



MGM INSTITUTE OF HEALTH SCIENCES
(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

Sector-1, Kamothe, Navi Mumbai - 410209

Tel. No. 022-27432471, 022-27432994, Fax No. 022 - 27431094

E-mail : registrar@mgmuhs.com ; Website : www.mgmuhs.com

PERFORMANCE APPRAISAL FORMAT FOR TEACHER'S

(Academic Year: July 1st 2018 - June 30th 2019)

1. Date of joining this Institute:

Before 1st July 2018

Between 1st July 2018 - 31st December 2018

Between 1st January 2019 - 30th June 2019

☒
☐
☐

2. Name of the Teacher:

3. Email ID & Mobile No.:

4. Name of the College/School: MGM Medical College Campus: Navi Mumbai

5. Name of the Department: Pharmacology

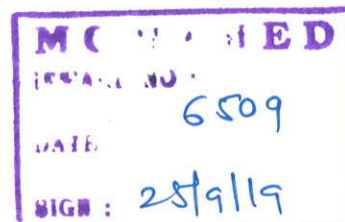
6. Present Designation: Professor

7. Educational Qualifications acquired/pursuing during last academic year: Yes/No ☒ ; If yes (Details of course like Diploma /Fellowship/ Ph.D./online course/others)

8. a. Total Teaching Experience post PG as on 30th June 2019: 14 Years 9 Months

b. University Approval as a teacher (UG/PG/PhD) (Please attach attested photocopy of approval letter):

	Yes/No
UG	Yes
PG	Yes
PhD	Yes



82
56
138

9. Awards/Medals/Recognitions/Appreciations: (Please attach relevant attested photocopies of Certificates)

Level	Award / Medal/Recognition/Appreciation (Institutional/Local/State/Regional/National/International)	Domain (Teaching/Health Care/Research/others)
UG		
PG	Certificate of Appreciation - Idha Competition - 30th Jan - 16th Feb 2019	Research
Post PG	Judge for Poster Competition MedInspire 2019	Research

10. Health Science Education Technology related event participation: Yes/No ; If Yes (Provide details):

Faculty CISP Workshop conducted in April, 2019 at MAM Medical College, Navi Mumbai, Delegate CISP Workshop 20th to 22nd Feb, KEM Mumbai

11. Research work: (Please attach attested photo copy of Certificates)

- Publications: National / International (Indexing status of the publications) - 4 Publications
Journals 1) Integrative Obesity & Diabetes (2) Phytomedicine (1)
3) International Journal of Basic & Clinical Pharmacology (2)
- Conference: Participated as a: Delegate/Resource person/Reading of Research Paper OR Poster display/Chief Guest/Any other:
(Please attach relevant proof / Certificates)

(Conference proceedings must be available)

Name of Conference	Date & Venue	Local/State /National / International/Other Level	Role
MedInspire 2019	14th-15th Feb 2019	International	Faculty

- Intellectual Property Rights (IPR): N/A (Attach details, If any)
- Start ups: N/A (Attach details, If any)
- Projects: (Please mention number of Projects in the table)

a)

Project Duration Funds Received ↓	Short Term (< 01 Year)	Long Term (> 01 Year)
< 1 Lakh	ICMR-STs Project	
> 1 Lakh		ICMR Project-2019

Government of India

b) Funding Agency :

➤ Self Financed ☐

➤ MGMIHS ☒

➤ External Funding Agency ☒

(29,000/-) Innovation & Incubation Centre

ICMR (20 lakhs)

Randomized controlled trial

12. Author of Text/Reference books/Chapter/Monogram/Editor/Any other:

(Please attach relevant proof/ Certificates i.e. photocopy of cover & last page)

Name of Book	Publisher	Role (Main Author/ Contributory Author/ Editor)

13. Guest Lectures/Orations delivered:

Sr. No.	Title of Lecture/Orations	Event	Venue	Date
1)	Electives, AETCOM	Faculty Sensitization-CBME	7th March 2019, MGM Medical College, Navi Mumbai	
2)	SLO, Electives, Time	CISP Workshop	April 2019	MGMHC
	Table designing Learning Resource Material			Navi Mumbai

14. Resource person at Workshops/CME/Seminar/Symposium/Panel Discussion: (attach certificate copy)

Sr. No.	Resource person as			Event	Venue	Date
	Faculty	Judge	Chairperson			
	✓			① Medinspire 2019	Navi Mumbai	14th-15th Feb 2019
	✓			② DY Patil		
	✓			③ CBME Faculty Sensitization	MGMHC	7th March 2019

15. Faculty Development Program (Academic Skills/Soft Skills/Administrative Skills etc.) attended: Yes/No ;

If Yes, Give details:

CISP in MET, 20th-22nd Feb, 2019, KEM, Mumbai

SPSS training, 8th June to 10th Aug 2018 at MGMIHS

16. Contribution/suggestions given for improvement in teaching learning process for discussions in Board of Studies meetings of the University: Yes/No ; (If Yes, Give attach an undertaking to this effect from respective BOS Chairperson)

Chairperson, BOS (Para-clinical)

17. Other responsibilities & activities during last academic year: (Please attach relevant proof / Certificates)

Participation as	Activity details	Achievements with documentary proof
Mentorship details / any significant finding	Mentorship meeting & interactions - UHP	Name of the mentees assigned to you (Attach the list) Tins Dental College
Examiner / Paper setter / Moderator	Examiner / ← Pappu Sattu & Moderator	MGMHS → DY Patil - MD Examiner June MDHS - Dental Paper Sattu 2019
University appointed Committee Member	Institutional Ethics Committee - Convener NAAC - Criterion VII - University Head	Member Secretary
Any other Administrative Commitment	BOS (Para-clinical) - Chairperson SAC, University - Member Chairperson - Scientific Committee, Dental College	
Extra-ordinary Contribution to society / Felicitation by State / Central Govt.	→ Nil	MGMHS Ethics Committee - Member Pharmacovigilance Committee - Member Drugs & Therapeutic Committee - Member
Member of organizing committee of Institute level conference/CME/ etc)	Organizing	Committee, GCP Workshop 24th Dec, 2018

18. Teaching work during last academic year: (Mention "actually taken/assigned" for below points a & b)

- a) Teaching: UG Lectures 88, Clinics/Practical's _____, Tutorials _____
- b) Teaching: PG Lectures 21, Clinics/Practical's _____, Journal Club/Seminar/others _____
- c) Preparation of Learning Resource Material : Yes/No ; If yes Topic: BOS (Nursing) & BOS (Physiotherapy) - Member

