
What has changed for taking charge patients with Parkinson disease during the pandemic period ?

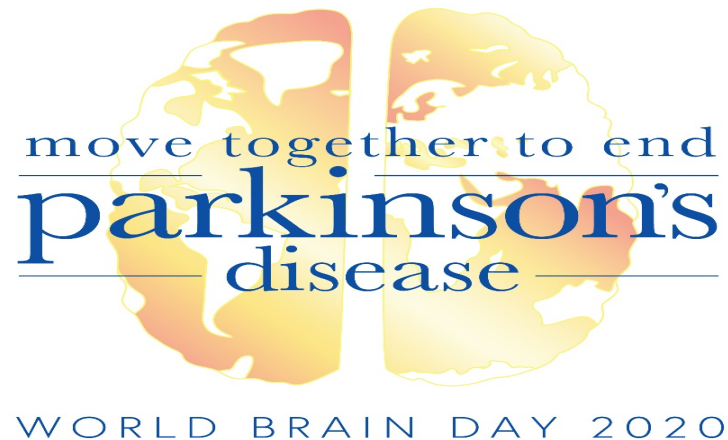
- **CATERINA PISTARINI**
ICS MAUGERI GENOVA –ITALY



WFNR
World Federation for NeuroRehabilitation

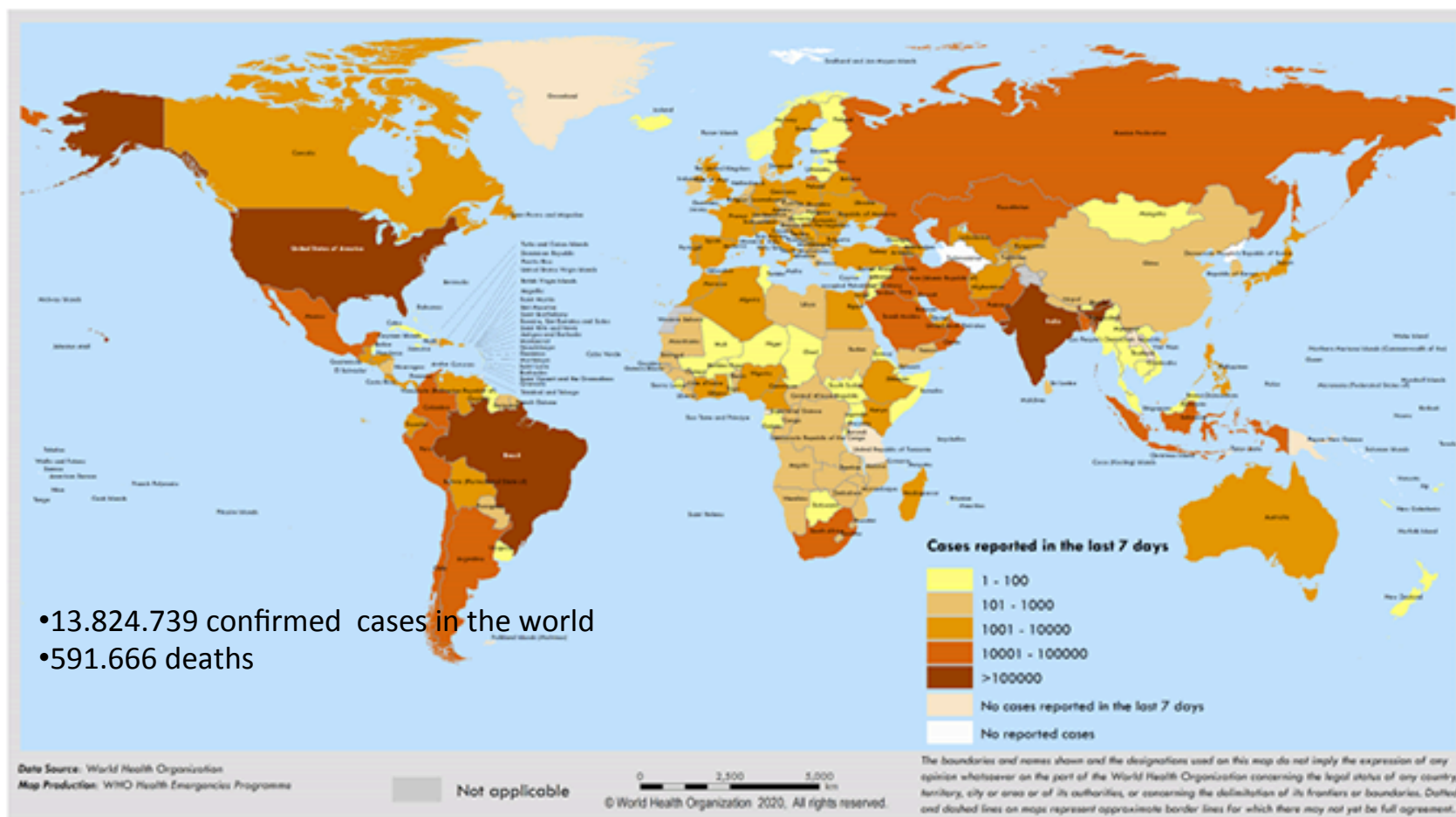
The World Brain Day has been endorsed in the 2014 to promote public awareness and to generate advocacy **related to brain health. The theme for this year's campaign is "our brain, our future"**.

