



World Congress on

# Neurorehabilitation

## Robotic assistance in the rehabilitation processes, for elderly people.

For most of the population the usage of new technologies in the rehabilitation process is perceived as unnecessary. On the other hand, clinicians see the potential of such solutions. In fact, robotic technology in the rehabilitation process could be used in multiple ways.

Robotic solutions can be used as a simple telephone presence tool, enabling the necessary patient-doctor contact. They could also be used for data collecting and as a transferring device. Some of the devices such as wheelchairs could be equipped with the necessary sensors that play a role between the robotic solutions and traditional rehabilitation.

With the increase of more available cheaper solutions, one can ask the question: is there a vision for the future to use socially assistive robots (SAR) in the population of elderly adults with memory loss or failures? Moreover, the current pandemic situation poses the question. If the beforehand introduced solutions could be an answer for the future?

An SAR was used in the past decade in multiple populations with various effects. The elderly population due to heterogeneity of diseases and experiences with new technologies seems to be the most demanding. I would like to discuss the current state of the new technologies used in the rehabilitation processes of elderly people today. A special focus would be drawn to the usability and acceptability of SAR usage within this population. Important aspects of designing such a device and the implementation of such solutions will also be discussed in depth.