19. Clinical Care: OPD _____, OT _____ (as applicable), Camps attended _____
(Indicate average figure as a percentage) Not Applicable

20. How would you rate your performance during last academic year:

- a) Indicate what % of your total time (during working hours) is generally utilized for following responsibilities/domains AND
- b) Rate your performance on a scale of 0 to 5 in following aspects of your job responsibility (during last Academic year): ("0" being the lowest and "5" being the highest)

Responsibilities/Domain	%	0 - 5
Teaching	50 %	4
Research	30 %	4
Administration	20 %	4
Clinical/Patient Care		

21. Membership / Office Bearer of professional bodies: (mention only those which you acquired during last academic year)

Reviewer of Indian Journal of Pharmacology ; IPS (Indian Pharmacological Society)

22. Any other information which you would like to share /disclose: _____
(Please attach relevant proof / certificates)

→ Certificate of Participation, Design Competition -
22nd to 26th Feb, 2019, Innovation + Incubation
Centre, MAMHS, Navi Mumbai

23. Any other special training undertaken during last academic year: (Please attach relevant proof / certificates)

→ SPSS Training from 8th June to 10th Aug 2018
→ CISP in MBT Training from 20th to 22nd Feb 2019

24. Plagiarism incidence/Disciplinary action against you (If any) in last academic year: _____
Nil

25. Contribution to the Institution in the last academic year :

1. Medical Book/Literature/ Manuscript/ Rare Book: _____ Nil
2. Donation: _____
3. Represented the institute in culture/sport/other activity): _____
4. Any other: _____

26. One Strength/Talent/Ability which you possess and wish to be utilized for the institutional growth: _____

Total days present for teaching [excluding all kind of leaves (Sunday/Public holidays/Vacation/CL/SL/EL/Other leaves): 252 /365

If present on non-instructional days (Please Tick): August 15 ☐ October 2 ☐ January 26 ☐

I solemnly declare that, the above information furnished is true and correct to the best of my knowledge.

Date:

17/19/19

(Signature of Teacher)

Shay, 17/19/19

7 set

INDIAN COUNCIL OF MEDICAL RESEARCH
ANSARI NAGAR, NEW DELHI -110029.

No. 5/4/1-7/19-NCD-II

Date: 30-8-19

To

✓ The Dean
MGM Medical College,
Sector-18 Kamothe,
Navi Mumbai 410 209

Subject: - " Randomized controlled study to assess effectiveness and acceptability of mobile app based interventional tool for cardiovascular disease self-management and risk factor control among diabetic patients " under Dr. Ipseeta Ray Mohanty, Mumbai.

Sir,

The Director-General of the Council sanctions the above mentioned research scheme initially for a period of one year from **01-09-2019** subject to extension upto the total duration specified in para 3(3) below.

The Director-General of the Council also sanctions the budget allotment of Rs. **11,26,750/-** (Rupees eleven lakh twenty six thousand seven hundred fifty only) as detailed in the attached statement for the period ending the **31-08-2020**.

The grant-in-aid will be given subject to the following conditions:-

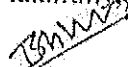
1. The payment of the grant will be made in lump-sum to the head of the Institution. The first instalment of the grant will be paid generally as soon as a report regarding the commencement of the project and appointment of the staff is received by the Council. The demand for payment of the subsequent instalment of the grant should be placed with the Council in the prescribed proforma attached.
2. The staff appointed on the project should be paid as indicated in the budget statement attached.
3. The approved duration of the scheme is **3 years**. The annual extension will be given after review of the work done on the scheme during the previous year.
4. A report on the progress made will be submitted to the Council as and when called for.
5. The Institute will maintain a separate account of the receipts and the expenditure incurred on the scheme and will furnish a utilization certificate and an audited statement of account pertaining to the grant.

PTO

6. The other terms and conditions are indicated in Annexure-1
7. The Host Institute shall utilize the grant after following the provisions laid down in the GFRs 2017 and T. A. Rules.
8. The PI may be advised to keep the fund in a separate Saving Bank Account opened for research funds received from ICMR so as to ensure that interest earned thereon is also credited in to the Fund Account.

The receipt of this letter may please be acknowledged.

Yours faithfully,



(Ishwar Likhar)
Admn. Officer
for Director-General

This issue with the concurrence
of Finance Section vide RFC No. NCD/Adhoc/70/2019-20 dated 30/8/19

No.5/4/1-7/19-NCD-II

1. Copy together with a copy of the budget statement forwarded for information to Dr. Ipseeta Ray Mohanry, Professor, Pharmacology, M. G. M. Medical College, Sector-18 Kamothe, Navi Mumbai-410 209.
2. Copy together with a copy of the budget statement forwarded to the **Accounts Section** for information and necessary action.
3. Copy together with a copy of the budget statement forwarded to the **Budget Section** for compilation of the Council's budget.
4. IRIS Code Number (2019-0502)
5. A.O., NCD.
6. Mr. Hemnat Kumar , Sr. T. O. , ICMR, New Delhi

For Director-General

**Budget Statement for the period
(01-09-2019 to 31-08-2019)**

No. 5/4/1-7/19-NCD-II

Date: 30-8-19

Subject: - " Randomized controlled study to assess effectiveness and acceptability of mobile app based interventional tool for cardiovascular disease self-management and risk factor control among diabetic patients " under Dr. Ipseeta Ray Mohanty, Mumbai.

Staff	1 st year (Rs.)
Contingency (Recurring)	
Contingency	25,000
Investigation Rs 3000/-per patients (3 time points 0&3 and 6 months) Total patients =300 total cost=300X3000=900000/- Dyslipidemia Lipid profile (TG, LDL, HDL, TC) Atherogenic index (Rs 400/- test) Glycemic control Fasting blood sugar, Glycosylated -Rs 100/- test hemoglobin Rs 500/- test Hemostasis High-sensitivity C- reactive protein Rs 500/- test Apolipoprotein A Rs 500/- test Apolipoprotein B1 Rs 500/- test	400000
Patient follow up and stationary	50000
Data entry and analysis	60000
Total (A)	535000/-
Overhead Charge (5%) (B)	26750/-
Non-Recurring (Equipment)	
Digital BP Measurement apparatus	10000
Body Composition monitor	40000
Healthy heart mobile app development online version	500000
Total (C)	550000/-
(B) Travel	15000
Total (A+B+C+D)	11,26750/-

[Signature]

(Rupees eleven lakh twenty six thousand seven hundred fifty only)