WBD 2020 is dedicated to raising awareness for Parkinson's Disease that affects more than 7 million people of all ages worldwide. Parkinson's can impact movement and almost all aspects of brain function, and people with Parkinson's disease may be particularly impacted by the current COVID-19 pandemic. COVID 19 is a dramatic reminder that health care is a global issue



Surveillance

Figure 1. Number of confirmed COVID-19 cases reported in the last seven days by country, territory or area, 10 July to 16 July **



- 13.824.739 confirmed cases in the world
- 591.666 deaths

**See [Annex 1](#) for data, table and figure notes.

The COVID-19 pandemic presents a unique challenge and opportunity for the field of Neurorehabilitation

The neurologic and neuromuscular conditions and sequelae from the SARS-CoV-2 itself (e.g., thrombotic events with stroke, encephalopathy, other organ involvement), the overall debility, acute hospital/ICU stay and need for ventilator usage will result in significant physical, cognitive and functional deficits that require both acute and long-term rehabilitation interventions and care.

The added psychologic stressors (fear, uncertainty, altered lifestyles, altered activity) and the marked reduction in preventative health care brought on by the pandemic increase need of neurorehab interventions

Given the current difficulties for offering rehab treatments, a “care system” transformation has been necessary

TO ENSURE A FULL RESPONSE TO THE NEEDS OF COVID PTS

The hospitals organizations have established to ensure full safety for all and continuity in taking charge ,meeting the individual needs of patients already within the acute ward. Specific team of professionals have been dedicated , with minimum staff protected by appropriate PPE

TO MAINTAIN REHABILITATION ASSISTANCE for people with severe brain injury, Multiple Sclerosis, Stroke, Parkinson disease .Given the particularity of the rehabilitation work where direct and prlonged contact between patients and opeartors is expected , as well the duration of hospitalization, it was a challenging task

For those who passed the infection with swab negativization , requiring rehabilitation , specific pathways were identified within the hospital or at home with specific remote rehabilitation strategies

Highlights of COVID-related Illness

Individuals with neurological chronic disability continued to require ongoing management and disability-specific intervention.

Very important to consider , individuals with chronic disability such as PK who are therefore at added risk for functional and medical decline are likely to be receiving less than optimal preventative and restorative services, and clinical care must be modified (e.g., virtual visits, teletherapy) to meet their needs.

Increased Need for Neuro-Rehabilitation: Overall

These patients require a rehabilitation approach of high intensity, which is generally available only in post-acute rehabilitation wards. In an interdisciplinary, team setting that have to be appropriately aligned for COVID/infectious care.

Post-acute rehabilitation wards have the necessary expertise in the management of patients with complex clinical condition and can offer neuromotor and cognitive-behavioral rehabilitation and education and psychological support to caregivers.

BUT...

An other lesson from this severe pandemic emergency is that the inclusion criteria for admission to highly specialized post-acute rehabilitation wards has to be revisited and rethought

BECAUSE...

