Development of OT Service Manual for Elderly Patients with Delirium in Hospital Setting – Facilitating Early OT intervention in Prevention and Management of Delirium

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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. A working group was set up under OTCOC elderly specialty group to develop a OT services manual for prevention and management of delirium by the input of multi-cluster clinicians.

Objectives
1. To understand the topic of delirium through literature review by learning the current clinical practice in management of delirium 2. To identifying learning components in area of assessment, prevention and management of delirium which can be adopted locally 3. To develop clinical pathway in the prevention and management of delirium

Methodology
1. Set up a working group with expert clinicians from the seven clusters as members 2. Searching related literatures by systematic review to understand the clinical picture of delirium, its pathophysiology, predisposing factors and its impact on elderly rehabilitation. 3. Identify the effective treatment protocol in prevention and management of delirium by summarizing related evidence. 4. Summarize the literature search to write up a service manual with clinical pathway and delirium management kit 5. Pilot trial and practice the OT related interventions on cases in two medical extended care wards of KH. The outcomes of the intervention were analyzed and summarized for reporting.

Result
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.

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 two major areas: 1. Early identification by screening using Confusion Assessment Method (CAM), supplement with, cognitive assessment by AMT, MMSE or MoCA measure severity using Delirium Rating Scale or MDAS 2. Non-pharmacological management by: Cognitive stimulation activities or 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. Provision of visual and hearing aids to enhance communication of patients with sensory deficit.

Review of Outcome in pilot trial A trial application of the manual was conducted on some cases in extended care wards of KH. The prevalence of delirium was 21%, 22 out of 104 new admission in 10 working days. Summarizing 6 case studies with episode of confusion, it was found that early OT intervention can yield positive outcomes in cognitive & ADL assessment and behavior changes, ultimately facilitating case management direction and early discharge planning. (Refer to appendix table)

Conclusion The service manual facilitates OT to consolidate local practice with reference to evidences. The data of the pilot trial reviewed effect of the OT intervention. 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 are highly recommended.