TERMS AND CONDITION OF THE GRANT

- i) Approval of the research proposal and the grant being released is for the specific project sanctioned and should be exclusively spent on this project within the stipulated time.
- ii) Expenditure should be on no account exceed the budget sanctioned for the enquiry. Expenditure incurred over the above the sanctioned amounts against one or more sub-heads of expenditure such as pay, allowances, contingencies etc, shall be met without reference to the ICMR, by re-appropriation of savings under remaining sub-heads provided by re-appropriation of incurred during the financial year is within the over all sanctioned ceiling of that year..
- iii) No expenditure shall be incurred on items not sanctioned by the Council. Savings should also not be re-appropriated for meeting or incurring expenditure on staff that has not been sanctioned by the council.
- iv) The grant paid by the Council shall be refunded in full by the Institution if and when the grantee concerned discontinues a scheme midway or does not follow the detailed technical programme laid down and approved.
- v) Receipts realised by the project officer and the sale proceeds, if any, will be remitted to the Council as miscellaneous receipts and should not be utilized for meeting expenditure on the scheme.
- vi) All facilities for the conduct of the research scheme basic equipment and other ordinary laboratory chemicals, glass ware, furniture and other help as may be required for the smooth working of the scheme shall be provided by the institute.

Staff :

- vii) The staff employed on the research scheme will not be treated as employees of the Council and the deployment of such staff at the time of completion or termination of the project will not be the concern/responsibility of the Council. They will be subjected to administrative control of the Institution and will be appointed generally in accordance with the normal recruitment rules and procedure of the Institute.
- viii) The Council will not be liable to bear any expenditure on pension/provident fund contribution and/or leave salary contribution incurred and committed by the grantee Institution for persons appointed on deputation from another organizations.
- viii (A) An undertaking on part-I (specimen attached) (Appendix 'A') to be obtained from the Head of the Institute where extra-mural project funded by ICMR are being sanctioned, may be sent to Council. The second part of the U.K. to be obtained from each employees, by the Principle Investigator:

No grant will be released unless the undertaking is receive by us sufficiently in advance to consider any release.

* undertaking

Release of funds

- ix) The first installment of the grant will be paid as soon as a report regarding the commencement of the project and appointment of staff is received by the Council. The Demand for payment of subsequent installments of the grant should be placed with the Council in the prescribed form (Appendix 'B').
- x) The institute will maintain separate audited account for this project. If it is found expendent. Keep a part of whole of the grant in a bank account earning interest, the interest thus earned should be reported to the Council. The interest thus earned will be treated as a credit to be adjusted towards further installment of the grant.
- xi) The accounts will be subject to audit by the authorized auditor of the Institutions. In case, facilities are not available for such auditing, the account will be audited by the Council's own internal auditors. Latest by the end of December, following the financial year for which the grant is paid, an audit certification from, the auditors to the effect that "the accounts have been audited and that the money was actually spent on the objects for which it was sanctioned" shall be submitted to the Council.
- xii) Further grants will be stopped unless audited statements of accounts, utilization certificates are received within a period of one year after the end of the financial year for which grant was sanctioned.

Stores:

- xiii) All expendable and non-expendable articles required for work of the enquiry should be purchased in accordance with the procedure in vogue in the institution. For permanent and semi-permanent assets acquired solely or mainly out of the grant, a separate audited record in the form of register in the prescribed Performa enclosed shall be maintained by the Institute. The term "assets means (1) immovable property and (ii) movable property of capital nature where the value exceeds Rs. 1,000/-. Separate assets registers for items costing Rs. 20,000/- or more and less than Rs. 20,000/- each item may be maintained. (Appendix "C").

For other stores purchased from the Council's grant, the Performa will be the same as is being used by the Institute.

All the assets acquired from the grant will be property of the Council and should, not without the prior sanction of the Council, be disposed of or encumbered or utilized for purpose other than those for which the grant has been sanctioned.

Publications

The financial assistance rendered by the council should be acknowledged in any published account of work for which the grant is given.

The council publishes own journal "Indian Journal of ('B') Medical research", In case, it is proposed to publish the papers based on the work done under the auspices of the Council in Journals other than the IJMR, the name of the journal in which it is proposed to publish the paper may please be intimated. A reprint of paper when published may please be sent to the Council for information and record.

Prior permission of the Council should be obtained before publication of any such papers in a foreign journal.

Patents

The Council shall have the right to make out patents in respect of inventions/discoveries made under a scheme/project financed by the council. The officer-in-charge or the staff employed on ICMR Schemes shall not apply or obtain patents for any invention/discovery made by them without prior approval of the council.

All patents will be registered with NDRC in the name of the Indian Council of Medical Research.

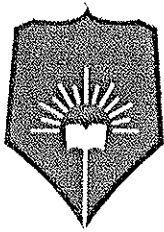
Termination of Enquiry:

Prior permission of the Council should be obtained if the investigator desires to discontinue the enquiry. The reasons for discontinuing the scheme should invariably be stated. The investigator should submit a complete and detailed report of the work done by him on the project till the date of relief.

Any unspent balance out of the funds given to the institute shall be refunded to the ICMR on termination of the scheme.

A final report is required to be submitted within one month from the date of termination of the enquiry.

A list (in duplicate) of non-expendable and expendable articles together with property registers and suggestions for disposal of the articles should be sent to the Council within a month from the date of termination of the enquiry.



D Y PATIL
DEEMED TO BE
UNIVERSITY
— SCHOOL OF —
MEDICINE
NAVI MUMBAI

Date: 07th June 2019

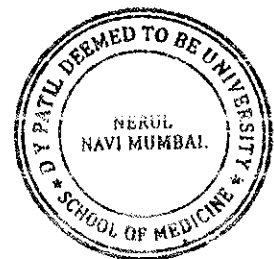
Attendance Certificate

This is to certify that Dr. Ipseeta Ray, Professor, Dept. of Pharmacology, MGM Institute of Health Sciences, Kalamboli, has conducted MD (Pharmacology) University Practical & Viva examination and Assessment of Theory answer books in subject of Pharmacology from 06th to 07th June 2019 at D Y Patil Deemed-to-be University School of Medicine, Nerul, Navi Mumbai.

Thank you

Dr. Deepak Langade
Convener

Professor & Head, Dept. of Pharmacology
5th Floor, Medical College Bldg.
Plot No. 2, Sector-5, Nerul, Navi Mumbai 400 706
Maharashtra, INDIA
T: +91 22 2770 9218 / 2218 Extn.: 166; Cell: +91 99305 50009
Mail: deepak.langade@dypatil.edu; drdgl@hotmail.com
Web: www.dypatil.edu



Fwd: Selection of ICMR- Short Term Studentship (STS) 2019 application- reg.

