

The Effect of Reminiscence Therapy on Diabetes Mellitus Patients with depression at The Persadia Clinic Dustira Hospital Cimahi

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Abstract

Diabetes mellitus is a chronic disease that is increasing annually. Without proper treatment and control, the disease will lower the quality of life of the patient and is certain to cause complications. Treatments for diabetes mellitus are lengthy and they require discipline that will sometimes change the patient's life pattern. As a result, it may bring adverse psychological effects on the patient, such as depression. In turn, depression can affect the treatment of diabetes mellitus. Reminiscence therapy is one of the psychotherapy treatments proven to be effective in reducing depression by focusing on the positive aspects of the patient. The purpose of this research was to know the effect of reminiscence therapy for depression among patients with type 2 diabetes mellitus at Persadia clinic in Dustira Hospital Cimahi. This research employed the pre-experimental method with a group of 32 respondents at pretest and posttest stages, with a non-random, purposive sampling method. The data collection was obtained by questionnaires following the PHQ-9 format and analyzed statistically using a dependent t-test. The results showed an average score of depression before therapy at 15.22 (mild-moderate depression) and after therapy at 10.28 (mild depression). Thus, it was concluded the reminiscence therapy for depression among patients with type 2 diabetes mellitus at Persadia clinic in Bandung with a P value (0.000) < α (0.05) has an effect to some degree. From the study, it is suggested Persadia clinic continue this therapy to help improve diabetes mellitus patient's quality of life and treatment compliance

Key words: Depression, Diabetes Mellitus, Pre-experimental, Reminiscence Therapy

Introduction

Diabetes Mellitus has become a global health issue especially in the developing countries. The disease is a metabolic type characterized by hyperglycemia, a state of insuline intolerance or both. Diabetes Mellitus is the most complex disease that demands significant attention and effort in its management and treatment compared to other chronic illnesses since it cannot be medicated or cured.

The disease is among the chronic illnesses has high potential in altering broad aspects of the life of the patient, such as his psychological state. A common mental disturbance found in such patients is depression. A patient experiencing depression usually exhibits the lack of interest and ability in performing daily activities, emotional instability, and callousness towards the disease itself. It leads to the patient to lose control over his own blood sugar level. Mackin and Arean (2005) (in Putra, 2014) state that there are interventions that can be employed to treat depression, with Cognitive Behavior Therapy (CBT) combined with Interpersonal Psychotherapy (IPT), Reminiscence therapy and medication. Such interventions are also supported by Snyder dan Lindquist (2002) who propose that Reminiscence therapy has the potential to prevent as well as treat depression since it stimulates the patient with type 2 diabetes mellitus to maintain positive thoughts.

Based on a prior study through the interview technique which surveyed seven diabetic patients who underwent treatment at Persadia Clinic, Dustira Hospital, Cimahi, four of them were identified experiencing depression. Their complaints included being more emotionally sensitive than usual, insomnia, restlessness, anxiety, and random heart throbs. Furthermore, a patient felt isolated from the people around them. On the other hand, the clinic has never carried out Reminiscence therapy. Thus, it was considered important to conduct an intervention in the form of Reminiscence therapy to enhance the patients' self-worth, self-awareness, and adaptation towards the stress factors.

Method

The research design applied in this study is the quasi-experiment type of *Pre Test Post Test One Group Design (before and after)* it is implemented to a group twice, namely before the experiment (01) and after the experiment (02), normally referred to as *pre test* dan *post test* (Arikunto, 2006)

The sampling technique in this study is *purposive sampling* which is one of the techniques for *non-probability* or *non-random sampling*. The researcher determined the samples she deemed representative to the population characteristics which were previously acknowledged (Hastono, 2007). The study employed a 5% degree of significance and a 90% power test, thus the 32 respondents for the sample was acquired using the sampling formula of paired variables (Sabri & Hastono, 2008).

The data collection was conducted in Persadia Clinic, Dustira Hospital Cimahi between June and July 2016. The research team collected the data by measuring depression using the PHQ-9 instrument, and conducted five Reminiscence therapy sessions comprised of two sessions of individual therapy and three sessions of group therapy, each lasting 30-45 minutes. After the therapy, the researchers measured the depression score of the respondents using the same instrument aforementioned.

The independent variable of the research is the Reminiscence therapy and the dependent variable is the depression of type-2 diabetic patients. Data Analysis was done with uni-variate and bi-variate analyses to determine the difference in the depression scores before and after the therapy through testing the means of the dependent. The results of the normality test showed a normal distribution; therefore, a bi-variate analysis was conducted using the paired t-test, type of a parametric test to discover the difference of the dependent means.

