## Prosthetic & Orthotic Sciences – Level of Education and Scope of Practice in Pakistan

Prosthetic and Orthotic profession deals with amputees and physically disabled people by providing/fitting them with appropriate devices to enable them to perform their daily activities. Prostheses (also known as Artificial Limbs) are devices that resolve the function and physical appearance of a missing limb. Orthoses (also known as braces or supports) are external support devices that improve the function of an impaired part of the limbs and spine.

Splints and braces made of steel and wood were used during ancient times, but most of the work in this area was done during the 20th century. The most significant contributions to Prosthetic/Orthotic sciences were made, stimulated by the aftermath of the first and second world wars and the polio epidemics of the late 1940's and early 1950's. During early 1960's some universities in the West started research projects mainly in Prosthetics. During 1980's some new materials and techniques were introduced and in 1990's significant work was done to start education programs in a number of countries under the regulations of ISPO (International Society for Prosthetics and Orthotics) and local regulatory bodies.

Today Prosthetic & Orthotic profession has emerged in a different shape, where massive research is underway in developing new designs of sockets, new light weight and strong materials, modular (Hydraulic, Pneumatic, Computerized and Myoelectrics) joints and components. Without strong theoretical and practical background nobody can deal with these high tech. materials, components and techniques. Many countries have started university level courses at graduate and post graduate levels and developed national regulatory bodies. ISPO (International Society of Prosthetics & Orthotics) is an international organization that offers accreditation as per the international standards. They evaluate courses offered throughout the world and award accreditation in different categories like Category 1, 2 and 3.

In Pakistan Prosthetic & Orthotic education started in 1988 at PIPOS (Pakistan Institute of Prosthetic & Orthotic Sciences) affiliated with KMU (Khyber Medical University). Apart from this three other universities are offering courses at BS level. So far none of these universities has acquired category 1 status of ISPO. At the same time none of these universities are offering post graduate courses, capacity building short courses, seminars, conferences and other CME activities.

Riphah International University has set new standards in other branches of Rehabilitation sciences like Physical Therapy, Speech Language Pathology and now intends to achieve and introduce higher standards in Prosthetics and Orthotics as well. The goal is to acquire category

status of ISPO at BS level and also start MS and higher programs in near future. Riphah Center of Excellence in Prosthetics & Orthotic Sciences (RCEPOS) that is going to be established in coming 3 years (3 phases) will lay down the foundation of highest standards in the country.

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