

**THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY,
69, ANNA SALAI, GUINDY, CHENNAI – 600 032.**



Regulations, Syllabus & Guidelines

FOR

POST – DOCTORAL FELLOWSHIP PROGRAMME

IN

BARIATRIC SURGERY

AS APPROVED IN 49TH SAB HELD ON 07.01.2015

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The Tamil Nadu Dr. M.G.R. Medical University, Chennai.

REGULATIONS FOR

POST – DOCTORAL FELLOWSHIP PROGRAMME IN BARIATRIC SURGERY

1. PREAMBLE :

In exercise of the powers conferred by Section 44 of the Tamil Nadu Dr. M.G.R. Medical University, Chennai Act 1987 (Tamil Nadu Act 37 of 1987) the Standing Academic Board of the Tamil Nadu Dr. M.G.R. Medical University, Chennai hereby makes the following Regulations for Post – Doctoral Fellowship Programme in Bariatric Surgery.

2. SHORT TITLE AND COMMENCEMENT :

The course shall be called as “POST-DOCTORAL FELLOWSHIP PROGRAMME IN BARIATRIC SURGERY” of the Tamil Nadu Dr. MGR Medical University, Chennai.

This shall come into force from the academic year 2015–2016.

The regulations framed are subject to modification from time to time by the Standing Academic Board.

3. AIM AND OBJECTIVES :

Keeping in view the explosion of knowledge in modern medicine, the University introduces a series of Post – Doctoral Fellowship Programmes in different disciplines (speciality or sub – speciality), wherein suitable candidates will be imparted training in the concerned area.

These Post – Doctoral Fellowship Programmes aims that the candidate gets exposure in the concerned disciplines with particular emphasis on their clinical skills. The course is meant to give intensive hands – on clinical training with periodic evaluation by experienced teaching staff.

The Post –Doctoral Fellowship programmes offered by this University cannot be equated with DM / M.Ch.

4. DURATION OF THE COURSE :

The Duration of the Courses is 2 years. The First One Year can be considered as training period and Second Year be the period of study. At the end of Second Year the candidates be permitted to appear for the examination.

5. ELIGIBILITY FOR ADMISSION :

- a. Candidates who have passed Medical Post Graduate degree Courses recognized by the Medical Council of India are eligible to join in **POST-DOCTORAL FELLOWSHIP PROGRAMME IN BARIATRIC SURGERY**. This includes M.Ch. (Surgery G.E) / DNB (Surgery G.E). One year Post – PG experience is not required for admission to this course.
- b. The Ph.D. in the concerned speciality is not considered to be eligible to apply for the Post – Doctoral Fellowship Programme in Bariatric Surgery.
- c. Candidates who have obtained P.G. degree from any recognized University, within India, but outside the state of Tamil Nadu will have to produce Migration Certificate from their qualifying University. No Objection Certificate issued by the National Board of Examinations, New Delhi, is equivalent to Migration Certificate.
- d. The candidates shall obtain the Eligibility Certificate before starting of One year pre-training and Eligibility Certificate will not be issued after completion of pre-training in other Institutions.
- e. The candidates shall obtain Eligibility Certificate before the cut off date for admission in that particular Academic year.
- f. The candidates has to complete his / her One year pre – training in the same Institution(s) in which the candidate desires to undergo the course.

6. ELIGIBILITY CRITERIA :

M.Ch., (Surgery G.E) / DNB (Surgery G.E) candidates are eligible for the Post – Doctoral Fellowship Programme in Bariatric Surgery.

7. AGE :

No upper Age limit fixed for admission to Post - Doctoral Fellowship Programme in Bariatric Surgery.

8. ELIGIBILITY CERTIFICATE :

Candidates who have passed the qualifying examination as stated in Regulation No.6 above other than the Tamil Nadu Dr. M.G.R. Medical University, Chennai shall obtain an “Eligibility Certificate” from this University by remitting the prescribed fees along with the application form and required documents before seeking admission in any one of the affiliated Medical Institutions. The application form is available in the University website: www.tnmgrmu.ac.in.

9. MIGRATION CERTIFICATE :

On completion of Post Doctoral Fellowship Programme in Bariatric Surgery, Migration Certificate will not be issued.