Results

Univariate Analysis Depression Prior to Reminiscence therapy on table 1.

Tabel 1 Mean Distribution of the Scores of Depression Experienced by Type-2 Diabetic Patients Pre-Reminiscence therapy at Persadia Clinic, Dustira Hospital, Cimahi in 2016

| Depression | Mean | SD | Min- Max | 95% CI | N |
|-------------------|-------------|-----------|---------------------|-------------------|----------|
| Pre-Treatment | 15.22 | 4.633 | 10- 25 | 13.55- 16.89 | 32 |

Based on Table 1, the average score of depression from 32 respondents suffering from type-2 Diabetes Mellitus prior to the reminiscence therapy is 15.22 with the standard deviation of 4.633. The lowest and the highest scores were 10 and 25 respectively. From the interval estimation, it was concluded that 95% was the level of certainty that the average score of depression was between 13.55 and 16.89.

Depression Post Reminiscence Therapy

Tabel 2 Mean Distribution of the Scores of Depression Experienced by Type-2 Diabetic Patients Post- Reminiscence Therapyat Persadia Clinic, Dustira Hospital, Cimahi in 2016

| Depression | Mean | SD | Min- Max | 95% CI | N |
|----------------|-------|-------|-------------|----------------|----|
| Post-Treatment | 10.28 | 4.129 | 3-20 | 8.79- 11.77 | 32 |

As seen in Table 2 above, the average score of depression from the 32 respondents with the Type-2 diabetes mellitus post reminiscence therapy was 10.28 with the standard deviation of 4.129. The lowest and highest depression scores were 3 and 20 respectively. A ninety-five percent certainty level was maintained that the average score of depression was between 8.79 and 11.77.

Bivariate Analysis

Tabel 3 Mean Distribution of the Scores of Depression of Type-2 Diabetic Patients Pre- and Post- Reminiscence Therapyat Persadia Clinic, Dustira Hospital, Cimahi

| Variable | Kelp | Mean | Beda Mean | N | SD | P value |
|----------|----------------------|-------|--------------|----|-------|------------|
| Depresi | Pre Intervention | 15.22 | 4.94 | 32 | 4.129 | 0.000 |
| | Post Intervention | 10.28 | | | | |

Based on table 3, the mean difference fo the depression score was 3.750 with a standard deviation of 4.129. Statistic tests yielded the p value : 0,000 with alpha 5%: it, therefore, can be concluded that there was a difference of the mean of depression score between pre- and post-intervention. It leads to the conclusion that there was an affect caused by reminiscencetherapytowards depressiononpatients of type 2 diabetes melitus at the Persadia Clinic, Dustira Hospital, Cimahi, in 2016.

Discussion

Depression Post-Reminiscence Therapy

The analysis result in Table 4.2 showed the mean of depression score post reminiscence therapy 10.28 (light depression) with scores ranging between 3 and 20 lied between the normal and light category. It displayed a decrease of 4.94 in the mean depression score after intervention.

Depression treatment can be done by pharmaceutical and or psychotherapeutic methods. According to Peng et al. (2009), different types psychotherapy such as cognitive behavior, general psychotherapy and reminiscence therapy are considered effective in treating patients with depression. In this study, diabetic patients were provided with reminiscence treatment since their age ranges between 46 and 59 (middle to senior age). In accordance to RIPFA (2006 in Syarniah, 2010), reminiscence therapy is given to senior patients experiencing depression, dementia, and cognitive disorders that cause low self-care and self-worth, social isolation, helplessness, and desperation.

Reminiscence therapy is a method related to recollection of memories to increase mental health and quality of life (Chen, Li & Li, 2012). Memory is an unforgettable or forgotten event or experience. Recollection of such memories helps patients to adjust with their current life alteration. The process of remembering enjoyable and affective past occurrences can increase self-worth (Mackin & Arian, 2005 dalam Wheeler, 2008).

Reminiscence therapy not only focuses on memory recollection but it is also a structured process useful to reflect upon life to find its meaning and adaptive coping. It is conducted with two or more people shared with family members, the group, or the caregivers so that communication takes place and create positive aspects. Chiang et al. (2009) claimed that the positive aspects arising from reminiscence therapy can affect the emotions and behavior which in turn will provide encouragement or motivation to face problems.

Reminiscence therapy for type 2 diabetic patients encourages them to discuss their pleasant past events or experiences, reducing depression by elevating positive emotions. It was carried out in five sessions for the duration of 30-45 minutes with the first 2-3 sessions discussing guided topics. In the research process, each respondent was given a chance to share their emotions, discuss topic related past events, and express their feelings at the end of the therapy. A positive bond was formed with the caregivers (nurses) during individual sessions since the patients were more communicative with them. Furthermore, the respondents expressed their hopes and plans to the group regarding their illness, yielding the feeling of not being due to the fact that they were experiencing the same condition.

