

Annapoorana Medical College and Hospitals, Salem

Medical Education Unit

Indian Medical Graduate with a Degree – What Next?

Career Guidance for Undergraduates after MBBS

Are you an MBBS graduate? Are you confused about what to do after MBBS in India? With so many options, we don't blame you. While some start practicing medicine right after their MBBS, others choose to specialize in a particular field.

In a diverse field like medicine, it is crucial to choose the right specialization for a fulfilling career. You can pursue an MD/ MS degree, maybe even a diploma or DNB degree that can aid in your career growth. The course duration for MD/MS is three years. You can opt for a diploma if you want a shorter route, which will earn you a degree in just two years. DNB, on the other hand, takes three years to complete.

It is important to note that one has to clear an entrance exam (like NEET PG) to be eligible to get a post-graduation (PG) medical seat.

If you wish to practice as a Physician, chose MD that is generally considered to be a simple yet straightforward route by many in the Medical Community. It will help you reach a wide range of patients.

MS, on the other hand, requires one to possess excellent physical and mental attributes as it requires both disciplines to work in harmony during practice. It is also not for the faint of heart.

Apart from MD/ MS, you can also pursue diploma courses. Note that diploma courses don't command the same recognition from medical institutions that MD/ MS and DNB degrees provide.

You can also consider doing a DNB. Diplomat of National Board (DNB) is a program by the central government that offers PG courses on various

medical specializations. However, very few actually get through the course as DNB exams are tough to crack.

If you wish to pursue your higher education abroad, you will have to clear the respective entrance exams. If one chooses to pursue PG medical courses in the USA, he/ she will have to pass the USMLE exam. For the UK, it is PLAB, while Australia requires PG medicine aspirants to clear AMC.

While you make your decision, it is crucial to research the respective field and gather advice from first-hand sources before you commit. It is also vital that you choose an area that is in line with your passion and curiosity. This will prove to be satisfying in the long run.

MD (Master of Medicine)

Clear Entrance Exams

Get selected in Counseling

3 Years Course

- MD Aerospace Medicine
- MD Anatomy
- MD Anesthesiology
- MD Biochemistry
- MD Biophysics
- MD Community Medicine
- MD Dermatology, Venereology & Leprosy
- MD Emergency Medicine
- MD Family Medicine
- MD Forensic Medicine

- MD General Medicine
- MD Marine Medicine
- MD Medical Genetics
- MD Radiotherapy
- MD Respiratory Medicine
- MD Microbiology
- Nuclear Medicine
- MD Paediatrics
- MD Palliative Medicine
- MD Pathology
- MD Pharmacology
- MD Psychiatry
- MD Physical Medicine & Rehabilitation
- MD Physiology
- MD Sports Medicine
- MD Immuno-Hematology and Blood transfusion
- MD Infectious Diseases
- MD Tropical Medicine
- MD Hospital Administration
- MD Radio Diagnosis
- MD Health Administration

- MD Geriatrics
- MD Pulmonary Medicine

MS (Master of Surgery)

- MS ENT
- MS Obstetrics & Gynaecology
- MS Ophthalmology
- MS Orthopaedics
- MS General Surgery
- MS Traumatology & Surgery
- MS Otorhinolaryngology

For MD, MS, MCh (6 years) & Post Graduate Diploma courses, the Qualifying Examination

- NEET PG/ NeXT (National Eligibility Cum Entrance Test / National Exit Test) is the Single Eligibility Cum Entrance Examination for admission to MD/ MS/ PG Diploma Courses which will include the following:
 1. All India 50% Quota Seats for all States/ Union Territories of India.
 2. State Quota Seats for all States/ Union Territories of India.
 3. All Private Medical Colleges, Institutions & Universities / Deemed Universities all across the Country
 4. Armed Forces Medical Services Institutions.
 5. Post MBBS DNB Courses and Post MBBS NBE Diploma Courses

- List of colleges providing PG Degree Courses in various Specialties, Total seats available, which are updated time to time can be accessed at <https://www.nmc.org.in/information-desk/list-of-college-teaching-pg-courses/>

- **DNB (Diplomat of National Board)**

- Clear Entrance Exams
- Get selected in Counseling
- 3 Years Course

NBEMS (National Board of Examinations in Medical Sciences) Programs for Post MBBS Doctors

DNB Broad Specialty Courses

- NBEMS administers DNB Broad Specialty Courses in 29 disciplines of modern medicine through its accredited institutions. The duration of the course for Post MBBS candidates is for 3 years.
- The Qualifying Examination for the Post MBBS trainees get Admission to 3 Years DNB Course (equivalent to M.D, M.S Degree) after successfully qualifying the NEET-PG examination, which is conducted by NBEMS
- Total Accredited seats can be viewed at https://accr.natboard.edu.in/online_user/frontpage.php?v=4