10. CONDONATION OF BREAK OF STUDY :

The Break of Study for a period of less than 90 days can be condoned by the Course Director and the Break of Study for the period of more than 90 days and less than one year is to be condoned by the University authorities. The application form is available in the University website: www.tnmgrmu.ac.in.

11. RE-ADMISSION OF THE BREAK OF STUDY :

1. The course shall be completed within the period of double the duration from the date of admission.
2. The Regulation for Re-admission are as per the University's common Regulation for Re-admission.
3. The candidates having break period in the One year pre-training shall complete the balance period of training before starting the 2nd year of study in the Post Doctoral Fellowship Programme in Bariatric Surgery.

12. NO. OF ATTEMPTS ALLOWED FOR EXAMINATION:

The candidates of 2 year Post Doctoral Fellowship courses in Bariatric Surgery shall be allowed for a maximum of five attempts with a period of 4 years including the first appearance.

13. ADMISSION :

The admission for the Post – Doctoral Fellowship Programme in Bariatric Surgery is twice in a year (i.e.,) 1st January and 1st July.

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|---------------------------------|---|--|
| (a) Admission upto 31st January | - | 28th February is the last date for Registration. |
| (b) Admission upto 31st July | - | 31st August is the last date for Registration |

An Institution can admit max. of Two (2) students per year for particular Post – Doctoral Fellowship Programme in Bariatric Surgery i.e, either in January / July sessions or 1 candidate for each session (January or July). However, the total number of candidates per institution per course shall not exceed 2 per year.

14. SELECTION OF CANDIDATES :

The candidates for the Post – Doctoral Fellowship Programme in Bariatric Surgery can be selected by the centers on their own and the selection to be transparent.

- a. The candidates selected by the Institutions will become bonafide student of this University only after registration.
- b. The Post-Doctoral Fellowship Programmes of the Affiliated Institutions will be published in the University website.

15. COMMENCEMENT OF THE COURSE :

The one / two years Post – Doctoral Fellowship Programmes will commence on 1st January & 1st July of every year and the candidates are expected to get registered with this University within 30 days of their selection by the

Affiliated Institutions. (i.e. 28th February & 31st August).

16. CURRICULUM :

The Regulation, Guidelines, Curriculum and the Syllabus for the Post Doctoral Fellowship Programme is prescribed in these regulations are subject to modification by the Standing Academic Board from time to time.

17. REGISTRATION :

A Candidate admitted into 'POST-DOCTORAL FELLOWSHIP PROGRAMME IN BARIATRIC SURGERY' under any one of the affiliated institutions of this University shall register his / her name with this University by submitting the prescribed application form for registration duly filled in, along with the prescribed fee and a declaration in the format to the Controller of Examination of this University through the affiliated institution within 30 days from the cut-off date prescribed for admission. The application should have the date of admission of the course.

18. SCHEME OF EXAMINATION :

Commencement of examination for the Post Doctoral Fellowship Programme in Bariatric Surgery is on any day within the calendar month of January / July. The examination will be conducted with one internal Examiner i.e. the Course Director who is the Convener of the examination and Two External Examiner of which One from Government & One from Private Institution. The maximum age limit for the examiner is 70.

19. EXAMINATION PATTERN :

There is no theory examination for the Post Doctoral Fellowship Programme in Bariatric Surgery. The Institution must have periodical assessment on the performance of the students by maintaining a log book.

20. ATTENDANCE :

90% attendance is mandatory to become eligible for the examination and will be certified by the Course Director.

21. MINIMUM / MAXIMUM MARKS FOR PRACTICAL / CLINICAL / ORAL & INTERNAL ASSESSMENT :

The Examination pattern is as follows :

Exam	Maximum	Minimum
Practical	100	50
Orals / Viva	100	50
Internal Assessment	100	50
Log Book	50	25

The log book will be assessed by examiners during the Clinical Examination. Projects presentation is mandatory and 25% of IA is for the project.

22. EXAMINATION :

There is No Theory Examination. Only Clinical Examination & Viva will be conducted.

A candidate who undergoes the Post-Doctoral Fellowship Programme in Bariatric Surgery shall satisfy the required eligibility criteria to appear for the Examination.

23. CLINICAL EXAMINATION HOURS :

The Clinical Examination will be conducted between 9 a.m. to 5.00 p.m.

