

FACILITIES FOR PATIENT CARE, TEACHING, LEARNING & RESEARCH

Patient care

The Institute of Aerospace Medicine is not directly involved in patient care, the main roles being aeromedical training, research, and evaluation. However, in the affiliated Command Hospital (Air Force), Bengaluru regular audit of health care quality and patient safety are conducted through Review Committee Meetings. Workshops and guest lectures are conducted by faculty from Institutions like NIMHANS, Bengaluru for the benefit of health assistants. The hospital achieves continuous quality improvement in patient care and safety through regular clinical meetings, CMEs, and workshops.

The institute's re-compression chamber facility is used for administering Hyperbaric Oxygen Therapy (HBOT) to patients suffering from Sensory Neural Hearing Loss (SNHL), Gas Gangrene, diabetic foot, radiation necrosis, etc. This facility is being extended to civil patients at a very nominal rate. A grievance cell is available for redressal of grievances by the patients. Feedback information is collected from patients through interviews at the time of discharge and feedback forms. Patient complaint boxes are also available at various places for addressing the grievances.

Teaching – learning processes

The institute follows the rules and regulations as laid down by the authorities like RGUHS, MCI and Air Headquarters. The Institute has a dedicated section (Training Wing) for the smooth conduct and functioning of the training activities. Training Wing carefully prepares weekly training programme which is

circulated to all departments. To look after the activities of the affiliated university, there is another sub-section (University Division) under Training Wing. 1st year of the PG course mainly comprises of didactic lectures, practical demonstrations, simulator experiences and visits to other defence units/ organizations. A lot of emphasize is given in the 2nd and 3rd years on self and experiential learning methodologies viz, departmental attachments, journal club & seminar presentations, participation in national and international conferences and attachment with teaching hospital to enrich their clinical skills and knowledge. Each student carries out research work on their dissertation topic and learns to analyse and interpret the results. Students are also encouraged to participate in various activities of the institute to improve their professional competence. The trainees are evaluated throughout the course period and corrective actions are employed to help each trainee to appreciate the effort required to achieve professional efficacy.

Training curriculum includes attachment of students to Command Hospital, Bengaluru where the above-mentioned aspects are covered in depth. In addition, both students and faculty are encouraged to attend CMEs and Workshops organized at various teaching hospitals on matters related to patient safety aspects. The syllabus also includes a capsule on patient safety.

The students are attached to Command Hospital Bengaluru for six months period during the second year of course where they will be working under clinical departments like Medicine, ENT, Ophthalmology, Orthopaedics, Neurosurgery, Psychiatry, Physiotherapy. During this period students must attend patients in outpatient department and the wards and also encouraged to give case presentations and seminars etc. All these activities help to enrich the clinical knowledge of the students.

The intra network of the Institute provides easy access to information of common nature to both teaching and non-teaching staff. For the benefit of students, study materials have also been made available on this network.

Research Processes

The Institute is unique and one of its kind in South Asia and hence Service Officers with excellent record or Scientists with good academic and research experience only are posted to this Institute. Moreover, the institute provides excellent opportunities to the specialists for research/ teaching/ consultancy/ aeromedical evaluation and all necessary support to attain professional and personal goals. The teaching faculty members are encouraged to take up research projects and present papers in national and international conferences and publish their research work in reputed journals published by Armed Forces Societies or elsewhere. They are also encouraged to participate in CMEs & Workshops, Seminars, and symposia and to get associated with national/ international professional bodies.

The Institute extends the necessary support to the faculty who are keen on taking up collaborative research work with R&D organizations like DRDO, HAL, ISRO, IISc, etc. The Institute library is well equipped with internet and has subscribed to HELINET of RGUHS, Karnataka for e- journals. Similarly, the non-teaching staff are sponsored and encouraged to participate in Orientation Programmes and Refresher Courses for professional development. Majority of the faculty is from the Armed Forces Medical Services and the others belong to DRDO, Ministry of Defence. State-of-the-art simulators have been acquired for improvement in the quality of research, training and aeromedical evaluation under Human Space Project and other sponsored research programmes.

Few of the main objectives by IAM are:

(a) To train medical doctors as aerospace medicine specialists possessing good insight and awareness in this area of specialization to establish the Institute as one of the foremost institutions of the world in aeromedical training and research. Aerospace Medicine is a specialised area of medicine concerned with evaluation and maintenance of health, safety, and performance of aircrew/ aerospace-related personnel. The postgraduate course is aimed at imparting adequate knowledge of aerospace medicine to the medical officers to handle aeromedical problems at the air bases and also to undertake research work in the areas of aeromedical concern.

(b) To find solutions for Problems encountered : Most of the aircrafts in Indian Air Force inventory are of foreign origin and hence the reference anthropometric parameters used for designing the aircraft and AEA are as per their aircrew population. This gives rise to anthropometric mismatch many a time and indigenisation of AEA is required for use by IAF aircrew. These issues are regularly addressed through specific research studies taken up at the Institute as well as with the help of anthropometric data of Indian aircrew population available at the Institute

(c) To help with ISRO in the maiden Human Space Programme: GAGANYAAN MISSION.