- **Diploma Courses**

- Diploma in Clinical Pathology
- Diploma in Anesthesia

- Diploma in Health Education
- Diploma in ENT
- Diploma in DVL
- Diploma in Occupational Health
- Diploma in Obstetrics & Gynecology
- Diploma in Physical Medicine & Rehabilitation
- Diploma in Pulmonary medicine
- Diploma in Sports Medicine
- Diploma in Hospital Administration
- Diploma in Immuno-hematology
- Diploma in Microbiology
- Diploma in Pediatrics
- Diploma in Psychiatry
- Diploma in Pathology
- Diploma in Nuclear medicine
- Diploma in Radiotherapy
- Diploma in Sports Medicine
- Diploma in Ophthalmic Medicine and Surgery
- Diploma in Dermatology
- Diploma in Forensic Medicine
- Diploma in Physical Medicine

- Diploma in Radiation Medicine
 - Diploma in Tropical Medicine and Hygiene
 - Diploma in Hematology and Blood Transfusion
 - Diploma in Diabetology
 - Diploma in Health Administration
 - Diploma in Ophthalmology
 - Diploma in Orthopedics
 - Diploma in Public Health
 - Diploma in Medical Radio-Diagnosis
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- **Post MBBS NBE Diploma Courses: National Board of Examinations in Medical Sciences: NBEMS Diploma**
 - NBEMS administers Diploma courses in 8 disciplines of modern medicine through its accredited institutions. The duration of the course for Post MBBS candidates is for 2 years
 - The Qualifying Examination is the NEET-PG/ NExT examination, which is conducted by NBEMS
 - Anesthesiology DA (NBEMS)
 - Obstetrics & Gynaecology DGO (NBEMS)
 - Paediatrics DCH (NBEMS)
 - Family Medicine D Fam. Med. (NBEMS)
 - Ophthalmology DO (NBEMS)
 - Otorhinolaryngology (ENT) DLO (NBEMS)

- Radio Diagnosis DMRD (NBEMS)
- Tuberculosis & Chest Disease DTCD (NBEMS)
- Total Accredited seats can be viewed at https://accr.natboard.edu.in/online_user/frontpage.php?v=4

- **Integrated courses**

- Clear Entrance Exams
- Get selected in Counseling
- 3 Years Course

PG Abroad

USMLE - United States Medical Licensing Exam

- Entry Exam to Practice Medicine in USA

Step 1 USMLE

- Can be taken after completing Phase II MBBS
- MCQ Pattern of 280 Questions from Pre clinical subjects (Anatomy ,Physiology, Biochemistry, Physiology, Pharmacology ,Pathology and Microbiology)

- Result –Minimum Passing Score is 196. Announced as Pass / Fail

- Resource Materials:

Boards and Beyond

U world

Pathoma

Sketchy

Step 2 CK USMLE

- Assessment of Clinical Knowledge
- 320 Questions, Orientation
- Resource Materials:

U world

Boards and Beyond

Divine Intervention Podcast (Free)

Ambos Library

Occupational English Test (OET)

- Resource Materials:

E2 OET Free Course

Official OET Sample Papers

If all the above is done we can apply for,

ECFMG Certification - Educational Council for Foreign Medical Graduation

- Criteria to apply for ECFMG Certification – USMLE Step 1, USMLE step 2, MBBS Degree, Letter of Good Standing from university.
- NRMP - National Resident Matching Program (MATCH): Program and Applicants match for the best Placement in Residency
- ERAS - The Electronic Residency Application Services is provided by the Association of American Medical Colleges. AAMC provides application which has Professional, Volunteer, and Research of the Applicant.

- Personal Statement about the specialty they want to choose
- LOR- Letter of Recommendation from US Professional and Home Country Professional.
- MSPE- Medical School Performance Evaluation
- Medical School Transcripts

Interviews

- ROL- Rank Order List
- Fix Match date
- SOAP- Supplementary Offer and Acceptance Program
- Placed as a Resident.

USMLE Step 3 - before PG Year 1 and PG Year 2

PLAB – Professional and Linguistic Assessment Board

- PLAB to be replaced by UKMLA- United Kingdom Medical Licensing Assessment
- Eligibility: After completion of MBBS Degree
- IELTS – International English Language Testing System.

PLAB 1:

- 180 MCQ based Questions
- Exam can be taken in India

PLAB 2:

- PLAB 1 should be cleared before PLAB 2

- OSCE- Objective Structured Clinical Examination (Clinical Scenario based and Routine Case Based Questions)
- Exam has to be taken in United Kingdom.
- Recourse Material: Oxford Handbook for Foundation Doctors

AMC – Australian Medical Council Exam

- International Medical Graduates should clear AMC I and AMC 2 for Medical Licensing and Practicing in Australia.
- AMC Exam is limited to Clinical Subjects.

AMC 1:

- Assess knowledge of General practice, Internal Medicine, Pediatrics, Psychiatry, Surgery and OBG.
- MCQ based –CAT (Computer Aptitude Test)

AMC 2:

- Assess clinical Skill in Internal Medicine, Surgery, Psychiatry and OBG.
- International Medical Students those, who have cleared PLAB Score and MRCP, need not appear for AMC Exam.
- Total cost of AMC 1 & 2 Exams will be approximately INR 2.5 Lakhs.
- IELTS are not required for AMC Exam but it is required during Job / Internship Application.
- Every year, Exam Registration starts by Month of November.