The feeling of inclusion derived from the common ground of having the same diagnosis which led to a sense of calmness among the group members due to the emotional support provided. Emotional support repaired negative emotions caused by stress. Research conducted by Hartati (2010) showed that clients preferred the support group at Syamsi Dhuha Foundation Bandung on the basis of group members experiencing similar conditions.

Based on the discussion above, the rational conclusion would be that the therapy relies on participants recollecting and sharing their pleasant past events. In doing so, a participant has a mean to place meaning in his life and help adjust himself to the current changes in his life. It has the potential to increase his mental health and the quality of his life. As for the patients observed in the study, the treatment was able to reduce depression.

The Effects of Reminiscence Therapy on Depression

The results of the study exhibited a decrease of the mean score of depression among type-2 diabetic patients after undergoing reminiscence therapy, from 15.22 (mild depression) prior to the treatment and 10.28 (mild depression) after treatment, with a difference of 4.94. The statistical test yielded the P value of 0.000 with alpha 5%, leading to the conclusion that there is a decrease in the means of the depression scores. In turn, it suggested that there were effects of the reminiscence therapy on depression experienced by the aforementioned respondents. A study by Jooj et al. (2015) showed that reminiscence therapy could decrease depression experienced by female diabetic patients. The results indicated that there were significant differences between groups that either receive or deprived from such intervention. The numbers of depression significantly dropped in the treated group. Besides effective towards reducing depression, reminiscence therapy can also increase self-worth and social interaction (Chao, et al. 2006). Other positive effects of the therapy are, among others, the increase of hope and satisfaction in life, the increase in the ability to solve problems, and the increase in self-care. Chiang et al. (2009) added that it is beneficial in assisting elder citizens to raise their well-being and prevent psychological disorders as well as isolation. Memories and experiences have emotional effects on individuals.

The reminiscence therapy method employed in the research is the simple reminiscence, carried out in five sessions consisting of pleasant memories of childhood, adolescence and adulthood, family members at home, and self-evaluation as well as self-integrity. During the sessions, the respondents verbalized their emotions such as relief and happiness, and how reminiscing gave self-gratifying satisfaction and motivation to be active, to be rejuvenated, to be grateful of life, to be not grievous of their current condition, to be more patient, and to be more open to others.

Reminiscence therapy can be given individually, with the presence of family members, or in a group (Kennard, 2006 dalam Syarniah, 2010). It not only assists the patients to overcome depression, but also raises awareness for the care givers since they can observe the patient's background story, their style of communication, friendship and their ability to adapt.

Parallel to the study by Hidayati et al (2015), the results showed that the group receiving treatments experienced a significant decrease in depression level compared to the controlled group consisting of elderly residing in retirement homes after individual treatments. The treatment was conducted individually due to variations of problems of the group members, flexible time and location for treatment, and more openness in exposing their feelings.

It can be concluded from the discussion that reminiscence therapy has effects on depression experienced by type-2 diabetic patients. The therapy can affect the limbic system and lead to an increase in comfort due to the increase in serotonin and norepinephrine. It may be conducted individually or in a group since both methods indicated a decrease in depression. Therefore, effective treatments such as reminiscence therapy does not only reduce symptoms of depression but also increase self-care, health, and the quality of life of diabetic patients.

Conclusion

Before reminiscence therapy, the mean score of depression of type-2 diabetic patients was 5.22 with a standard deviation of 4.633. The lowest and highest scores were 10 and 25 respectively. From the interval estimation, it was concluded on the basis of 95% certainty that the mean depression score was between 13.55-16.89. Based on the interpretation of the instrument the 10-25 score range indicates a mild-medium stage of depression.

After intervention, the average score of depression of the same patients was 10.28 with a standard deviation of 4.129. The lowest and highest scores were 3 and 20 respectively. A ninety-five percent certainty gained from interval estimation showed a depression mean score range between 8.79-11.77, thus indicating a downward trend in the depression score.

The mean of the depression score from the first test (prior to the therapy) was 15.22. In the second measurement (after therapy), the mean reached 10.28. Therefore, a difference of 4.94 in the means with a standard deviation of 4.129 and the statistical test of 0.000 lead to the conclusion that there are effects from the reminiscence therapy conducted on type-2 diabetic patients with depression at the Persadia Clinic, Dustira Hospital, Cimahi in 2016.

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