

Upper limb rehabilitation in (sub)acute stroke in West African low-income countries:

An observational prospective study focusing on dose and content

Introduction: The content and dose of upper limb training, the main components of rehabilitation after a stroke, is not known in low-resource income countries.

Objective: To identify the content and dose of upper limb rehabilitation in early phase poststroke in Burkina Faso and Benin.

Methods and patients: An observational prospective study was conducted in hospital and rehabilitation centre settings in Burkina Faso and Benin. Sessions of patients in the acute and subacute phase of stroke were observed for 4 weeks by recording the content and dose of upper limb rehabilitation using a standardized taxonomy of activities form.

Results: Eighty-one patients (Burkina Faso $n=59$ and Benin $n=22$) and 35 physiotherapists were observed. The median number of sessions during 4 weeks was 8 with 30 minutes median session length and a median duration of upper limb training of 15 minutes per session. The dose of therapy is higher in Benin than in Burkina Faso ($P < 0.001$). The upper limb training consisted of performing pre-functional activities for 85% of the time.

Conclusion: Upper limb physiotherapy in the early phase poststroke in low income countries was focused only on pre-functional activities and provided at a low dose. Future research should investigate how higher dose involving functional training could be provided in countries such as Burkina Faso and Benin taking into account the importance of improving upper limb in daily activities with the limited resources available.