



## Service Priorities and Programmes Electronic Presentations

**Convention ID:** 894

**Submitting author:** Ms Alice Po Shan CHAN

**Post title:** Senior Occupational Therapist, Tai Po Hospital

### **Cognitive Stimulation Techniques for Elderly People**

*ChanAPS*

*Occupational Therapy Department, TPH*

#### **Keywords:**

Cognitive stimulation techniques

errorless

rote learning

elderly

#### **Introduction**

Reality orientation (RO) is a common strategy used to re-orientate people with cognitive impairment by constantly providing repetitive orientation to their environment, including information on time, place and person. When people with cognitive decline are hospitalized, maintaining orientation to an unfamiliar and rapidly changing environment is extremely difficult. Different approaches are discussed in the literatures which aim to facilitate the person to function as effectively as possible in the new environment.

#### **Objectives**

This study aims to identify the better cognitive stimulation technique applying to elderly patients to help them to re-orientate to time (year, season, month, date, day) and place (region, district, hospital, department, floor level) in an sub-acute hospital setting.

#### **Methodology**

Individual RO training on basic level of environmental information was held consecutively for 5 days in a week. Three different cognitive stimulation techniques were used in three different groups of patients. Convenient samples of patients aged over 65 with their MMSE below cut-off were recruited. Patients with psychiatric illness, visual, hearing and speech problems which might hinder effective communication were excluded. They were randomly assigned to Group A as control (conventional treatment), Group B for errorless rote learning (RL), Group C for errorful multiple choice (MC) and Group D for errorful logical deduction (LD).

#### **Result**

Forty-four elderly patients with mean age 83.9 years were recruited. Twenty-six (59%) were women. The average MMSE score was 13.1 (range 6-19). There was no significant difference in cognitive function among the four groups ( $p > 0.05$ ). The average day for the patients to achieve their individual highest orientation scores was Day 3. Significant improvement in orientation was found in all intervention groups

(Group B  $t(11)=-8.99$ , Group C  $t(10)=-5.41$ , Group D  $t(10)=-6.36$ ;  $p=0.00$ ) with Group B, the errorless rote learning group having the lowest p-value. Change in orientation scores was correlated neither with age nor MMSE scores. Correlation between change in orientation scores and MMSE scores was only found in Group B ( $r=0.58$ ,  $p=0.05$ ).

It is concluded that cognitive stimulation techniques are useful, with errorless rote learning being more superior amongst the three cognitive stimulation techniques used in this study. Given the relative short length of stay and their abilities to participate with their acute medical conditions, the potential use of errorless rote learning technique to re-orientate confused elderly patients should not be ignored.