From: shardul kamale (shardulpotter@gmail.com)

To: ipseetamohanty@yahoo.co.in

Date: Thursday, 16 May 2019 08:56 IST

----- Forwarded message -----

From: ICMR-STS <sts@bmi.icmr.org.in>

Date: Fri, May 3, 2019, 9:54 AM

Subject: Selection of ICMR- Short Term Studentship (STS) 2019 application- reg.

To: <shardulpotter@gmail.com>

No: 21/1/2019-HRD-STS

MUST forward this E-mail to your guide.

Dear Students,

This is in reference to your application for ICMR- Short Term Studentship-2019 submitted ONLINE to the ICMR.

I am pleased to inform you that the DG, ICMR approves selection of your application for STS to carry out the proposed research work in any two months (between April to July, 2019) to work on the proposed STS research project. **The award of Stipend Rs. 20,000/- and a Certificate is subjected to conditions and approval of your STS Report (to be submitted in October 2019) by ICMR.** Kindly complete the research at the earliest, so that the Report can be prepared and submitted in time. (Report Submission guidelines are available at: <http://14.139.60.56:84/Instructions.aspx>)

Please note that NO Report shall be considered/accepted after the last date i.e. 31st October 2019 (till 3:00 PM) only.

The research carried out by the student must be in compliance with ICMR's *ICMR Ethical Guidelines for Biomedical Research on Human Participants, 2017* and *National Ethical Guidelines for Biomedical Research Involving Children*, which may be downloaded from ICMR website (http://www.icmr.nic.in/guidelines/ICMR_Ethical_Guidelines_2017.pdf) and http://www.icmr.nic.in/guidelines/National_Ethical_Guidelines_for_BioMedical_Research_Involving_Children.pdf

On completion of the studentship, a Report of the actual work done may please be submitted ONLINE as per detailed format and instructions specified on ICMR website.

IMPORTANT: It is advised that prior to writing/submitting the report, please go through the detailed Report Submission Guidelines/instructions given on ICMR-STS website.

In case of any queries, please send email to stshrd2017@gmail.com

Best wishes,

(Mrs. Harjeet Bajaj)
Administrative Officer-STs
(For Director General)

Important : Please inform the Dean/Principal of your Medical/Dental College regarding your selection for ICMR- STS 2019

This is an automated email. Please do not send reply to this email address.

Assessment of factors associated with poor glycemic control among patients with Type II Diabetes mellitus

Ashutosh A Kakade¹, Ipseeta R Mohanty^{1*} and Sandeep Rai²

¹Department of Pharmacology, MGM Medical College, India

²Department of Medicine, MGM Medical College, India

Abstract

Background: Glycemic control remains the major therapeutic objective for prevention of target organ damage and other complications arising from diabetes. In addition, elucidation of various determinants of poor glycemic control may contribute to a clearer understanding of modifiable antecedents of diabetes-related complications and help to achieve improved diabetic control and patient outcomes.

Method: Two hundred twenty patients of Type II diabetes mellitus were taken after Informed consent. Patients who fulfill Inclusion and Exclusion Criteria were participated for the study. A Case record form was administered to these patients, which included details regarding the socio-demographic, anthropometric, metabolic, disease profile and diabetes self-care practices of the Type II diabetic patients.

Result: Based on HbA1c values, majority of diabetic patients had poor glycemic control (91.8%) while only 8.2% Type II diabetic patients had good (ideal) glycemic control. Statistically significant difference ($P = 0.044$) was found between patients with good and poor glycemic control in relation with BMI ($P = 0.044$), central obesity ($P < 0.001$), dyslipidemia ($P < 0.001$) and diabetes self-care practices (glucose management ($P = 0.003$), dietary control ($P = 0.006$), sum scale ($P = 0.028$)).

Conclusion: Majority of Type II diabetic patients had poor glycemic control. Factors affecting glycemic control included BMI, central obesity, dyslipidemia and diabetes self-care practices (glucose management and dietary control).

Introduction

There is a rising trend in the prevalence of diabetes in India over recent years, and the number of people living with diabetes in India is expected to increase from 32.7 million in the year 2000 to almost 60 million by 2025 [1]. In India, only a few nationwide studies have been conducted on the prevalence of diabetes and its complications. Moreover, while the urban population has easier access to diabetes screening as well as health care facilities for its management, the rural areas have poor diabetes screening services, preventive and counselling facilities, and there is non-adherence to diabetic management guidelines, complicated by long distance travel to health services among several other problems [2].

The primary goal in the management of diabetes mellitus is to attend near-normal glycaemia. Glycosylated hemoglobin (HbA1c) is the primary target of glycemic control. HbA1c is formed by non-enzymatic covalent addition of glucose moieties to hemoglobin in red cells. Unlike blood glucose levels, HbA1c is the index that indicates the average blood glucose during the past 3 months and is little affected by day-to-day variations [3]. Glycemic control is always the major therapeutic objective for prevention of target organ damage and other complications arising from diabetes. Despite the evidence from large randomized controlled trials establishing the benefit of improved glycemic control in reducing microvascular and macrovascular complications, high proportion of diabetic patients remain poorly controlled [4]. Therefore, recognizing the determinants of poor glycemic control will contribute to a clearer understanding of modifiable antecedents of diabetes-related complications and help to achieve improved diabetic control.

In clinical practice, optimal glycemic control is difficult to obtain on a long-term basis because the reasons for poor glycemic control in Type II diabetes are complex. Both patient and health care provider related factors may contribute to poor glycemic control. A variety of factors are identified in influencing glycemic control including age, sex, education, marital status, BMI, smoking, diabetes duration, and type of medications [5]. However, the results are not consistent and, in most instances, more than half of the variance in HbA1c levels is not explained [6]. Therefore studies focused on determining the factors predominantly associated with poor glycemic control among Type 2 diabetics attending any particular hospital set up, are warranted so that appropriate interventions can be planned at the level of the patient, physician and Institute.

