

## **RAMAIAH MEDICAL COLLEGE**

## PHYSIOTHERAPY & REHABILITATION



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# Introduction

The Department of Physiotherapy offers diverse forms of clinical services. Through the medical expertise and clinical understandings, they assess, diagnose and treat illnesses and conditions. They use electrotherapy, medical acupuncture and dry needling, manipulation, mobilization, massage, and prescriptive exercise to help their patients.

The Department of Physiotherapy has established two centers for providing clinical services. One at the Ramaiah Medical College Hospital and the other unit at the Ramaiah Memorial Hospital which is christened as the Center for Rehabilitation. The Clinical department is well equipped for quality patient care. The institute upgrades facilities on a regular basis. For enhanced patient care and quality service new age equipment are procured and are available at the M.S. Ramaiah Hospitals Department of Physiotherapy.

The Department of Physiotherapy offers various specialty services in M.S. Ramaiah Hospitals for In- Patient and Out- Patient sections. The In-Patient services are given on referral basis to patients admitted under Broad and Super specialties in wards as well as in the intensive care units. The out-patient services are provided to patients referred inhouse from various OPD's. Apart from the Hospitals the Department also offers Out-patient services at KSCA, Center for Rehabilitation.

## **Orthopaedic and Sports Physiotherapy**

#### Overview

Orthopedic Physiotherapy & Rehabilitation focuses on comprehensively managing problems of posture, joints, muscles and soft tissues. The goal of rehabilitation is to regain strength, flexibility, balance, endurance so as to enable an individual to return to routine, recreation and sports.

The Rehabilitation services at Ramaiah Memorial Hospital focuses on detailed assessment of a patient's problem followed by strategising and individualising a treatment program. The state of the art facility is equipped with wide range of exercise therapy and electrotherapy equipments like Class-IV LASER, Isokinetic dynamometer, underwater treadmill, EMG-Biofeedback, Pneumatic exerciser which will help in faster recovery

#### What do we treat:

- Back pain
- Neck pain
- Frozen shoulder
- Arthritis
- Post fracture rehabilitation
- Ligament and soft tissue injuries,
- Post joint replacement Rehabilitation
- Poor Postures
- Repetitive strain Injuries
- Tennis elbow
- Plantar Fasciitis





## **Sports Rehabilitation**

We facilitate participation in competitive or recreational sports among all age groups by providing safe therapeutic programmes.

At Centre for Rehabilitation, we offer simple solutions where coaches and players can objectively monitor their physical fitness through performance profiling. Our state of the art facility and equipment give an advantage for objective assessments and management of our clients.





Sports Assessment and Rehabilitation services that we offer:

#### **ASSESSMENTS**

- Injury Risk Assessment and profiling
- Isokinetic assessments
- Aerobic/ Anaerobic capacity / VO2 max testing
- Gait Assessments
- EMG Biofeedback analysis
- RMR+ Fuel substrate Analysis

#### **REHABILITATION**

- Advanced injury management and Sports Rehabilitation Programmes
- Injury prevention programmes
- Sports specific functional training
- Customised Cardio Respiratory Endurance Training
- Temperature regulated underwater treadmill and aquatic training

## **Neuro Rehabilitation**

#### Overview

Our Neuro Rehabilitation centre is a facility with the state of art infrastructure. The Neuro Rehab services are function oriented and will accelerate improvement with the patients' activities of daily living and participation in the society.