DHA, Dubai - Dubai Health Authority

- Dubai Health Authority (DHA) Exam is a Licensing Exam that all Medicos must pass, if they wish to serve in the Healthcare Sector of Dubai and UAE.
- Maximum Attempts: 3
- The Test is based on 70 Multiple-Choice Questions (MCQs)

The list of Important Documents that you must provide at the time of completing your Online Application Form is:

- Medical Degree
- Recognized Certificate of Medical Specialization (if applying for the Specialist Practitioner)
- Valid Medical Practice License of the Country of Last Employment
- Experience Letter Signed and Sealed by Medical Directorate
- Valid Passport Copy
- Good Standing Certificate (GSC) issued by the Local Medical Council of the Country of Last Employment.

MCCQE, Canada - The Medical Council of Canada Qualifying Examination

To apply to the MCCQE Part I, you must be a Graduate from, or a Student who is expected to complete all requirements to graduate from:

- A Medical School Accredited by the Committee on Accreditation of Canadian Medical Schools (CACMS); or
- A Medical School Listed in the World Directory of Medical Schools and identified by a Canada Sponsor Note, indicating it is an Acceptable Medical School in Canada; or

- There are 3 Exams that are offered by the Medical Council of Canada, including the MCCEE, MCCQE Part 1 and MCCQE Part 2

MCCEE

- The Medical Council of Canada Evaluating Examination (MCCEE) is a Four-Hour Computer-Based Examination offered in both English and French, at more than 500 Centers in 73 Countries Worldwide.
- International Medical Graduates, International Medical Students in their Final Clinical Year and U.S. Osteopaths must take the MCCEE as a Prerequisite for eligibility to the MCC Qualifying Examinations.
- The Computer-Based MCCEE is Multiple-Choice Questions Based Pattern.
- The MCCEE Questions cover the following Domains: Child Health, Maternal Health, Adult Health, Mental Health, and Population Health and Ethics. A number of Questions in the Examination will also have a focus on General Practice.

MCCQE PART 1:

- MCQ Based Pattern
- This component of the Examination is designed to assess a Candidate's Knowledge in the following general areas: 1) Internal Medicine, 2) Surgery, 3) Pediatrics, 4) Obstetrics and Gynecology, 5) Psychiatry, and 6) Population Health and the considerations of the Legal, Ethical and Organizational Aspects of the Practice Of Medicine.

MCCQE PART 2:

- OSCE Pattern

UPSC CMS (Union Public Service Commission- Combined Medical Services)

- UPSC conducts the Combined Medical Services Examination (CMSE) every year, to Recruit Medical Graduates into various Central Government Organizations and Services. The Combined Medical Services Examination (CMSE) is conducted, in accordance with the rules published by the Ministry of Health & Family Welfare in the Gazette of India.
- The selection of the Candidates will be made through an Online Written Examination, which consists of Two Papers. Each paper will be of Two Hours Duration carrying a Maximum of 250 Marks.
- Exam Level - National
- Frequency - Once in a Year
- Educational Qualifications - MBBS
- Upper Age Limit - 32 years
- Exam mode - Computer-Based (Online)
- Number of Papers - 2
- Question Format - Objective
- Duration of Exam - 1 Day
- Admit Card Availability - 3 Weeks before Exam
- No of Test Centers - 41
- Application Fee – Rs.200
- Official Website - www.upsc.gov.in

AFMS (Armed Force Medical Services) / Army Recruitment

- The Army Medical Corps is amongst one of the best options available to Medical Graduates of our Country, where there is an Opportune Professional Environment of an exceptional order, blended with high Degree of Professionalism, Dignity and Self-esteem. It offers a golden opportunity to be a part of World's Finest Service and get trained not only to be an Officer and a Gentleman, but also a Highly Skilled Professional.
- Army Medical Corp promises both Professional and Personal Growth at every stage of the career. In addition to the professional growth and development, the adventure and Extra-Curricular Activities in the service ensure an all round development essential for today's world. Apart from attractive pay and perks, service offers the best in Life-style and Professional Growth.
- Service Chiefs in accordance with any general policy directions that may be given by the DGAFMS. The charter has since been amended / updated from time to time.

Appointment

- Recruitment done- every year
- Permanent Commissions in the Army Medical Corps will be granted to persons in accordance with the conditions as under:-
 - (a) Such of the serving AMC/SSC who after having satisfied the terms of eligibility under AI 75/78 are found suitable for grant of permanent commissions by the AMC Selection Board.
 - (b) Stipendiary Medical Cadet of the Graduate Wing of Armed Forces Medical College, Pune on successfully passing the final MBBS Examination will be eligible for grant of permanent commissions under the terms and conditions as laid down.

2. Personnel granted Permanent Commission in the Army Medical Corps would be liable for service in any part of the world and in any branch of Armed Forces i.e. Army, Navy and Air Force.

Age Limits for applying for PC

- (a) Candidates must not have attained 30 years of age on 31 December of the year of applying for grant of PC. In the case of candidates possessing Additional Medical Qualifications, the following relaxation in age limits will apply:-
 - (i) Those possessing post graduate diploma -31 years like DOMS, DPH, DA etc.
 - (ii) Those possessing post graduate - 35 years qualifications like MD, MS etc.
- (b) A Candidate with previous Commissioned Service in the Army Medical Corps will be entitled to extension of the above age limits for the full period of Previous Reckonable Service, if such service was rendered while in possession of a Medical Qualification recognized by the Indian Medical Council.
- Educational Qualification:
The applicant must possess medical qualification included in the National Medical Council Act, 2019.
- The applicant must have permanent registration from any State Medical Council/ NMC/ MCI.
- Post graduate degree holders recognized by State Medical Council / NBE / NMC can also apply.