This kind of research into diabetes mellitus will provide useful insights into the current glycemic control of diabetic patients in our set up. Type II diabetic patients were classified as having good and poor glycemic control. Data on glycemic control pattern was linked to various measures of treatment modality (Oral Hypoglycemic agents, Insulin, OHA + Insulin), risk factors (Hypertension, Dyslipidemia), socio-demographic (Age, Gender, Socio-economic status), metabolic (Lipid Profile), anthropometric (BMI, Waist Circumference), disease

*Correspondence to: Ipseeta R Mohanty, Department of Pharmacology, MGM Medical College, Navi Mumbai 410209, India, E-mail: ipseetamohanty@yahoo.co.in

Key words: glycemic control, type ii diabetes mellitus, self-care practices, glycosylated hemoglobin

Received: June 10, 2018; Accepted: June 26, 2018; Published: June 29, 2018

Dipeptidyl peptidase IV Inhibitory activity of Terminalia arjuna attributes to its cardioprotective effects in experimental diabetes: In silico, in vitro and in vivo analyses.

Mohanty IR¹, Borde M², Kumar C S³, Maheshwari U⁴.

Author information

- 1 Department of Pharmacology, MGM Medical College, Navi Mumbai, India. Electronic address: ipseetamohanty@yahoo.co.in.
- 2 Department of Pharmacology, MGM Medical College, Navi Mumbai, India.
- 3 Department of Bioinformatics, School of Biotechnology and Bioinformatics, DY Patil Deemed to be University, CBD Belapur, Navi Mumbai, India.
- 4 Department of Pathology, MGM Medical College, Navi Mumbai, India.

Abstract

BACKGROUND: The marketed synthetic (Dipeptidyl peptidase-IV) DPP-IV Inhibitors are expensive antidiabetic drugs and have been reported to cause unacceptable adverse effects such as pancreatitis, angioedema, thyroid and pancreatic cancers. In this scenario research to develop novel DPP-IV Inhibitors from alternative sources is the need of the hour.

HYPOTHESIS/PURPOSE: Terminalia arjuna, a medicinal herb with antidiabetic and cardioprotective activities may represent a natural DPP-IV Inhibitor, the DPP-IV Inhibitory activity of which may translate into demonstrable therapeutic benefits in setting of diabetes with cardiovascular co-morbidities.

STUDY DESIGN: The study type used for the present study was an experimental (In vitro, In vivo and In silico) design.

METHOD: The DPP-IV Inhibitory, antidiabetic and cardioprotective effects of Terminalia arjuna was evaluated in the experimental model of myocardial infarction co-existing with diabetes. To determine the active principle of Terminalia arjuna responsible for DPP-IV Inhibitory activity, the crystal structure of DPP-IV was considered as receptor which was docked against Arjunetin, Arjungenin, Arjunic acid, Arjunone, Ellagic acid, Gallic acid, Sitagliptin and Vildagliptin. The binding sites as well as affinity of various active ingredients of Terminalia arjuna for DPP-IV enzyme was elucidated using in silico studies and compared to Vildagliptin.

RESULTS:

DPP-4 inhibitory activity and myocardial salvaging effects of *Commiphora mukul* in experimental diabetes

Manjusha K. Borde^{1*}, Ipsecta Ray Mohanty², Ujwala Maheshwari³,
Rajesh Kumar Suman⁴, Y. A. Deshmukh²

¹Department of Pharmacology,
Sinhgad Dental College and
Hospital, Pune, Maharashtra,
India

²Department of Pharmacology,

³Department of Pathology,
MGM Medical College, Navi
Mumbai, Maharashtra, India

⁴Department of Pharmacology,
Hind Institute of Medical
Sciences, Ataria, Sitapur,
Lucknow, Uttar Pradesh, India

Received: 07 January 2019

Accepted: 29 January 2019

*Correspondence to:

Dr. Manjusha K. Borde,

Email: manjusha_dhande@yahoo.co.in

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: *Commiphora mukul* (Burseraceae) is commonly known as Guggul in Ayurveda. Several studies have reported antidiabetic activity of *Commiphora mukul* but there are no studies to explore the DPP-4 inhibitory activity and myocardial salvaging effects of *Commiphora mukul* in setting of diabetes mellitus. The present study was designed to evaluate the cardioprotective efficacy as well as safety of the medicinal plant *Commiphora mukul* (Guggul) in the experimental model of myocardial infarction co-existing with diabetes.

Methods: Diabetes was induced with single dose of streptozotocin (STZ): 45mg/kg ip and myocardial infarction was produced by administering isoproterenol (ISP): (85mg/kg, sc) to rats 24 and 48 h prior to scarification (5th week). After the confirmation of diabetes on 7th day (glucose>200mg/dl), vildagliptin (10 mg/kg) and *Commiphora mukul* (200 mg/kg) were administered orally from 1st to 5th week (4 weeks). At the end of experimental period, normal control, diabetic-isoproterenol control, vildagliptin and *Commiphora mukul* group rats were sacrificed for further biochemical investigations as well as histopathological evaluation.

Results: *Commiphora mukul* treatment demonstrated significant antidiabetic as well as myocardial salvaging effects as indicated by restoration of blood glucose, HbA1c and CPK-MB serum DPP-4, hs-CRP levels as compared to diabetic ISP control group. In addition, *Commiphora mukul* showed significant cardioprotection as indicated by positive correlation between cardiac marker CPK-MB and serum DPP-4. The histopathological assessment of heart, pancreas and biochemical indices of injury confirmed the cardioprotective effects of *Commiphora mukul*. In addition, *Commiphora mukul* was found to be safe to the liver and kidney.

Conclusions: The natural DPP-4 inhibitor *Commiphora mukul* demonstrated significant cardioprotective effects in experimental model of myocardial infarction co-existing with diabetes.

Keywords: *Commiphora mukul*, DPP-4 inhibitor, Diabetes, Experimental model, Myocardial infarction

INTRODUCTION

A large body of epidemiological and pathological evidence documents that type 2 diabetes mellitus (T2DM) is an independent risk factor for cardiovascular disease (CVD) and is associated with increased susceptibility to cardiovascular complications.^{1,2} Cardiovascular complications are associated with increased mortality and

morbidity related with diabetes mellitus. To make matters worse, when patients with diabetes develop clinical CVD, they sustain worse prognosis for survival than patients of CVD without diabetes.³⁻⁵ These statistics provides scientific rationale for aggressively addressing the cardiovascular complications of diabetes. Therefore, the therapeutic goal, besides glycemic control in management

Evaluation of antidiabetic efficacy of *Murraya koenigii* on Streptozotocin induced diabetes in experimental rats

Rajesh Kumar Suman^{1*}, Ipseeta Ray Mohanty², Manjusha K. Borde³, Y. A. Deshmukh², Anurag Pathak¹, Arun Kumar Adhikari¹, H. K. Singh¹

¹Department of Pharmacology, Hind Institute of Medical Sciences, Mau, Lucknow, India

²Department of Pharmacology, MGM Medical College, Navi Mumbai, Maharashtra, India

³Department of Pharmacology, Sinhgad Dental College, Pune, Maharashtra, India

Received: 13 June 2019

Revised: 29 June 2019

Accepted: 06 July 2019

***Correspondence to:**

Dr. Rajesh Kumar Suman,
Email: rajeshsuman2043@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: The medicinal plant *Murraya koenigii* shown to have a wide variety of pharmacological activities (hypoglycemic and hypolipidemic). Objective of this study is the present study was designed to evaluate Antidiabetic and Hypolipidemic property of *Murraya koenigii* in experimentally induced diabetes in rats.

