



Case Report

Application of Occupational Performance Model in Occupational Therapy for Rehabilitation in Medical Conditions - A Case Study

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ABSTRACT

This case study describes the application of occupational performance model in occupational therapy practice for physical dysfunctions in severe medical conditions. A case of 37 years old male diagnosed as Encephalitis with clinical presentation of left Hemiplegia and Seizure was referred. Initial evaluation revealed significant poor performance in cognitive, physical, emotional, social and dependent self-care tasks. The early rehabilitation was initiated based on occupational performance model which showed the marked improvement in the client's abilities to perform basic daily living skills. This case study reveals knowledge about application of this model for rehabilitation in acute severe medical conditions.

Keywords: Encephalitis, Occupational Performance Model, Occupational Therapy.

INTRODUCTION

Encephalitis is the inflammation of cerebral tissue caused by viral agents or other toxins. The etiology and incidence depends on factors such as geography, culture and frequency of exposure to vectors responsible for viral transmission. ^[1] It has a significant effect on affected individual's prognosis as it is associated with multiple dysfunctions. In majority of the cases, it is associated with seizure. In addition to detrimental effects of encephalitis, the seizure also has an effect on the functional disability (Cognitive, Behavioral, physical, social, emotional and vocational). This makes the rehabilitation part a bit more complex.

Occupational performance can be defined as the ability to perform those tasks that make it possible to carry out occupational roles in a satisfying manner that is appropriate to the individual's developmental stage, culture and environment. ^[2]

Occupational Performance Model is a treatment continuum for physical dysfunctions in occupational therapy practice. According to this model, treatment is always within the context of occupational performance. There are four stages in this model. Stage one - Adjunctive methods; Stage two - Enabling activities; Stage three - Purposeful activity and Stage four - Occupational performance and occupational

roles. The stages in this treatment continuum may overlap or can occur simultaneously and in a step-by-step progression. It takes the patient to a logical progression from dependence to occupational performance to resumption of life roles. This model serves as a conceptual system for occupational therapy practice in physical dysfunction with a goal of maximum level of independence in occupational roles. [2]

Hence this single case study attempts to apply this model to improve occupational performance of a client who was primarily diagnosed as Encephalitis associated with Left Hemiplegia and Seizure disorder. He was referred to Occupational Therapy (OT) Department for functional rehabilitation. OT assessment and intervention focused to achieve maximal level of independence in daily living tasks and his vocational aspects using occupational performance model.

CASE REPORT

A 37 years old male client was referred (after vital parameters are stable) to occupational therapy services after one month of admission in Medical ICU. In the Initial assessment, the client was in Glasgow Coma Scale scoring of 6/15 (E3M3 VT), with pressure sores of Grade 3 over the both greater trochanters. Bilateral foot drop was observed with minimal scarring/ skin ulcers in posterior aspects of ankle and minimal pressure ulcers over the occipital region on head. He also had Tracheostomy, NG tube and an indwelling catheter was present. He had repeated coughs and expectorants through tracheostomy. Generalized muscle wasting was observed due to prolonged immobilization and disuse.

The client is a tailor by occupation and lives in nuclear family with his wife and two young school going children. Early rehabilitation was initiated from Intensive Care Unit with overall goal of attaining maximal level of functional independence in

occupational performance (Activities of Daily Living (ADL), work & Leisure) and to resume his previously valued occupational/ life roles(earning member of family, Taylor, Father) based on occupational performance model.

At *stage one of Adjunctive methods*, the following therapies such as bed positioning to prevent further pressure sores, Bilateral Resting Ankle Foot Orthosis (AFO) to prevent foot deformities and to maintain in neutral position of ankle joint, Passive mobilization of all extremities to prevent Tightness & Contractures, sensory stimulations (tactile, auditory, visual) to create alertness and basic orientation was initiated.

Enabling activities of stage two was initiated simultaneously with a few activities of stage one such as Passive Range of Motion, Resting AFO and bed positioning. The enabling activities initiated were peg board activity, stacking cones, human body puzzle and marble activity which are prerequisite for purposeful activity. These activities were provided with use of specific techniques and gradations from assisted sitting to sitting without back support in order to retrain sitting balance, peg board activity to encourage and facilitate Active Range of Motion (AROM) for bilateral upper extremity and hand. Both proximal and distal AROM in gravity eliminated plane to against gravity and graded to resistance level were provided in order to strengthen the upper extremity muscles. These activities are not likely to be as meaningful to the patient but were provided as an ancillary part of treatment program to train specific sensorimotor, perceptual and cognitive functions necessary for activities in performance areas.

In *stage three of purposeful activity*, the relevant and meaningful activities to the client were provided. Basic ADL activities of upper body dressing involving bilateral

extremity use, grooming activities of combing hair were provided. Work related tasks were initiated based on job analysis. Tasks like cutting a paper and clothes with a scissor, taking measurement of a cloth piece with measuring tape, stitching a larger button with a hand held large needle were initiated. These tasks were graded from simple to complex and adapted according to the client's level of abilities. Leisure activities such as reading newspaper, social talks with a neighbor patient and their family members were encouraged.

In *stage four, occupational performance* of basic daily living activities and work related tasks were provided to the client. Basic daily living tasks of wiping his face with wet towel, wiping his mouth with cloth, combing his hair with a comb on right hand and holding a hand held mirror in left hand, donning and doffing of a shirt were encouraged with physical prompts. The complexity of work related activities of cutting a paper pattern design, cutting clothes pieces with appropriate measurement were facilitated.

DISCUSSION

There was a significant improvement observed in basic self-care and in work related activities as therapy was initiated in early stage using this model and was consistent as the patient was in hospital for rehabilitation. The occupational performance model guided the sequence of therapy to be followed from acute stage of dependent to the stage of independent living

of the client thereby reducing caregiver burden. This case study reveals that the occupational performance model is more feasible for an occupational therapist to practice for physical dysfunctions in acute severe medical conditions. Added advantage of this model is that the use of activities in stage two & three acted as a good motivator for the client, a goal to complete the task thereby minimizing rote exercises to improve performance. Thus it enabled client to recover in a faster phase in spite of the severity of the condition.

CONCLUSION

This case study explores the application of occupational performance model for client with severe medical conditions. Thus it give some hope that this occupational performance model can be used to rehabilitate other such medical conditions and provide us with sufficient information about how to initiate and progress the occupational performance for rehabilitation.

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REFERENCES

1. Cash JC, Glass CA. Family Practice Guidelines. 2nded. New York: Springer Publishing Company; 2011.
2. Pedretti LW. Occupational Therapy: Practice skills for physical dysfunction. 4th ed. Missouri: Mosby Inc.; 1996.

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