Application

- Candidates mentioned in Para 1 (a) above will submit their applications to the office of the DGAFMS, Ministry of Defense, 'M Block, New Delhi, in accordance with the rules circulated to all Units / FMS / Commands through Normal Dept Channels.

Indian Railway Health Services (IRHS)

- Anyone can join Indian Railways as Doctor or specifically Medical Officer of Indian Railways. . So for being a Doctor in Railways you have to give the exam of IRMS (Indian Railways Medical Services). These are done separately for Specialist and MBBS doctors. For applying you just have to see for its advertisements in National Dailies. The direct recruitment to the cadre is done through the Combined Medical Services Examination held by Union Public Service Commission (UPSC). As of 2011, the approximate cadre strength of IRMS is 2,506. Training of the probationers is done in Railway Staff College/now National Academy of Indian Railways, Lalbaug Vadodara. After completion of training, they are posted as Assistant Divisional Medical Officers across the Indian Railway network.
- Official website - [Www.rrbcdg.gov.in](http://www.rrbcdg.gov.in).
- Age-limit - 21- 53years for general, OBC 3 years, SC, ST 5 year's age relaxation
- Educational qualification:
- The minimum educational qualification for Railway Medical officer recruitment 2022 is MBBS/ MD/ MS, however, candidates with higher education also eligible for apply for Medical officer vacancy but age limit is mandatory.
- GDMO: Degree in Medicine (MBBS)
- Specialist officer: MD or MS 3 with Years Experience
- The Selection / Recruitment Process of RRB Medical Officer include Competitive Written Exam / Interview / Contract basis and require Interview / Physical Requirements. For detailed Syllabus & Exam Pattern of Railway Medical Officer available at Syllabus Section

MBA (Master of Business Administration)

Clear CAT (Common Admission Test) Exam

Currently in high demand

- MBA in Healthcare Management
- MBA in Hospital Administration
- MBA in Hospital Management
- MBA in Bio-informatics
- MBA in Medical Administration
- MBA in Computational Biology
- MHA- PGI Chandigarh, AIIMS

MHA (Masters in Health/ Hospital Administration)

Master of Health Administration (MHA) is a 2-Year Professional Master's Level Degree Accredited to Students after completing a Course of Study in Health Administration which includes the Management of Hospitals and other Health Organizations, Public Health Consulting and Infrastructure

- Duration: 2 Years
- Eligibility:
 1. MBBS, BDS, BHMS, B.Sc. Nursing, BPT, BAMS, B.Sc. Allied Health Science, Veterinary Sciences, and B.Sc. Pharm from any recognized Indian University with a minimum of 50% Marks in aggregate.
 2. Candidates with Indian Citizenship can apply under The General Category, whereas NRI/ Foreign Students can apply under the Foreign or NRI Category
 3. Candidates should have accomplished their Internship before applying for Master in Health Administration (MHA) Course

- Entrance Exams: CAT, MAT
- Course Availability: India, USA, UK, Canada and Australia
- Sectors of Employment:
- IT for Hospitals, Commercial Management, Healthcare Insurance, Pharmaceutical and Management, Management of Hospital Operations.
- Candidates after completion of the Course can either pursue Jobs or go for PhD in Hospital Administration or PhD in Health Administration Courses.
- The Duration of the Course is at least 3 Years.
- PhD in Health Administration can be used by the candidates to undertake Research about the Healthcare System and guide the Healthcare Industry in the future.

M.Tech (Master of Technology)

- Biomedical Engineering
- Biological Sciences
- Nanotechnology

Sastra University

Advantage – Currently in high demand

MMST (Master in Medical Science and Technology)

- Medical Biotechnology
- Bio-informatics

- Healthcare Imaging

MPH (Master of Public Health)

Master of Public Health is a Two-Year Postgraduate Interdisciplinary Programme awarded for studies in areas related to Public Health. The programme is designed to focus on Public Health Services rather than research and teaching. The Master of public health programme is focused on developing public health administrators with expertise in public health. The course also focuses on topics such as Disease Characteristics, their Prevention and Cure, Crisis Management, Strategic Health Policies and Regulatory Affairs.