Methods: Experimental diabetes was produced with single dose of Streptozotocin (STZ): 45 mg/kg IP. The rats were randomly allocated in various groups for 37 days. After the confirmation of diabetes on 7th day (>200 mg/dl), hydroalcoholic extract of *Murraya koenigii* (500 mg/kg) was administered orally to experimental rats from day 7th day and continued for 37 days thereafter. Various antidiabetic (Glucose, HbA1C), metabolic (Lipid profile), safety (pancreatic lipase, Creatinine, SGPT, Histopathology of Liver and Kidney) were evaluated in various group.

Results: Efficacy of *Murraya koenigii* was observed on various parameter of diabetes. Administration of STZ resulted in a significant decrease in diabetic changes (increase in blood glucose, HbA1C), altered lipid profile ($p < 0.01$) in the Control group rats as compared to sham group. *Murraya koenigii* treatment demonstrated significant antidiabetic indicated by restoration of blood glucose, HbA1C level ($p < 0.01$) compared to Control group. In addition, *Murraya koenigii* also documented hypolipidemic property of test drug. As per biochemical assessment of Pancreatic lipase, Serum creatinine, SGPT and Histopathological report, the test drug reduce the pancreatic, liver and renal marker and also showed safe to pancreas, Liver and kidney. The histopathological assessment of the liver and kidney confirmed the biochemical findings.

Conclusions: The study concluded that the *Murraya koenigii* possess antidiabetic efficacy

Keywords: Blood glucose, Diabetes, Experimental rats, Medicinal plant, *Murraya koenigii*, Streptozotocin

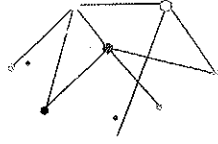
INTRODUCTION

Many herbal agents have been described for the treatment of diabetic mellitus in ancient literature.^{1,2} The global prevalence of type 2 diabetes mellitus (T2DM) is on the rise and at the current rate the estimates for the year 2000 through 2030 show that this global epidemic will have an increase from 171-366 million patients.³

Curry leaf extract possess the property to decrease blood cholesterol and blood glucose level in diabetic ob/ob mice. Mice were given daily injection of 80 mg/kg of leaves extract intraperitoneally for 10 consecutive days. Blood glucose was found to be reduced after the administration of extract. This study suggests that *Murraya koenigii* may be proved to be clinically important in improving the management of type 2 diabetes.^{4,5}



DY PATIL
DEEMED TO BE
UNIVERSITY
NAVI MUMBAI



INSPIRE™

An International Multidisciplinary Medical Summit



Certificate of Participation

CME on "Pharmacology with Clinical Perspectives"

Held on 14th -- 15th February 2019

By The Dept. of Pharmacology

CME CODE NO.- MMC/MAC/2019/C-012145

This Is To Certify That

Dr./Mr./Mrs./Ms. Ipseeta R.

has participated as a Faculty/Chairperson/Delegate in

"MEDINSPIRE 2019" An International Multidisciplinary Medical Summit.

He/She has delivered a lecture on _____

Maharashtra Medical Council has granted 4 Credit Points for the CME.

As a faculty he/she is awarded 1 additional Credit Point.

Dr. Rai Usha Satish
MMC Observer

Dr. Deepak Langade
HOD Dept. of Pharmacology

Dr. Sandeep Kaushal
General Secretary, ISRPT

Dr. Shiva Murthy N
President, MPS

Dr. Surekha Patil
Dean

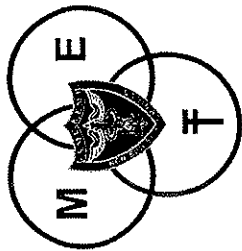
Dr. Shirish Patil
Vice Chancellor

Dr. Vijay D Patil
President

Dr. Rai Usha Satish

Dr. Sandeep Kaushal

Dr. Shiva Murthy N



Seth G. S. Medical College & KEM Hospital, Mumbai

Code no. MMC/MAC/2019/F-012241

Type of CME - Multispeciality

This is to certify that

Dr. Ipseeta Ray

has participated as Delegate in the
Curriculum Implementation Support Program in
Medical Education Technology

held from 20th February to 22nd February 2019

at GSMC-KEMH-MCI Nodal Centre, Mumbai, Maharashtra

Maharashtra Medical Council has granted four (04) credit hours for Delegates

Dr. Y. J. Bhosale
Org. Secretary

Dr. P. B. Iyer
Org. Chairman

Dr. Hemant Deshmukh
Dean

Dr. Vaja P. Savji
MMC Observer
MMC/MAO/00027/2013

Seth GS Medical College & KEM Hospital

11/11/2018

MGM

Certificate of Appreciation

This is to certify that

Dr. Ipsita Ray

has participated in the Training Programme on

Organized by Medical Affairs Department, Wockhardt Ltd. in Collaboration with

MGM Medical College & Hospital, Navi Mumbai.

On 14th Dec 2018 at Department Of Pharmacology, MGM Medical College & Hospital, Navi Mumbai

bssaw

11/11/2018



MGM Institute of Health Sciences

(Deemed University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai - 410 209

Certificate of Participation

IN

Hands-on-Training on 'Data Analysis Using SPSS'

Dr./Mr./Ms. IPSEETA RAY from 03/06/2018 - 10/08/2018
_____ has actively participated in Hands-on-Training programme on 'Data Analysis Using SPSS' for 10 days (30 hours), PHARMACOLOGY DEPT. at MGM Institute of Health Sciences, Navi Mumbai.

