Early Occupational Therapy Intervention Contributing to Prevention and Management of Delirium in Elderly Rehabilitation – An Experience in KH
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Introduction
3D (Dementia, Depression and Delirium) are common in elderly patients. In clinical practice, it was found that the prevalence rate of delirium is competitive to that of dementia and depression. The impact of delirium on clinical outcome of elderly rehabilitation can be remarkable. However, the screening and management of clients with this problem is sub-optimal. It is justified to have a revisit of the topic by literature review and review of our local clinical practice by case trial and studies.

Objectives
1. To understand the topic of delirium through literature review by:
   1. learning the current clinical practice in prevention and management of delirium
   2. identifying the essential components of delirium detection and management that can be adopted locally
2. To pilot OT practice in selected cases of delirium in extended care wards

Methodology
1. Searching related literatures by systematic review to understand the clinical picture of delirium, its pathophysiology, predisposing factors and its impact on elderly rehabilitation.
2. Identify the effective treatment protocol in prevention and management of delirium by summarizing related RCT studies.
3. After literature review, practice the OT related interventions on cases in two medical extended care wards of KH. The outcomes of intervention were analyzed and summarized for reporting.

Result
A. Overview of Literature Search
The etiology of delirium is complicated as explained by Multifactorial Model of Delirium in Elderly (Inouye et al 2013). The common at risk group are elderly >75 years old, at post operation or critically ill. The
phenomenon is common in acute, subacute as well as nursing home setting. The predisposing factors are cognitive impairment, functional dependence, multiple comorbidity, sepsis, dehydration, visual & hearing impairment and polypharmacy. Interventions targeting on early identification and follow up with prompt treatment will bring about success in prevention and management of delirium.

B. Intervention contributing by OT

With reference to the clinical pathway of delirium presented by Inouye in 2006, it was found that OT can contribute in the intervention of delirium by early identification using a delirium screening tools called Confusion Assessment Method (CAM), cognitive assessment by MMSE or MoCA, and conduct dementia or depression assessment to aid establish differential diagnosis. In addition, OT can contribute in prevention and non-pharmacological treatment of delirium by reality orientation training, ADL training meeting individual patient needs to facilitate early mobilization and individualized training activities to promote mood stabilization, adaptation to ward routine and sleep hygiene.

C. Review of Outcome

Summarizing 5 case studies with episode of confusion, it was found that early OT intervention can yield positive outcomes in facilitating case management direction and early discharge planning. The management of two patients was made clear after conducting cognitive screening and assessment to help establish differential diagnosis of pseudo-dementia and dementia with delirium due to sepsis. Another patient recovered from delirium (MMSE from 10/30 improved to 27/30) after orientation training and discharged to OAH smoothly. Daily orientation & ADL training yield positive outcome for a patient with delirium on top of mild dementia. Finally, a patient with moderate dementia recovered from delirium state after behavior management to improve her feeding habit.

Conclusion

The clinical case trial and review help OT gaining more clinical experiences to consolidate local practice with reference to evidences. To promote the practice in the clinical team, establishment of a local multi-disciplinary clinical pathway in prevention and management of delirium for our elderly patients group is recommended.