- Duration: 2 Years
- Eligibility: Candidates must hold a Bachelor's Degree within any of the Health Sciences Fields such as MBBS, BDS, BPT and Nursing.
- Also, there are some Universities and Institutes that demand a Minimum of 50% Aggregate in Bachelor's Degree in order to be considered for the admission.
- Entrance exams: NIL
- Course availability: India, USA, UK, Canada and Australia

Top Specializations:

- Public Health
- Community Medicine
- Pediatrics
- Hospital / Healthcare Management

- Healthcare and Hospital
- Occupational Therapy
- Public Health and Management
- Dietetics and Nutrition
- Paramedical- Physiotherapy

There are nearly 62 MPH Colleges in India that offer MPH, out of these 45 Colleges are Private and 10 are Government Colleges

- DYPMC Pune
- Shree Guru Gobind Singh Tercentenary University, Gurgaon
- JIPMER Puducherry
- KIMS Karad

Increased in demand after COVID

Career options:

1. Healthcare Administrator
2. Health Informatics Specialist
3. Epidemiologist
4. Assistant Environmental Scientist
5. Bio-security Specialist
6. Bio-terrorism Researcher

12. Clinical Research

- M.Sc / Ph.D Courses

After MBBS, Various Institutes that offer Research Opportunities are

- ICMR (Indian Council for Medical Research)

- CIMAP, CCMB (Centre for Cellular and Molecular Biology), St. John's Research Institute.
- WHO offers various Research Programs
- AIIMS- All India Institute of Medical Sciences, PGI- Post Graduate Institute, NIMHANS- National Institute of Mental Health & Neuro-Sciences, Tata Institute of Fundamental Research, Mumbai (TIFR) offer PhD. degrees.
- Rajiv Gandhi Centre for Biotechnology under the Government of India functioning at Poojappura, Thiruvananthapuram, offers Major Research Programme in Disease Biology and Molecular Medicine as well as Plant Biotechnology and Discovery.
First Class (with 60 percent marks) MBBS Degree Holders are also eligible for admission. (www.rgcb.res.in). This Ph.D. Programme is affiliated to the University of Kerala.
- Those having a Valid Research Fellowship from UGC- University Grants Commission- CSIR or ICMR, category A of Department of Biotechnology are eligible to receive Fellowships.
- Medical Science and Technology, Thiruvananthapuram, Jawaharlal Institute for Postgraduate Medical Education and Research (JIPMER), Puducherry, Postgraduate Institute of Medical Education and Research, Chandigarh and Christian Medical College, Vellore provide research facilities leading to Ph.D.

Private Practice

- Takes time
- Slow Curve of progress

JR (Junior Resident Doctors)

- Eligibility: MBBS
- Work place: Medical College Hospitals & Corporate Hospitals

Work at PHC (Government Health Services: Primary Health Center)

- Good exposure to Cases & Gain experience
- Added Marks in PG Entrance for Seats
- The Medical Services Recruitment Board (MRB) has been established with the Objective of making Direct Recruitment to various categories of Staff in the Health and Family Welfare Department, Government of TN
- The applications are received only through Online hosted in the MRB Website mrb.tn.gov.in
- All Direct Recruitment Posts in Assistant Surgeon (General) shall be made, through open advertisement (in at least two newspapers and one of which must be in Vernacular Language) by conducting Written Examination (through Physical or Electronic Mode) duly following the procedures prescribed.
- All Direct Recruitments to the Post of Assistant Surgeon in various Specialty Departments in Tamil Nadu Medical Service shall be made through a 'Walk-In' Selection through Open Advertisement (in at least two newspapers and one of which must be in Vernacular Language), based on the Marks obtained by the Candidates in their Post Graduate Specialty Subject. For the Post of Assistant Surgeon (Specialty) a person in Possession of Post Graduate Degree shall be preferred over DNB and a Post Graduate Diploma, duly following the procedures prescribed.

Service Quota for PHC Medical Officer

- Minimum of 2 Years Continuous Service is must for an Assistant Surgeon Cadre - PHC Medical Officer to write NEET PG.
- 50% of state Quota Seats in all Govt. and Self Financing Colleges are allotted to Service Candidates.
- Incentive Marks depends on the PHC Location they work.
- Maximum Incentive Marks given is 30.

Assistant Surgeon Cadre initially:

- Incentives for PG after Two Years of Continuous Service;
- 5% Marks per year for Rural Areas.
- 9% Marks per year for Difficult Areas in Plains.
- 10% Marks per year for Hilly Areas.

Master's in Operational Health

- Occupational Safety & Health

Medical Content Writing

- Needs good skills
- Can collaborate with Pharmaceutical companies

Teaching / Professor

- Can do PhD and apply for Lectureship
- Can do Research in field of interest

Medical Adviser

- Work with the Marketing Department to develop Marketing Strategies and Materials
- Work closely with the Medical Information Teams to make sure that information about all the Company's Products are available
- Provide support to Regulatory Affairs Department for obtaining applicable product
- Licenses
- Conduct Analysis of Competitors Products as well as own product pipeline
- Work with Medical / Technical Writers for creation of Marketing Material, Package Inserts etc
- Participate in Local and International Meetings to represent the company

Medical Career Advisor

- Accredited Post Graduate Diploma or Masters Degree in Global Career Guidance is available
- Duration....1 Year Full-time or 2 Years Part-time
- He is a person who Guides Students & Parents towards the Right Career Path
- Courses lead to Qualification in Career Development
- Background in Psychology is helpful
- Programs in Human Resources & Computer can be taken up, to become better equipped for the job of Career Counseling

Work with WHO/ UNICEF / CDC

- WHO offers 'Surveillance Medical Officer' jobs

- Check their WebPages for vacancies
- Create a profile on WHO e-Recruitment database
- Fill the forms & wait
- Can try going to WHO Office at Delhi to apply directly

