Evidence-based approach of systematic review on the effects of Therapeutic Horticulture to adult mental clients with depressive symptoms

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Introduction
Mental clients with depressive features are common across different settings. Although more and more advanced drug treatment emerging over last decade, a substantial number of patients do not respond to conventional treatment (Gonzalez et al, 2009). It warrants our effort to review effective complementary intervention to such group of clients to promote early recovery. Therapeutic Horticulture (TH) is defined as a process using plant-related activities by healthcare providers to improve participants’ well-being through active and passive involvement (Gonzalez 2009). It was found beneficial to people with depressive symptoms such as people suffering from chronic illness across different culture and national borders (Meehan 2003, Maller et al, 2006, Page 2008, Hansen Ketchum et al, 2009). This paper attempted to illustrate the clinical value of such intervention in hope to enable reader have more insight.

Objectives
1. To scrutinize literatures about Therapeutic Horticulture
2. To make use the knowledge and experience to add value to clinical services

Methodology
A working group, composing of 3 experienced nurses who had completed a series of EBN workshops, conducted a systematic review of the topic. Materials retrieving from 9 databases scoping from 1997 to current year and covering adult mental clients with depressive symptoms were searched. Duplicated articles were eliminated and Full text or abstract with English language were retrieved. To facilitate consistent literature appraisal, it adopted a “PICOs “framework including (1) population, (2) intervention, (3) comparator, (4) outcome and (5) study design over the reviewing process. Hierarchical consideration was allocated to literatures of systematic review and randomized control trial. Validity of findings were strictly scrutinized according to “RAMBO” schema; (i) randomization and representative of sample pool, (ii)
ascertainment of the, (iii) independent measurement, (iv) independent assessment and (v) objectives relevant to pre-determined clinical question (Figure 1).

**Result**

- Eighteen articles matching the preset criteria and found relevant to address the clinical question were reviewed (Figure 2).
- When horticulture was used in group-based settings, immediate positive effects were observed in terms of quality of life, well-being & self-concepts.
- Two types of intervention using horticulture were identified; therapeutic horticulture and horticulture therapy. Their common feature are using plants and environment as tools to create an context conducive to (1) reduce anxiety & depressive features, (2) relax, (3) promote self-image through achievement & (4) enhance socialization. Public Health Implications Therapeutic Horticultural can be used as vehicles of rehabilitation programs for adult mental clients with depressive symptoms to improve depressive symptoms when combining with conventional treatment.