

# Concepts of Physical Medicine & Rehabilitation (Physiatry) in Medical Science & Bangladesh Perspective

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Physical Medicine and rehabilitation (PM & R) also known as physiatry or rehabilitation medicine is a branch of medicine that aim to enhance and restore functional ability and quality of life to those with physical impairments or disabilities<sup>1</sup>. It deals with total care of medical illness by drugs, physical agents, exercises and assistive devices. A physician having completed training in this field is referred to as physiatrist or rehabilitation medicine specialist. Physiatrists specialize in restoring optimal function to people with disease, and injuries to the muscles, bones, tissues and nervous system (such as stroke patients)<sup>1</sup>.

The term 'physiatry' was coined by Dr. Frank. H. krusen in 1938. The term was accepted by the American medical association in 1946. The field grew notably during and 2<sup>nd</sup> world war to accommodate the large number of injured soldiers<sup>2</sup>. In Bangladesh physical medicine and rehabilitation is started as a post graduate course in Bangladesh College of Physicians & Surgeons (BCPS) in 1990. Up to July 2013, about 70 fellows from BCPS has come out and serving all over the country.

Common conditions that are treated by the physiatrists include amputation, spinal cord injury, sports injury, stroke, musculoskeletal pain syndrome such as low back pain, fibromyalgia and traumatic brain injury. Cardiopulmonary rehabilitation involves optimizing function in those affected with heart or lung disease. Chronic pain management is achieved through a multidisciplinary approach involving psychologist, physical therapist, occupational therapist, exercise therapist, anesthesiologist and interventional procedure

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when indicated. In addition to previous methodology, stroke is often treated with help of a speech therapist and recreational therapist when possible<sup>3</sup>.

The major concern that PM & R deals with a medical field is the disability of a person to function optimally within the limitation placed upon them by a disabling impairment or disease process for which there is no known cure. The emphasis is not on the full restoration to the pre morbid level of function, but rather the optimization of the quality of life for those not able to achieve full restoration. Comprehensive rehabilitation is provided by specialists in this field, who act as a facilitator, team leader, and medical expert for rehabilitation<sup>4</sup>.

Rehabilitation must be started at the earliest possible time in order to ensure the best results. It is administered in conjunction with specific medical or surgical treatment of the precipitating disease<sup>5</sup>. The role of rehabilitation is to minimize disability and handicap, and a help of handicapped person lead a useful life within his limitation in order to make a disabled person in to a "differently abled" person<sup>5</sup>.

Rehabilitation Medicine is recognized today as a necessary and integral part of management of chronic diseases and disabilities. About 5 to 10 percent of total population are estimated to be in need of physical medicine and rehabilitation services at this time. At least three times as many physiatrist would be needed to provide those services<sup>6</sup>. There is also an increasing demand for rehabilitation services for all kinds of medical problems proportional to the increasing awareness among the general public that restoration of a satisfactorily high quality of life of the physically impaired patient<sup>7</sup>.

It is unfortunate for persons impaired by physical handicaps that as more and more hospital, skilled nursing facilities, and extended care facilities establish components of rehabilitation services, there are not enough qualified physiatrists available to provide the evaluation and supervision that result in best outcome<sup>7</sup>.

In Bangladesh, the demand of physical medicine & Rehabilitation service is extending day by day. As the awareness about this speciality and public interest rapidly growing up about non- pharmacological procedures of pain management, it is now emmence

need to grow up this speciality for comprehensive management of musculoskeletal problems including sports injuries. For example, many people and also many healthcare personnels suffer from neck pain due to muscular spasm & joints stiffness which is not due to specific disease rather than posture related conditions. These patients have special treatment in physical medicine as soft tissue massage, Ultrasound therapy, specific neck muscles exercise, ADL (Activities of daily living instructions) advices other than pharmacological agents as NSAIDS (Non steroidal anti inflammatory drugs) and muscle relaxants.

There are about 85 tertiary level healthcare institutes in Bangladesh which include govt. and private medical college hospitals, specialized govt. and non govt. hospitals. But the number of physical medicine & Rehabilitation Specialist or Physiatrist are only about 100 in number. According to our total population, for about twenty lacs people there is only one physiatrist. The number of physiatrist should be at least three time more than the present number. There is also shortage of proper Rehabilitation centres and other personnels as physiotherapist and Rehab technician. So special attempts should be taken from govt. and non- govt. sectors to overcome the deficiency of all of these shortages for comprehensive management of musculoskeletal problems of our patients.

## References

1. "What is physiatry- HSS" Hss.edu. Retrieved 2012; 10-20.
2. Grabois, M: Garrison, SJ; Hart, K.A; and Lehmkuhl, L.D, ed (2000). Physical medicine and rehabilitation: the complete approach. Melden, Mass; Black well science SBN 978-08654 25361.
3. Frontera, W.R.(ed). Physical medicine and Rehabilitation: principles and practice: Lippincott Williams & wilkins. 2010.
4. Krusen, F.H. Concepts in Rehabilitation of the Handicapped. Philadelphia, W.B. Saunders company; 1964.
5. Sunder S. Introduction to Rehabilitation Medicine, Textbook of Rehabilitation, joypee. 2002; (01).
6. Kottke. Frederic J, Stillwell. G. Keith, Lehmann Justus F. Krusen's Handbook of Physical Medicine & Rehabilitation. Preface to the third edition. 1982; Xxvii.
7. Kottke. Frederic J, Lehmann Justus F. Krusen's Handbook of Physical Medicine & Rehabilitation. Preface to the 4<sup>th</sup> edition. 1990; (xvii, xxiii).