Dr. Rajesh B. Goel

Registrar

MGM Institute of Health Sciences

Dr. Rita Abbi

Program Co-ordinator

Professor, Biostatistics

MGM Institute of Health Sciences



MGM Institute of Health Sciences, Navi Mumbai

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

MGMIHS Incubation and Innovation Centre

Certificate of Participation

Presented to

Dr./Mr./Mrs./Ms. Apseeta Ray for _____

your contribution in the Design Competition 2019 organized by MGM Institute of Health

Science, Navi Mumbai from 22nd to 26th February 2019.

Dr. Raman P. Yadav

Director, MGMIHS
Incubation and Innovation Centre

Dr. Rajesh B. Goel

Registrar,
MGMIHS

Dr. Sudhir N. Kadam

Medical Director,
MGMIHS

Dr. Shashank D. Dalvi

Vice Chancellor,
MGMIHS



MGM Institute of Health Sciences, Navi Mumbai

(Deemed to be University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

MGMIHS Incubation and Innovation Centre

Certificate of Appreciation

Presented to

DR. IPSITA RAY

in recognition of maximum participation in the Idea Competition 2019 organized by

MGM Institute of Health Science, Navi Mumbai from 30th Jan 2019 to 16th Feb 2019.

Dr. Raman P. Yadav

Director, MGMIHS
Incubation and Innovation Centre

Dr. Rajesh B. Goel

Registrar,
MGMIHS

Dr. Sudhir N. Kadam

Medical Director,
MGMIHS

Dr. Shashank D. Dalvi

Vice Chancellor,
MGMIHS



MGM MEDICAL COLLEGE, NAVI MUMBAI

Accredited by NAAC with "A" Grade

Sector-1, Kamothe, Navi Mumbai – 410 2019 | Ph: 022 2743 3404, 2743 7900

Email: mgmmmb@gmail.com | Web: www.mgmuhs.com

COMPETENCY - BASED MEDICAL EDUCATION

Faculty Sensitization Program

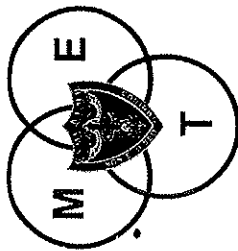
This is to certify that Dr. Upseeta Ray has
Participated in 'Faculty Sensitization Program (CBME)' held at MGM Medical College &
Hospital, Kamothe, Navi Mumbai on 7th March 2019 as Speaker / Delegate.
conducted sessions on: 1) AETCOM & Humanities 2) Electives


Dr. R. S. Inamdar

Chairman
Curriculum Committee
MGMIHS


Dr. G. S. Narshetty

Dean
MGM Medical College
Kamothe, Navi Mumbai



Nodal Centre Seth GS Medical College & KEM Hospital

Curriculum Implementation Support Program

Certificate of Participation

This is to certify that

Dr. Ipseeta Ray

Professor, Department of Pharmacology

Member, Curriculum Committee, MGM Medical College, Kamothe, Navi-Mumbai
has participated in the Curriculum Implementation Support Program
held from 20th to 22nd February, 2019, at the Nodal Center

Dr. Hemant Deshmukh
Dean
Seth G S Medical College & KEM Hospital

Praveen B. Iyer
Convener
GSMC-KEMH-MCI Nodal Centre

Dr. Munira Hirkani
Co-convenor & In-charge CISP,
GSMC-KEMH-MCI Nodal Centre

Dated : 22nd February, 2019

ROLL NO.	NAME OF THE STUDENTS	NAME OF THE MENTORS	DEPARTMENT
93	MGM/MC/NM/2 017-93	Dr. D. Naik Roll No.(92-98)	MICROBIOLOGY
94	MGM/MC/NM/2 017-94		MICROBIOLOGY
95	MGM/MC/NM/2 017-95		MICROBIOLOGY
96	MGM/MC/NM/2 017-96		MICROBIOLOGY
97	MGM/MC/NM/2 017-97		MICROBIOLOGY
98	MGM/MC/NM/2 017-98		MICROBIOLOGY
99	MGM/MC/NM/2 017-99	Dr. Neha Singh Roll No.(99-105)	MICROBIOLOGY
100	MGM/MC/NM/2 017-100		MICROBIOLOGY
101	MGM/MC/NM/2 017-101		MICROBIOLOGY
102	MGM/MC/NM/2 017-102		MICROBIOLOGY
103	MGM/MC/NM/2 017-103		MICROBIOLOGY
104	MGM/MC/NM/2 017-104		MICROBIOLOGY
105	MGM/MC/NM/2 017-105		MICROBIOLOGY
106	MGM/MC/NM/2 017-106	Dr. Savita Shahani Roll No.(106-112)	PHARMACOLOGY
107	MGM/MC/NM/2 017-107		PHARMACOLOGY
108	MGM/MC/NM/2 017-108		PHARMACOLOGY
109	MGM/MC/NM/2 017-109		PHARMACOLOGY
110	MGM/MC/NM/2 017-110		PHARMACOLOGY
111	MGM/MC/NM/2 017-111		PHARMACOLOGY
112	MGM/MC/NM/2 017-112		PHARMACOLOGY
113	MGM/MC/NM/2 017-113	Dr. Ipseeta R. Roll No.(113-119)	PHARMACOLOGY
114	MGM/MC/NM/2 017-114		PHARMACOLOGY
115	MGM/MC/NM/2 017-115		PHARMACOLOGY
116	MGM/MC/NM/2 017-116		PHARMACOLOGY

