In Taiwan, approximately 26-35% of older adults living in long-term care institutions have suffered from anxiety perhaps due to changes in the normal patterns of life, family problems, extreme pain, dependence on others or dying process (Huang, 2000). Anxiety has negative impacts on physical and psychological health, and quality of life among residents (Au, Tsang, Ling, Leung, Ip & Cheung, 2015). Interventions are required to manage the psychological symptom among institutionalized older adults.

Acupressure, a complementary medicine technique, has been documented that it effectively relieved the psychological symptom among institutionalized elders. Acupressure could be believed to be one non-pharmacological method that might promote psychological well-being among institutionalized older adults.

To examine the effects of acupressure on anxiety in residents living in nursing homes.

Methods and Materials

Design: A double-blind randomized control trial with and repeated measures.
Participants: All participants met the following criteria: 1) age ≥ 65 years old; 2) living in the nursing home for ≥ 3 months; 3) be able to communicate with the research team; 4) without cognitive impairment (a Mini-Mental State Examination score ≥ 25); 5) absence of any problems in the problem point such as fractures, ulcers, skin diseases or inflammation; and 6) be willing to participate in the research. A total of 62 participants were recruited from a nursing home in Taiwan (Figure 1).

Interventions: All study participants provided informed written consent. They were assigned to the experimental group (n=31) and control group (n=31) by using random selection. The five selected points (Figure 2) for the intervention and instructions were developed by the researchers and a senior Chinese medical expert with clinical acupressure experience. In addition to the routine care, the intervention group received acupressure at bedtime 3 times a week, 20 minutes per time, and 3-5 kilograms force pressing for 8 weeks. The control group received only the routine care.

Outcomes: K10 is a 10-item scale for non-specific psychological distress (Kessler et al., 2002). Measured dimensions include feeling depression, restlessness, anxiety, hopelessness, and worriedness. Items are scored from 1 (none of the time) to 5 (all of the time). The total score ranges 10-50. A score of ≥ 22 indicates worse levels of psychological distress. Cronbach’s alpha for the scale was 0.89 in this study.

Data collection: Data at baseline (T0), the end of the intervention (T1) and one month after the intervention (T2) were collected. Statistical analysis: Demographics were compared using a χ2 test and Fisher’s exact test. In case of significant results, a post-hoc test with the Sidak correction was used to assess pair-wise comparisons of the K-10 within a group. An independent t-test was used to compare the mean K-10 scores between the two groups. Data were analyzed using PASW 22.0 for Windows (SPSS, Chicago, IL, USA). All statistical tests were 2-tailed, and p values of < 0.05 were considered statistically significant.

Results

Both groups contained more females than males. Those aged ≥ 81 years old, widowed, and self-pay for the cost of living at the nursing home constituted the highest proportions in both groups. No significant differences existed between the two groups in terms of baseline data (Table 1). There were no reports of adverse effects of the intervention in any participants.

The intervention group had significantly lower k-10 scores compared to the control group at T1 and T2 (Table 2). The scores of the k-10 of the intervention group at T0, T1 and T2 were significant differences (Table 2).

Discussion

These results are similar to findings of other research showing that acupressure improved psychological distress, reduced depression, promoted well-being, and enhanced comfort (Kashefi, Khajehi, & Ashraf, 2011).

Modern medicine has proven that acupressure can regulate activation of neural circuits during anxiety and nervousness and maintain homeostasis of neurochemical mechanisms to promote psychological healing (Hsu & Yang, 2010).

The study was limited to one nursing home, with a sample size of 62 people, and results cannot be inferred to be valid for other institutions.

Conclusions

Acupressure may act as a means to alleviate anxiety for older adults in nursing homes, which may enhance quality of life.

Acupressure may be provided and incorporated into health education programs for nurses or staff members in long-term care institutions.

Future Directions

More-rigorous investigation of this topic requires multicenter studies with larger samples.

References