Career for Doctors in WHO (World Health Organization)

- A Postgraduate MD is valued more than MBBS
- 5-10 years of relevant experience, in-country experience, knowledge of a 2nd language (French most common), publication record, carries weight
- People with masters in Public Health Surveillance, Research Methodology or with PhD are more likely to be considered
- Infectious Disease or a good Internal Medicine Program would be considered more for the job

Doctor Career in UNICEF (The United Nations Children's Fund)

- International Professionals are required to have Advanced University Degree in the relevant field
- Health Officer, Child Protection Specialist, Program Associate, Immunisation Officer, Nutrition Specialist, many such cadres available

Career for Doctors in CDC (Centers for Disease Control & Prevention)

- Before joining a job in CDC, Internship with the Organization can be done
- Gaining experience is the key to land in a job with CDC
- Create an Account & upload Resume in CDC
- New Employees go through an Orientation Program

- CDC Medical Officers serve as Advisors, Consultants & Administrators
- Medical Officers shift their Medical Practice to oversee Clinical Operations in a Health Care Setting

20. Career Opportunities for MBBS Doctors in Pharmacology Oriented Fields

Courses	Eligibility	Duration	Entrance	Institutions offering	Scope
M.D. Pharmacology	MBBS	3 years	NEET PG/NEXT	Government and private medical colleges	<ol style="list-style-type: none"> 1. Medical advisors in Pharma Industries 2. Faculties in Medical colleges 3. Clinical researchers
MS Clinical research	MBBS	2 years	Nil	Universities across India, USA, Europe Australia	<ol style="list-style-type: none"> 1. Have to compete with other Science Degree Graduates 2. Principal Investigator in Drug Development 3. Clinical research coordinators
Diploma in Clinical Research	MBBS	3 to 6 month	Nil	Private institutions like ICRI	<ol style="list-style-type: none"> 1. Have to compete with other Science Degree Graduates 2. Principal Investigator in Drug Development 3. Clinical Research Coordinators
DM (Clinical Pharmacology)	MD. (Pharm.)	2 years	State Entrance	AIIMS JIPMER NIZAMS	<ol style="list-style-type: none"> 1. Clinical Research Companies 2. Principal Investigators 3. Medical Advisors

Title	Skill	Employers	Remuneration Range	Demand
Drug Safety Officer	Pharmaco-vigilance Needs short term training	CROs like Iqvia, Icon PPD, Labcorp, George Clinical, Astra Zeneca, Novo Nordisk, Navitas Life Sciences, MSD, Covance, JSS Cliantha, Lambda, Novotech, Syngene Paraxel, Ardent, Novartis, Accenture, Reliance , TCS	Starts with 100K per month Senior level ranges to up to 5L	High

Clinical Research Associate	Clinical Research Training and Knowledge	Same as above	Starts with 75K for beginners	High
Medical Advisor to Pharma Industry	Sound knowledge in Pharmacology	Drug manufacturing and marketing companies like Ranbaxy, Pfizer	Starts with 50K goes up to few Crores depending on skill and seniority	Moderate
Principal Investigators in Clinical Trial	Knowledge in Clinical Trials with Diploma	Most Hospitals	Starts with 80k goes up to 5 Lakhs	Moderate
BABE Study Investigators	Pharmacokinetics knowledge and Design Training	BABE Centers	Starts with 75K for fresher's and goes up to 3 Lakhs for seniors	High for Freshers
Medical Writers	Sound Pharma knowledge in Drafting Package Inserts and Product Monograms	Pharma allied Companies, and contract agencies, listed on top	Depending on quality and seniority 50 k to 5 Lakhs	Moderate
CRC – Clinical Research Coordinators	Diploma in Clinical Research	Above listed companies	40K to 100K Beginning step for becoming Investigator	Very high compete with Pharma Graduates

21. INI- CET (Institute of National Importance- Combined Entrance Test)

- Institute of National Importance combined Entrance Test is a Common Entrance conducted by AIIMS Delhi twice in a year (January and July), for admissions to PG Degree Courses in Institutes of National Importance
- The Courses offered are M.D, M.S, D.M- Doctor of Medicine (6 years) & M.Ch- Master of Chirurgiae (6 years)
- AIIMS, Delhi
- AIIMS, Jodhpur
- AIIMS, Bhubaneswar
- AIIMS, Bhopal

- AIIMS, Bathinda
- AIIMS, Bibinagar
- AIIMS, Deoghar
- AIIMS, Manglagiri
- AIIMS, Nagpur
- AIIMS, Raipur
- AIIMS, Patna
- AIIMS, Rishikesh
- NIMHANS, Bengaluru
- JIPMER, Puducherry
- PGIMER, Chandigarh
- SCTIMST, Trivandrum
- Total Accredited seats can be viewed at <https://www.aiimsexams.ac.in/>

22. Fellowships: Short-Term Medical Courses

- Fellowship in Neonatology
- Fellowship in GI Endoscopy
- Fellowship in Andrology
- Fellowship in Diabetes Management
- Fellowship in Ultra-Sonography in OBG

23. Royal College Exams: Alternate Options

The Medical Council of India also recognizes the membership of Royal Colleges, UK that is considered as equivalent to the MD/ MS degree in India. Clearing the exams of Royal Colleges is an alternative option for MBBS graduates to get specialized in their favourite medical specialty.