24. PRACTICAL EXAMINATION :

Minimum 10 and Maximum 20 OSCE Stations will be given for examination (Objective Structured Clinical Examination).

Internal Assessment marks and attendance are to be submitted to the University one month before the Examination.

25. EXAMINATION CENTRE :

In case of more than one Centre conducting the same Course, the Examination Centre will be decided by the Controller of Examinations of this University and the Course Director of the Centre will be the Convener of the examination.

26. STIPEND :

The University will not give any stipend to the candidates admitted for Post-Doctoral Fellowship Programme in Bariatric Surgery, and the University will not interfere, if the private institutions are willing to give a stipend to the candidates admitted under them.

27. LOG BOOK :

The Log Book shall be verified by the Course Director periodically and should be submitted to the examiners at the time of examination for evaluation and only the marks to be sent to the University for result processing.

Submission of Log Book is compulsory to appear for University examination.

If the examiners suggest minor corrections and resubmission of the Log Book, the results of the candidates shall be withheld and the Log Book shall be resubmitted by the candidate within three months. The Log Book shall be revalued by the same set of examiners and after getting approval, the results of the candidate shall be published.

28. Project :

Project should be submitted at the end of the year and it carries 25% of marks in the internal Assessment.

29. PROGRAMME DIRECTOR :

Must have 15 years of work experience with a teaching experience of 10 years and must possess Diploma / Fellowship / Ph.D. in the concerned field.

Programme Director should be responsible for

- 1. Journal Club**
- 2. C.M.E. Programmes**
- 3. Internal Assessment**
- 4. Hands on Training**
- 5. Knowledge about complications.**

30. VACATION :

There is no vacation.

Post Doctoral Fellowship in Bariatric Surgery Syllabus

INTRODUCTION :

With Obesity and its associated comorbidities has risen tremendously in India in the recent years with India being the capital for type 2 diabetes in the world. Bariatric surgery also called the Obesity surgery has gained popularity in the treatment of Morbid Obesity and also treatment of its associated comorbidities. But its limited by lack of enough number of surgeons trained in performing this kind of procedures. Also, there's at present no recognized training program in our country for this kind of surgeries. This necessitates interested surgeons to travel out of the country for such fellowships. Also, for such training to happen, a multidisciplinary team approach including surgeons, life style therapists, nutritionists, psychologists etc for a holistic care.

TRAINING OF MINIMAL ACCESS BARIATRIC SURGERY DEFINITION :

Fellows in Bariatric Surgery will be fully qualified surgeons recognized by the Medical Council of India and/or National Board of Examinations with adequate experience in Minimal access surgery. The development of such educational programs will adequately prepare surgeons in the management of Obesity patients and provide scientific care.

OBJECTIVES OF THE TRAINING :

To train a specialist to be capable of

- A. Understanding and performing Bariatric surgery**
- B. Making Bariatric an essential part of Minimal Access & General Surgery**
- C. Teaching, research and auditing in Bariatric Surgery**
- D. Co-ordinating and promoting collaboration in organizing the services**
- E. Providing leadership in developing research within the specialty**

COURSE OBJECTIVES :-

- A. To learn about specialized endoscopic equipments and instrumentation.**
- B. To understand and learn the principles of Minimal Access Bariatric Surgery**
- C. Gain expertise in surgical management of Bariatric Surgery**
- D. Diagnosing and management of intraoperative and postoperative complications**
- E. Understand the principles of preoperative evaluation and selection of patients**
- F. Postoperative care pathways**
- G. Sterilization and maintenance of instruments and video equipments.**
- H. Documentation, storage data and presentation.**
- I. Anesthesia in laparoscopic surgery.**
- J. Trouble shooting in MAS.**
- K. Electro surgery and other newer energy sources.**
- L. Basic and advanced skills in Endo-knotting and transcorporeal suturing techniques.**

Part I Basic Considerations

- 1. Epidemiology and Discrimination in Obesity**
- 2. The Pathophysiology of Obesity and Obesity-Related Diseases**
- 3. History of the Development of Metabolic/Bariatric Surgery**
- 4. Mechanisms of Action of the Bariatric Procedures**
- 5. Indications and Contraindication for Bariatric Surgery**
- 6. Preoperative Care of the Bariatric Patient**
- 7. Anesthetic Considerations**
- 8. Components of a Metabolic and Bariatric Surgery Center**
- 9. Evaluation of Preoperative Weight Loss**
- 10. Patient Safety**
- 11. Understanding Bariatric Research**
- 12. Quality in Bariatric Surgery**

