The effect of Cognitive Behavioural Therapy (CBT) on the treatment efficacy of non-fluent aphasic patients?

Yan-Yu, Loretta, Hon

Hong Kong Polytechnic University

Wing-Sze, Samantha, Li

Hong Kong Polytechnic University

Man-Tak, Leung

Hong Kong Polytechnic University

Siu-Man, Raymond, Ting

North Carolina State University

Abstract. Literatures suggest that patients with left frontal Aphasia normally associated with psychological problems (Atchley et al.,2003; Demaree et al., 2005). However, traditionally, treatment for aphasic patient focuses only on language and psychological problems are seldom addressed by the speech therapist. This study aims at adding psychological treatment (Cognitive Behavioural Therapy CBT) into traditional language treatment and evaluating the effect of CBT - the self-efficacy levels (Motl, et al., 2009) have on the treatment efficacy of the intervention. An AB single case design was employed in this study. This study involved two phases of intervention periods and two pairs of aphasic patients were recruited for the study. In each pair, there is one matched control subject and one experimental subject . In the

first phase, both control and experimental subjects received language treatment only. In the second phase, the control subject continued language treatment and the experimental patient received both language and CBT treatment. The investigation compares both the language performance and psychological status of the two Aphasic patients across two phases. A number of measures, including Cantonese Aphasia Battery (CAB), naming task developed by the clinicians, Chinese Beck Depression Inventory II (C-BDI-II), Stroke Cognitive Questionnaire Revised (SCQR), Chinese version of Patient Health Questionnaire 9 (PHQ-9), and Chinese version of Patient Health Questionnaire 15 (PHQ-15), were used continuously in the to illustrate the language performance and psychological status of the patients across sessions. Moreover, language samples in naturalistic context at the start of CBT treatment and at the end of CBT treatment were collected from both experimental subjects for language profile analyses. Results showed that traditional language therapy was effective to all four patients. Additional cognitive behavioural therapy further promoted language performance of the experimental subjects. The result shows that the patients who received both language and CBT treatment in the second phase have better improvement in his language performance when compared to his progress in the first phase. This conclusion is further substantiated when compared with the control subjects. With the language therapy alone, it is found that subjects/

psychological states improve. However, the experimental patients showed better psychological status improvement after receiving CBT treatment. The clients' ability and the training vocabulary size improvement explained the improvement in language performance. Theory of self-efficacy explained the additional language improvement and the facilitation effect between language therapy and psychological states. The present study appears to support the notion that psychological treatment could further facilitate the language performance. The study provides preliminary evidence that CBT may be beneficial to the language treatment of Aphasic patients. Further research with a larger clinical samples and streamlining treatment programme is suggested.

References

Atchley, R. A., Ilardi, S. S., & Enloe, A. (2003). Hemispheric asymmetry in the processing of emotional content in word meanings: The effect of current and past depression. *Brain and Language*, 84, 105–119.

Demaree, H.A., Everhart, D.E., Youngstrom, E.A., & Harrison, D.W. (2005). Brain lateralization of emotional processing: Historical roots and a future incorporating "dominance". *Behavioral and Cognitive Neuroscience Review*, 4, 3-20.

Motl, R.W., McAuley, E., Snook, E.M., & Gliottoni, R.C. (2009). Physical activity and quality of life in multiple sclerosis: Intermediary roles of disability, fatigue, mood, pain, self-efficacy and social support. *Psychology, Health and Medicine* 14(1):111-24.