

Style

Sentence Length Info

Total Sentences: 11

Avg. Length: 18.4 words

Short Sentences (< 17 words): 5 (45%)

Long Sentences (> 35 words): 0 (0%)

Sentence Variation: 7.5 words (std deviation)



It is important to vary between simple and complex sentences

(<http://blog.paperrater.com/2015/05/effective-use-of-sentence-length.html>), which you seem to have done quite well.

Line chart of the length of each sentence (first 50 sentences). A jagged chart indicates variation.



Helpful Resources:

- Effective Use of Sentence Length (<http://blog.paperrater.com/2015/05/effective-use-of-sentence-length.html>)



Nice work! Although you scored above average, consider visiting our Vocab Builder (http://www.PaperRater.com/vocab_builder/index) to enhance your paper even more.

Tips

Whether you are writing for a school assignment or professionally, it is imperative that you have a vocabulary that will provide for clear communication of your ideas and thoughts. You need to know the type and level of your audience and adjust your vocabulary accordingly. It is worthwhile to constantly work at improving your knowledge of words. To help with this task, please consider using our Vocabulary Builder (http://www.PaperRater.com/vocab_builder/index) to improve your comprehension and usage of words.

⇒ **Grade**

Auto Grader

Grade: 80 B

The grade above is NOT complete! We do not actually use a crystal ball to generate your grade. Instead, this grade takes into account spelling, grammar, word choice, style, vocabulary, and more; but it does NOT examine the *meaning* of your words, how your ideas are structured, or how well your arguments are supported. We should also mention that our automated grader doesn't **always** get things right. So, please consider this grade to be one facet of your paper's overall grade.