- Royal College of Anaesthetists (RCoA)
- Royal College of Emergency Medicine (RCEM)
- Royal College of General Practitioners (RCGP)
- Royal College of Occupational Therapists (RCOT)
- Royal College of Obstetricians and Gynaecologists (RCOG)
- Royal College of Ophthalmologists (RCOphth)
- Royal College of Paediatrics and Child Health (RCPCH)
- Royal College of Pathologists (RCPath)
- Royal College of Physicians (RCP)
- Royal College of Psychiatrists (RCPsych)
- Royal College of Radiologists (RCR)
- Royal College of Speech and Language Therapists (RCSLT)
- Royal College of Surgeons (RCS)
- Royal College of Veterinary Surgeons (RCVS)

With the exclusive training from RCR Exam, you can clear all the following steps with ease:

Step 1: First – Two modules: Anatomy

Step 2: Final Part A – Two MCQ-Based Written Papers

Step 3: Final Part B – Oral Examination and Rapid Reporting

24. Online PG Medical Courses in India

- Fellowship (MMSc- Master of Medical Science, Blended)
- Fellowship in Non-Invasive Cardiology (Regular)
- Master of Medicine/ Master of Surgery (Blended)

25. Short-Term Courses

- Critical Care Medicine
- Post-Graduation Certificate Course in Emergency Service
- Post-Graduate Certificate Course in Critical Care
- Diabetes Management
- Training in Occupational Health
- PGDCC (Post-Graduate Diploma in Clinical Cardiology)
- Basic Life Support

26. Out of the Ordinary

- Molecular Imaging and Image Analysis
Molecular imaging and image analysis is a field that is rapidly gaining traction in modern times.
- Regenerative Medicine
Regenerative medicine is something pulled straight out of science fiction to many. However, it offers a promising future.

- Biomaterials and Implants
Biomaterials and implants deal with the implementation and creation of artificial organs that aid those who require it.
- Stem Cells
Stem cells and regenerative medicine has gained a lot of attention in recent times. It aims to treat the underlying cause of a disease.
- Immuno-technology
Immuno-technology is based on the application of cells and molecules in the immune system. It is an essential arm of biotechnology, which helps in industrial-scale implementation of the Immuno vaccine to treat the affected.
- Recombinant DNA Technology
Recombinant DNA Technology is a field dealing with DNA cloning and restructuring.
- Bio-sensors
With the exponential growth in IoT and connected society, the need for biosensors that can respond to the needs of an individual has great potential.

27. Courses after MBBS without NEET/ NExT PG

1. Post MBBS Certificate in Critical Care and Indian diploma in Critical Care

- Duration: 2+ 2 Years
- Eligibility: MBBS from any NMC Recognized University
- Course availability: Private institutions in India
- Accreditation: Indian Society of Critical Care Medicine
- Ref: <https://www.isccm.org/idccm.aspx>

2. Post-Graduate Diploma in Public Health Management

- Duration: 1year

- Eligibility: MBBS, AYUSH, Dental and Nursing
- Course availability: Private Institutions in India
- <https://phfi.org/course/post-graduate-diploma-in-public-health-management-pgdphm/>

3. Masters in Emergency Medicine (MEM)

- Emergency Medicine is a Special Domain of Medical Courses that prepares Doctors to cater to Emergency Cases in Hospitals, Clinics, etc.
- Masters in Emergency Medicine equips you with skills and knowledge to Cure Illnesses or Injuries whenever needed.
- Duration: 3years
- Eligibility: MBBS from any NMC Recognized University
- Course availability: Private Medical College and Institutions in India
- Minimum Qualifications: MBBS
- Course Duration: 2-3 Years

Specializations: Pediatric care, Resuscitation Medicine, Sports & Exercise, Global Health, Ultrasound & Renal medicine

Career Prospects

The Industries which you can explore after pursuing a Masters in Emergency Medicine:

- Disaster Management
- Rescue Operations
- NGOs
- Private Practice
- Public and Private Hospitals
- Mining Industry
- Defense Service
- Research and Development
- Nursing Homes
- Fire Stations

4. Postgraduate Diploma in Family Medicine

- Duration: 2 Years
- Entrance Exam: none
- Eligibility: MBBS from any NMC Recognized University
- Course Availability: CMC Vellore

5. Other Courses

- Bachelor of Occupational Therapy
- Bachelor of Science in Biotechnology
- Bachelor of Technology in Biomedical Engineering
- Bachelor of Science in Microbiology (Non-Clinical)
- Bachelor of Science in Cardio-Pulmonary Perfusion Technology
- Bachelor of Respiratory Therapy
- Bachelor of Science in Nutrition and Dietetics
- Bachelor of Science in Genetics

Nano-Medical Science

- Meritorious MBBS Graduates can opt for M.Tech. Programmes in Medical Nano Technology or Nano Medical Sciences. But limited opportunities are available for study. In Kerala, Amrita Centre for Nano Sciences under Amrita Institute of Medical Sciences (AIMS), Kochi, conducts M.tech. Nano Medical Sciences.
- Total seats: 20. This programme is fully-funded by the Department of Science and Technology. Meritorious M.Sc., MBBS, M.tech, M.Pharm and BDS holders are eligible for admission.