	ROLL NO.	NAME OF THE STUDENTS	NAME OF THE MENTORS	DEPARTMENT	
117	MGM/MC/NM/2 017-117	TIWARI SHRUTI AJIT	Dr. Ipseeta R. Roll No.(113-119)	PHARMACOLOGY	
118	MGM/MC/NM/2 017-118	ANKUSH SANIKA AVINASH		PHARMACOLOGY	
119	MGM/MC/NM/2 017-119	CHOPDEKAR ATHARVA SANTOSH		PHARMACOLOGY	
120	MGM/MC/NM/2 017-120	SHIRODKAR ANUSHREE BHARAT	Dr. Pradeep Jadhav. Roll No.(120-126)	PHARMACOLOGY	
121	MGM/MC/NM/2 017-121	SINGH YASH AJAY		PHARMACOLOGY	
122	MGM/MC/NM/2 017-122	ANSARI HASNAT MUKARRA MUDDIN		PHARMACOLOGY	
123	MGM/MC/NM/2 017-123	PATEL SAGAR RAMESH		PHARMACOLOGY	7
124	MGM/MC/NM/2 017-124	KAMALE SHARDUL VIJAY		PHARMACOLOGY	
125	MGM/MC/NM/2 017-125	PUNDE AISHWARYA AVINASH		PHARMACOLOGY	
126	MGM/MC/NM/2 017-126	WABLE ROHAN DILIP		PHARMACOLOGY	
127	MGM/MC/NM/2 017-127	GEEVARGHESE JOB JACOB	Dr. Snigdha Senapathy Roll No.(127-133)	PHARMACOLOGY	
128	MGM/MC/NM/2 017-128	SUBANDH ANISH MAKARAND		PHARMACOLOGY	
129	MGM/MC/NM/2 017-129	OZA RUSHABH NISHEETH		PHARMACOLOGY	
130	MGM/MC/NM/2 017-130	KENI DIVYAKSHI BHAGWAN		PHARMACOLOGY	7
131	MGM/MC/NM/2 017-131	SHAIKH UZMA FAIZANAHMAD		PHARMACOLOGY	
132	MGM/MC/NM/2 017-132	DUBEY ANKIT SANJAY SAHOOKAR		PHARMACOLOGY	
133	MGM/MC/NM/2 017-133	DALVI PRANAV NITIN	Dr. Savitri Katlam Roll No.(134-140)	PHARMACOLOGY	
134	MGM/MC/NM/2 017-134	SHEKHAR TANISHA VIJAY		PHARMACOLOGY	
135	MGM/MC/NM/2 017-135	KUMAR GAYATHRI RAJENDRA		PHARMACOLOGY	
136	MGM/MC/NM/2 017-136	JAIN PRANIT PANKAJ		PHARMACOLOGY	
137	MGM/MC/NM/2 017-137	GUPTA PREETI BUDHA GAUTIYA		PHARMACOLOGY	7
138	MGM/MC/NM/2 017-138	SINHA YASH YASHI SHARAN		PHARMACOLOGY	
139	MGM/MC/NM/2 017-139	KOLHE VAISHNAVI SUNIL		PHARMACOLOGY	
	MGM/MC/NM/2			PHARMACOLOGY	



Mahatma Gandhi Mission's

Medical College

N-6 CIDCO, Aurangabad -431003.

Ph-0240-6601100 , Fax – 240-2484445,2487727

E-mail: mgmmca@themgmgroup.com

To Whom It May be Concerned

Date-19/09/2019

Dr Ipseeta Ray, Chairperson, BOS (Para-Clinical) actively participated and contributed significantly to the curriculum development and implementation process at the University level from time to time

Important Contributions are as under

Introduction of training in 'Research Methodology' for 2nd MBBS

- It was resolved to introduce training in 'Research Methodology' for 3rd Semester MBBS students. The final consensus draft of the training module is submitted for approval.

Inclusion of topic on 'Emerging and Re- emerging infections' in MBBS Microbiology syllabus

- It was resolved to include the topic on 'Emerging and Re-emerging infections' in MBBS Microbiology syllabus

To provide all standard proformas for examination of Medico-legal cases during Forensic Medicine MBBS practical's in formative and summative assessments

- The printed format of the Medico-legal examination proforma may be provided to 2nd MBBS students during practical examination in formative and summative assessments, to be applicable from batch entering 2nd MBBS 2017-2018 of examination is submitted.
- Besides Performa of Sexual Violence, the list of the standard Medico-legal examination proformas that may be provided to 2nd MBBS students during practical's in formative and summative assessments

- Age of Estimation
- Cause of Death
- Injury Report
- Sexual offences
- Alcoholic Examination
- Sickness/fitness
- Potency certificate
- Examination of weapon
- Examination of bone

Action plan for adoption of competency based undergraduate medical curriculum by para-Clinical disciplines

- It was resolved to recommend adoption of competency based undergraduate medical curriculum for Para-Clinical disciplines, as mandated by MCI
- Although the overall syllabus remains the same, several changes have been incorporated in the competency-based medical education curriculum. These include reduction in the duration of the 2nd MBBS term (Paraclinical Phase), total teaching hours, teaching learning methods, skill training, self-directed learning, formative and summative assessment methods, time table, AETCOM modules, elective courses and the required resources for implementation of the curriculum
- Accordingly, the Para-Clinical departments will comply and ensure the smooth implementation of the proposed Competency based medical education curriculum when the batch enters 2nd MBBS in the year 2020
- The list of Elective courses suggested by various para-clinical departments are appended for approval

General Electives as per the list provided by MCI

- Immunology (Microbiology)
- Laboratory Sciences (Pathology)
- Research Methodology, Pharmacoeconomics (Pharmacology)

Additional General Electives (Not included in MCI list) that can be offered for implementation by MGMIHS are

- 'Virology and Bacteriological techniques (Microbiology, Navi Mumbai)
- 'Bio-medical waste management'(Microbiology, Aurangabad)
- 'Medico-legal aspect of Injured person' (FMT, Aurangabad)
- 'Research Project' (Pharmacology, Navi Mumbai)
- 'Pharmacovigilance' (Pharmacology, Aurangabad)
- 'Quality Assurance in Lab service' (Pathology, Navi Mumbai)
- 'Blood bank' (Pathology, Aurangabad)

Change in portion for Paper 3 and Paper 4 for MD Microbiology University Examination

- The proposed change in portion for Paper 3 and Paper 4 for MD Microbiology Examination is consistent with MCI Guidelines. The revised distribution of the syllabus for the four Papers in MD Microbiology University Examination is submitted for consideration and approval.

Change in portion for Paper 3 and Paper 4 for MD Pathology University Examination

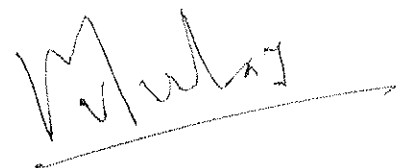
- The revised syllabus distribution for the four Papers in MD Pathology University Examination is in accordance with MCI Guidelines and is submitted for consideration and approval.

To define objectives required to be achieved by post graduate (MD) students in Pharmacology during their Allied postings

- It was resolved to structure and streamline the Allied posting training of MD Pharmacology students by defining the objectives to be accomplished during the allied postings schedules in various departments
- The draft of the tasks to be performed during allied postings and modified PG log book reflecting the training undertaken during the allied postings are here with submitted for approval

To identify the thrust area for research department wise

- The thrust areas for research identified by respective Para-Clinical departments based on the infrastructure available, research projects undertaken, publications, awards and Conferences/CME organized are submitted for consideration.
- It was also resolved that the departments will make efforts to further strengthen these areas of research in the future, keeping in view the thrust areas at National and regional levels.



Co-Chairperson, BOS (Para-Clinical)

