

# WORLD PHYSICAL MEDICINE AND REHABILITATION CONFERENCE

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## Task-oriented rehabilitation for upper extremity post-stroke: A case study

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**Background:** Effective and feasible approaches for Upper Extremity (UE) rehabilitation are needed.

**Aims:** This case study demonstrated the conduction and efficacy of occupational therapy Task-Oriented approach (TO) for improving UE motor and the functional abilities post-stroke.

**Methods:** A case study of a 60 years old male (Mr. J) who had ischemic right cerebral vascular accident with resultant left hemiparesis with a chronicity of 12 years. Mr. J got 6 weeks of 3 hours/week TO treatment. TO consisted of client-centered functional activities consistent with Mr. J client-centered treatment goals. Measurements included Canadian Occupational Performance Measure (COPM), Motor Activity Log (MAL), Wolf Motor Function Test (WMFT), active range of motion and handheld dynamometry strength of the paretic UE.

**Results:** TO treatment followed large functional and motor improvements. COPM performance and satisfaction were 1.8 and 2.2 units greater respectively, MAL amount of use and quality of use were 2.1 and 1.39 units greater, WMFT time was 4.63 second faster and grip strength increased 14.33 lb. Furthermore, paretic UE range of motion, tone status and grasp abilities were improved.

**Conclusion:** To approach appears an effective and feasible UE post-stroke rehabilitation approach inducing clinically meaningful UE functional improvements. More studies are needed to provide more evidence for this approach.

## Biography

Khader A Almhdawi is the Chairman of Rehabilitation Sciences Department (PT, OT and Speech/Audiology) at Jordan University of Science & Technology (JUST), Irbid, Jordan. He has obtained his OT BSc from JUST in 2003 and his MSc from Colorado State University, USA and PhD in Rehabilitation Sciences (Stroke Rehabilitation) from the University of Minnesota, USA in 2011. He is currently researching in the field of adults' physical dysfunctions particularly of neurological challenges, assistive technology, occupational stress, education and accommodating individuals with disabilities and integrating them in community.

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