Combined Degree

- Dr. B.R. Ambedkar Centre for Biomedical Research under the University of Delhi offers M.Sc. - Ph.D. Combined Degree in Biomedical Sciences. This is a Four-Year Fulltime Course. Those who have obtained Bachelors Degree in Biomedical Sciences, Life Sciences, Zoology, Botany, Microbiology, Chemistry, Biochemistry, Environmental Biology, Biotechnology, B.Pharm., MBBS, B.V.Sc. (with 55 Percent Marks are eligible for Admission).

Private Practice after MBBS

- The most sought after choice of MBBS Aspirants is to set up a clinic or start Practicing Medicine at a Private Firm. However, this comes in with lot of challenges. This choice is opted by Medical Graduates far and wide to gain hands-on experience and earn money.

Career in Aerospace Medicine

Aerospace or Aviation Medicine is a Specialised Field of Occupational Medicine and corresponds to the Medical Treatment and Handling Medical Emergencies in a Space Environment.

- Study Requirements: MBBS, MD
- Duration: 5.5 Years+ 1 Year Internship
- Entrance Exam: NEET PG
- Average Salary: INR 10 Lakhs-20 Lakhs P.A
- Best Institute in India: Institute of Aerospace Medicine (IAM)

Top Universities: Following are some of the Key Universities providing a wide range of Degree and Diploma Courses in Aerospace Medicine.

- Monash University
- King's College London
- The University of Sydney
- University of Pretoria
- University of Otago
- University of North Dakota
- Wright State University
- Auckland University of Technology

Eligibility Criteria

Most of the Courses in Aerospace Medicine are available at the Postgraduate Level; the candidates should have completed their MBBS Degree with qualifying marks which can vary from College to College.

- Most Universities also require the applicant to clear NEET PG to pursue a Degree in Aerospace or Aviation Medicine.
- To study Aerospace or Aviation Medicine Abroad, its needed to provide MCAT Scores along with Language Proficiency Scores such as IELTS, TOEFL, PTE., also have to submit a lucrative Statement of Purpose (SOP) and Letters of Recommendation (LORs)

Career Opportunities in Aerospace Medicine

The list of Employment Areas in which you can build a Prosperous Career after completing a Degree in Aerospace Medicine:

- NASA
- Federal Aviation Administration
- National Transport and Safety Board
- Airline Medical Department
- Airline Medical Clinic
- Aerospace Manufacturing
- Commercial Spaceflight Operations
- Military
- Salary: Aerospace Medicine has many companies across the World that is connected to making Space-Related Medicines and other Pills. The average salary package for Aerospace Medicine in India can range from Rs. INR 10 Lakhs- 20 Lakhs p.a.

Future Aspects

The domain of Aerospace Medicine is expanding with the advent of Biotechnology and Innovations in Aviation as well. Further, it has sprouted into a varied array of Disciplines such as,

- Clinical/ Civil/ Military Aerospace Medicine
- Space Medicine
- Operational Medicine
- Emergency Aerospace Medicine
- Interplanetary & Space Station Medicine
- Research and Development
- Industrial Aerospace Medicine

- Gerontology & Geriatric Aerospace Medicine

Humanitarian Agencies

MSF (Medicine Sans Frontiers- Doctors without Borders)

- An Independent Humanitarian Agency dedicated to serving the Underserved Populations, especially in areas affected by Conflict or Natural Disasters.
- MBBS doctors can opt to serve in International or National Missions.

CDM (Clinical Data Management)

- Clinical Data Management (CDM) is an emerging domain of Clinical Research and concerns itself with the use of Computer Applications for Managing Trial Data or Information by storing them in Database Systems to support collection of data. In simpler terms, it is associated with the Integration, Collection and Validation of the Clinical Trial Data. Allied with the **Scope of Bioinformatics**, this field is replete with a Multitude of Career Opportunities that one can explore.
- Provided as a Postgraduate Program as it is a Specialized Field, Clinical Data Management involves an intensive Study of Data Generation and how Data is sourced into Clinical Trial Database.
- Entry Requirements: MBBS Degree

Top Universities in India

- ICRI – Jagannath University, Delhi
- ISBM University
- ICRI Bangalore
- Apeejay Stya University

- ICRI- ZEE Hingiri University
- People's University, Bhopal

Career Prospects

- For the Young Individuals wanting to pursue this New Springing Field of Clinical Data Management, there are a plethora of career prospects available in different sectors. Moreover, the Pharmaceutical Industry is in dire demand of Specialised Experts with the knowledge of Efficient Data Management for Medical Purposes. Further, aspirants can also choose to work in the arena of Research and Development to build Exciting Technological Innovations for the Medical Industry.

Some of the Major Job Profiles that one can consider in this field are:

- Clinical Data Manager
- Clinical Data Coordinator
- Data Validation Associate
- Data Manager
- Medical Coder
- Database Programmer
- Quality Assurance Associate

