

CASA di CURA del POLICLINICO (CCP)

Casa di Cura del Policlinico (CCP) is a fully integrated multi-specialty clinical centre aiming at providing both inpatient and outpatient services mainly directed to neurological patients. The Centre, a 136-bed rehabilitation clinic plus 12-bed day hospital facility, is constituted as a Department of Neurorehabilitation Sciences, accredited by the Italian National Health System, and economically supported by Regione Lombardia.

The Department is composed by three 45-bed Units for hospital stay and four clinical services: (Neuropsychology, Phoniatory, Neuro-ophtalmology, and Psychiatry). Moreover, the clinic refers to internal Radiology service (including CT scan and MRI), and Laboratory for biological analysis; technogym's rehabilitation facilities and swimming-pool are also available.

CCP is aimed at offering chronic neurological patients the highest comprehensive standards of care in a comfortable environment, through a patient management approach organised around a core rehabilitation programme. The Centre draws together the expertise of a large team of specialists which perform a multidisciplinary service aimed to cover the full range of needs of patients with neurological disorders. The disciplines represented in the team include clinicians (neurologists, physiatrists, pulmonologists, cardiologists, phoniatrists), psychologists, motor and occupational therapists, speech therapist, dieticians, and specialist nurses.

The Neuropsychology service activity concerns the assessment of cognitive profile following a brain lesion and the implementation of specific rehabilitation programs for cognitive deficits. The Phoniatory service gives a significant support in assessing swallowing deficits in dysphagic patients; in consideration of nutritional aspects, specific rehabilitation interventions are provided to patients varying the consistency of food and using training techniques. The Neuro-ophtamology service operates assessing deficit in visual acuity and reduction of visual fields following a central nervous system pathology. The Psychiatric service offers clinical and pharmacological support for those patients and relatives who needs specific cares for mood and psychic disorders.

The main objective of our clinical interventions pertains rehabilitation of patients with different types of brain-lesions, for instance due to acute events such as cerebral stroke or traumatic brain injury. Stroke rehabilitation may include some or all of the following activities: strengthening motor skills, mobility training, range of motion therapy, neuropsychological evaluation and cognitive rehabilitation, therapy for language and communication disorders, electrical stimulation,

and virtual reality. Rehabilitation programs are also addressed to subjects requiring high complexity assistance, such as patients after acute severe brain injury, minimally responsive or in vegetative state. On the other hand, an increasing number of admissions also concerns chronic patients with neurodegenerative diseases, such as Parkinson's disease or Amyotrophic Lateral Sclerosis. Lastly, also some chronic paediatric neurological patients may attend the Centre, as an 8-bed day hospital facility and an outpatient clinic have recently been committed to Infantile Cerebral Palsy (ICP). CCP has been certified UNI EN ISO 9001:2008 for “*design and provision of training events in the medical field*” and “*provision of specialized rehabilitation services for adults in inpatient, day-hospital and outpatient regimen*”.

Our multidisciplinary approach to patients aims to integrate all services, enabling us to provide each patient with an individualized care plan, tailored to meet his specific needs. Since improving the patients' Quality of life (QoL) is one of the main goals of our Centre, in the course of clinical practice we evaluate the effects of our multiprofessional approach by using the Customer Satisfaction Survey developed by Regione Lombardia. The analysis of results collected during the period between January and December 2013 shows high level of satisfaction perceived by patients and caregivers: particularly, for inpatients the total score was 6.46 points out of 7 available on the Regional Scale.

Beyond clinical activities, our Department is active on education and research. Education is mainly directed to the different professional profiles of the team and provides update on rehabilitation fields and clinical management of the patients with neurological diseases. Clinical research projects are aimed to study aspects concerning assessment and rehabilitation techniques for motor, cognitive, linguistic, and occupational deficits caused by brain lesions.

A great part of these projects are in partnership with Istituto Superiore di Sanità (ISS) and Italian Universities from several main cities in the country, including Milan, Turin, Rome, and Trento. The cooperation between CCP and University Institutions is based upon know-how and technology sharing. We are especially interested in the following areas: Clinical Neuropsychology (attentional disorders and their interaction with the visual loss; aphasia and other language disorders); the effects of the transcranial Direct Current Stimulation (tDCS) in the treatments of brain injuries; the assessment of new tool for a more effective rehabilitation therapy.

In the last two years, collaborating with the Catholic University of the Sacred Heart in Milan, we also focused our attention on the *active aging* and the *patients wellbeing*, two crucial issues for citizens with neurological diseases. In addition, it is worth mentioning that “patient engagement” is the experience resulting from the conjoint emotional (feel), cognitive (think), and

conative (act) enactment of individuals in their management of the health issue. Therefore, in this context, we are now investigating on the patients wellbeing and engagement by using *horticultural therapy* protocols and planning a *healing garden*. These strategies may potentially relate to higher quality of care and patient-doctor relationship, thus improving patient's clinical markers and compliance to proscribed therapeutic regimens.

The key aim of CCP is to provide an ideal setting for promoting translational research in neurodegenerative diseases in order to facilitate the rapid transfer of research knowledge to the clinical environment. The Centre is actively involved in a clinical and preclinical research program into neurodegenerative diseases, particularly including biomarker analysis and genetic studies as well as innovative new therapies for affected patients.