#### Our motto is:

- To Improve the quality of life and Functional Independence in individuals with neurological dysfunctions
- To reintegrate the individuals into the community/society

To empower their abilities to return to work

#### ADVANCED TREATMENT FACILITIES:

- Hydrotherapy with underwater treadmill facility
- Biofeedback
- Gait Rite Gait Analysis
- Virtual rehabilitation
- Pneumatic therapeutic Gym
- Isokinetic Dynamometer
- Unweighing Track System
- Advanced electro therapy equipment

### WHAT DO WE TREAT:

- Stroke
- Spinal Cord Injury
- Traumatic Brain Injury
- Guillain Barre Syndrome
- Brachial Plexus Injuries
- Parkinson's Disease
- Movement Disorders
- Balance Disorders
- Multiple Sclerosis





## Cardio-Respiratory Physiotherapy & Rehabilitation

#### Overview

At our centre, Cardiac rehabilitation/Secondary prevention/Pulmonary rehabilitation programs are multifaceted, comprehensive and designed to optimize a patients physical, psychological and social functioning. We have a multidisciplinary and integrated approach. The components of this program include heath education, risk factor and lifestyle modification, counselling, physical activity, nutritional advice, exercise training, foster healthy behaviour thus reduce disability, improve exercise capacity, enhance psychosocial and vocational state of patients, promote active lifestyle and return to work.



#### Who will benefit:

- Individuals at risk of heart diseases like Hypertension and Diabetes
- Conservative management in heart failure and heart disease
- Obstructive/restrictive lung diseases
- Post procedures Angioplasty
- Post Surgeries- CABG, heart/lung transplant, pacemakers, valve replacement, lung surgeries
- Post covid-19
- Metabolic diseases
- Cancer conditions
- Obesity
- Sports fitness groups
- All of whom are looking to improving their exercise capacity, strength and endurance for a healthier lifestyle.

#### Rehabilitation Goals and Benefits:

- Aims to restore patient's independent life
- Improve exercise capacity and strength
- Decrease level of perceived exertion
- Reduced dependency on external oxygen support
- Decrease medication dependency
- Prevention of future complications
- Increase participation in physical and social activities
- Improvement in quality of life and overall health and well being

State of the art infrastructure facilities like Cardiopulmonary exercise testing (CPET), resistance and AI enabled aerobic exercise training equipment, cardiopulmonary monitoring systems. A typical program for these patients would contain supervised exercise sessions from week 1 for inpatients to week 12 post cardiac/pulmonary event as outpatients extending to a maintenance training phase.



## Paediatric Rehabilitation

#### Overview

At our center, we serve children and teenagers through a continuum from birth to high school years. Our Therapists involve the family in every aspect of therapy. We enhance every child's abilities and design therapy programs to address each child's unique needs. Our multidisciplinary approach towards assessment and planning of interventions aims to provides the best functional outcomes for every child.

#### **Therapies**

We offer a range of Therapy services to enhance every child's specific requirements

- Physiotherapy
- Speech Therapy
- Early Intervention
- Aquatic Therapy
- Orthotic Prescription

#### **Conditions**

Our Team works dedicatedly in treating children with the following conditions

- High risk infants
- Feeding/swallowing difficulties
- Speech language delays
- Developmental Delays
- Cerebral Palsy\
- Spina Bifida
- Traumatic Brain and Spinal cord injuries
- Muscular Dystrophies
- Brachial plexus injuries
- Genetic disorders
- Pulmonary disorders
- Congenital and traumatic musculoskeletal conditions

#### Assessment

We specialize in a range of assessments using Gold Standard tests administered by certified Therapists

- High Risk Follow up
- Neurodevelopmental Assessment
- Speech and language Assessment
- Sensory Profile
- Gait Assessment
- Pulmonary fitness assessment
- Orthotic Assessment



## Physiotherapy in Cancer Care

#### Overview

The physiotherapy program for cancer survivors at Ramaiah is based on current scientific evidence that recommend "exercise to be embedded as part of standard practice in cancer care from diagnosis to cure and as an adjunct therapy that helps counteract the adverse effects of cancer and its treatment"



Based on this philosophy, our service is integrated within the cancer care continuum and offers restorative, supportive and palliative care services that are tailored to suit individual requirements and include comprehensive treatment programs for

- Prehabilitation
- Pain Management
- Improving functional exercise capacity during and after chemotherapy/radiotherapy
- Management of adverse effects of cancer treatment such as Fatigue, Neuropathy, Sarcopenia, Osteoporosis
- Lymphedema, Trismus, incontinence and other post-operative complications
- Improving independence in daily activities
- Palliative care

## Women's Health

#### Overview

Our Goal is to provide highest quality services to cater to women of all age groups. We have a holistic approach to care that proactively identifies the risk factors and enhances functional outcomes in Women across life span. We engage in a comprehensive set of resources including clinical, behavioral and functional support for healthy outcomes for all WOMEN.