Part II Primary Bariatric Surgery and Management of Complications

- 1. Laparoscopic Gastric Bypass : Technique and Outcomes**
- 2. Laparoscopic Adjustable Gastric Banding : Technique and Outcomes**
- 3. Laparoscopic Sleeve Gastrectomy : Technique and Outcomes**
- 4. Duodenal Switch : Technique and Outcomes**
- 5. Management of Gastrointestinal Leaks and Fistula**
- 6. Gastrointestinal Obstruction After Bariatric Surgery**
- 7. Postoperative Bleeding in the Bariatric Surgery Patient**
- 8. Gastric Banding Complications : Management**
- 9. Management of Nutritional Complications**

Part III Revisional Bariatric Surgery for Failure of Weight Loss

1. Reoperative Bariatric Surgery
2. Reoperative Options After Gastric Banding
3. Reoperative Options After Sleeve Gastrectomy
4. Revisional Procedures After Roux-en-Y Gastric Bypass

Part IV Metabolic Surgery

1. The Rationale for Metabolic Surgery
2. Operation of Choice for Metabolic Surgery
3. Operative Outcomes of Bariatric Surgery in Patients with a Low Body Mass Index (30–35 kg/m²)
4. Outcomes of Metabolic Surgery

Part V Specific Considerations

1. Management of the Gall bladder Before and After Bariatric Surgery
2. Effects of Bariatric Surgery on Non-metabolic Disease
3. Cardiac Risk Factor Improvement Following Bariatric Surgery
4. The Role of Endoscopy in Bariatric Surgery
5. LABS Project
6. Adolescent Bariatric Surgery
7. Impact of Bariatric Surgery on Infertility
8. Body Contouring After Massive Weight Loss
9. Experimental Alternatives in Bariatric Surgery
10. Coding and Reimbursement for Bariatric Surgery

1. Liability Reduction, Patient Safety and Economic Success in Bariatric Surgery
2. Robotics in Bariatric Surgery
3. Genetic basis of consideration / Counseling

Part VI Pulmonology

1. Basic Pathophysiology of lungs in obese patients
2. Sleep Disorders
3. OSA Obstructive Sleep Apnoea
4. OHS Obesity Hypoventilation Syndrome
5. Sleep study / CPAP
6. COPD & Obesity

Part VII Cardiology

1. Hemodynamic Changes in Obese patients
2. Basic Cardiac Preop Evaluation
3. Metabolic Syndrome
4. HTN / Hyper Lipidemia / DM / Pre OP optimization / Post OP follow up

Part VIII Nutrition

1. Perioperative Nutrition Assessment of the Bariatric Surgery Patient
2. Nutrition Education and Counseling of the Bariatric Surgery Patient
 1. Macronutrient Recommendations: Protein, Carbohydrate and Fat
 - Identification, Assessment and Treatment of Vitamin and Mineral Deficiencies After Bariatric Surgery

2. Managing Common Nutrition Problems After Bariatric Surgery
3. Nutrition Care Across the Weight Loss Surgery Process

Part IX Psychosocial

1. Psychosocial Characteristics of Bariatric Surgery Candidates
Psychopathology and Bariatric Surgery
2. Quality of Life
3. Eating Disorders and Eating Behavior Pre and Post-Bariatric Surgery
Introduction to Psychological Consultations for Bariatric Surgery Patients
Psychosocial Issues After Bariatric Surgery
4. Technology to Assess and Intervene on Weight-Related Behaviors with
Bariatric Surgery Patients Psychosocial Issues in Adolescent Bariatric Surgery

Part X Obesity Medicine

1. Lifestyle Modification for the Treatment of Obesity
2. Pharmacotherapy Management of Obesity
3. Medical Preparation for Bariatric Surgery
4. The Perioperative and Postoperative Medical Management of the Bariatric
Surgery Patient
5. The Importance of a Multidisciplinary Team Approach
Genomic and Clinical Predictors Associated with Long-Term Success After
Bariatric Surgery
 1. Medical Approach to a Patient with Postoperative Weight Regain
 2. The Role of Physical Activity in Optimizing Bariatric Surgery
Outcomes