Professionals may be forced to choose between admitting patients with often unstable vital functions and poor recovery potential and discharging patients with severe disabilities in need of highly specialized rehabilitation. Additionally, rehabilitation professionals are overwhelmed by conflicting tasks such as maintaining the safety of staff and patients

CAREGIVERS

Another unfortunate consequence of the Covid 19 epidemic is that caregivers are no longer allowed to visit hospitalized patients, which has many negative consequences including lack of emotional stimulation of patients by their caregivers ,an aspect for which remote information technologies cannot fully compensate.

Meanwhile, caregivers are not able to care for their loved ones at home and, at the same time, may decline transfer to long-term care facilities that may be full of Covid-19 positive patients. The social isolation, alteration in service provision, lifestyle changes and psychological stressors to these individuals and their family and caregivers has been a risk of new or worsened issues.

In a context of rapid spread of the virus, it has been clear that limiting as much as possible the contacts that are not strictly necessary reduced drastically the risk of spreading the disease.

TELEMEDICINE , TELECONSULTING, TELECOOPERATION , TELEHEALTH became steps of rehabilitation treatment particularly helpful when it's needed to:

- **INCREASE TREATMENT COMPLIANCE**
- **ENHANCE THE FREQUENCY AND INTENSITY OF REHABILITATION PROTOCOLS**
- **INCREASE ADHERENCE AND MOTIVATION OF PTS**

TeleRehab

Smart solutions guarantee a continuous and coherent relationship from inhospital setting to domestic environment in a supervised way

These solutions allow personalized consultation and treatment via telephone or live internet connections , or via prerecorded sessions . In some countries , well developed, secure virtual care platform already exist; in others, media such as Zoom , Skype , FaceTime and others may be suitable alternatives .

However , it's helpful to take in mind that these systems can have some limitations, such as ready availability of equipments, technical malfunctions, potential for inadvertent personal data disclosure being limited for physical examination

What to do to help patients and family

One thing that many people with chronic condition as Parkinson disease is a feeling of being alone. That feeling is something that can get worse because of “social distancing.” Staying home to try to stop the spread of the virus might add stress, especially if they live alone.

The biggest help that can be offered is to find ways to keep the patients in their normal routine as much as possible.

A routine is especially good for someone whose life has already been changed by a brain injury. Encourage good sleep hygiene by helping them get up and go to sleep at the same time each day. Encourage routine, structure and engaging in healthy habits such as bathing regularly, eating healthy foods, and refraining from smoking or using alcohol or other substances. If it’s possible keep their exercise routine going. Try to get some fresh air every day.

The social isolation can also curbed by seeing if they’d like to set up online tools so they can stay in touch virtually with their friends, family members and other people on whom they rely. It is critical that the person with a brain injury maintains their social support system. This can be done using FaceTime, online video chats or other such tools. Seeing a person on the other side of the screen and being able to take a moment to check in and connect can be a great mood booster

What to do to help patients and family

Another thing that can be done is to find out how patient's doctors, therapists and other care team members are changing their appointments. Many are still able to offer telehealth services over the phone, computer or other devices. Even if support groups aren't meeting in person, for example, explore whether they're set up to meet online.

To check patient's supply of medicines too. If possible, to have three months' worth of prescription refills on hand, so they don't run out.

These are all things that help us stay in top mental health any time, but are especially important to [maintain a sense of control while COVID-19 "social distancing" rules are in place.](#)

Conclusions

Covid pandemic forced us to rebuild and implement our neurorehabilitation activity.

It was a unique challenge for offering new possibilities of neurorehabilitation treatments

For the Future :

We should rethink how organize the link between inhospital and home rehabilitation for maintaining greater quality, adherence and effectiveness of our treatments for patients who need.

11th WORLD CONGRESS FOR NEUROREHABILITATION

jointly with

**35th CONGRESS OF THE FRENCH SOCIETY OF
PHYSICAL AND REHABILITATION MEDICINE**

7–11 October 2020

WFNR
World Federation for NeuroRehabilitation

SOFMER



Thank You very much for your attention