#### Patients will benefit from Physiotherapy if they are experiencing:

- Accidental leakage of urine when coughing, sneezing or laughing
- The need to urinate frequently or all of a sudden, uncontrollable urge to urinate
- Pain in the pelvic region
- Fecal incontinence
- Organ prolapse
- Pre- and post-partum related issues including back pain, pubic symphysis pain, diastasis recti etc
- Scar tissue concerns
- Coccyx disorders
- Dysmenorrhea





#### Diagnostic Services:

- Diastasis Recti Evaluation
- Bladder and Bowel Dairy
- Pelvic floor muscle function
- Pelvic gridle assessment
- Ante-natal & post-natal Physiotherapy Evaluation

#### **Treatment Services:**

- Electrotherapy Modalities
- Pelvic floor muscle and core exercise training
- Behavioral Techniques
- Relaxation Techniques
- Manual Therapy
- Ante-natal & Post-natal Exercise Program

## **Geriatric Rehabilitation**

#### Overview

The hospital has dedicated multidisciplinary geriatric clinic within its main outpatient block, conveniently located for easy access and speedy care for older adults. The department of Physiotherapy is integral to the geriatric team and offers preventive, curative and rehabilitative services to the patients. As part of its active aging initiative, the department conducts group exercise program at a frequency of twice a week. In addition, the department provides community outreach services to senior citizen groups such as Dignity Foundation, Sanjay Nagar, where the team offers active aging program once a week.







#### Services

- In-patient Rehabilitation
- Out-patient Rehabilitation
- Community Based Rehabilitation
- Group Therapy Programs

#### Assessments

- Comprehensive Geriatric Assessment
- Risk of Fall Assessment
- Gait Assessment
- Balance Assessment
- Cardio-Pulmonary Endurance Assessment

## Speech Language Pathology & Audiology

#### Overview

Our Speech language pathology services include assessment and therapy for communication disorders which are impaired due to speech and\or language deficits in all age groups. Their problems may have existed from birth or resulted from illness, accident, or injury.

The Speech-language pathology department provides services which:

- Evaluate and diagnose speech, language, communication, and swallowing disorders.
- Treat speech, language, communication, and swallowing disorders.
- Provide training and education to family/caregivers.

#### Services

Assessment and intervention of the following:

- Developmental delays
- Autism Spectrum Disorder
- Cerebral Palsy
- Fluency disorders/Stuttering
- Learning Disability
- Articulation disorders
- Voice disorders
- Aphasia, Dysarthria and Apraxia of Speech
- Dysphagia (Swallowing disorders)

## **AUDIOLOGY**

Audiology department uses diverse range of testing methods to determine if hearing loss is present in all age groups. Services provided are centered around the prevention of hearing loss and the identification, diagnosis and treatment of auditory impairments.

#### Tests administered for assessment:

- Pure tone audiometry
- Impedance audiometry
- Speech audiometry
- Oto acoustic emission (OAE)
- Brainstem evoked response audiometry (BERA)
- Neonatal hearing screening
- Hearing Aid Trial and fitting

#### Management includes:

- Recommend and provide hearing aid selection, fitting, and programming
- Recommend and provide hearing assistive technology systems (HATS)
- Counsel and educate patients and families/caregivers on the psychosocial adjustments of hearing loss

## Professional Scope of services of Department of Physiotherapy

The professional scope of practice consists of patient and client management, which includes diagnosis and prognosis, to optimize physical function, movement, performance, health, quality of life, and well-being across the lifespan. In addition, scope of practice includes contributions to public health services aimed at improving population health and human experience.