Spiritual Emotional Freedom Technique (SEFT) to Reduce the Diabetes Distress in People with Diabetes Mellitus

Wardiani Priyanto¹, Rahma Widyana², Metty Verasari³
Faculty of Psychology, Universitas Mercu Buana Yogyakarta¹,²,³
wardianipriyanto14@gmail.com¹, rahma@mercubuana-yogya.ac.id², metty@mercubuana-yogya.ac.id ³

Abstract. This study aimed to examine the effectiveness of Spiritual Emotional Freedom Technique (SEFT) for healing to reduce the diabetes distress levels in people with diabetes mellitus at productive ages. Participants in this study were 12 people, 33-61 years old male and female with moderate and high levels of diabetes distress as measured with diabetes distress scale/DDS17. This research design was an experimental pre-post-test control group, with experimental group and control group. The data analysis technique employed in this study was statistical analysis with the Wilcoxon sign-rank test and the Mann Whitney U-test. The Wilcoxon sign-rank test results showed a significance value of p= 0.028 (p <0.05) and was strengthened by the Mann Whitney U-test results with a significance value of p= 0.002 (p <0.05). A decrease in the value of x = 63.33 to x = 20.33 means a significant difference in the diabetes distress levels in people with diabetes mellitus at productive ages before and after being given the SEFT for healing intervention. These results indicate that SEFT for healing can reduce the diabetes distress levels, and the hypothesis was accepted. SEFT for healing is proven to be effective and can be used as one of the therapy to reduce the distress in people with diabetes.

Keywords: SEFT for healing; diabetes distress; diabetes mellitus; patients at productive ages.

INTRODUCTION

Diabetes mellitus is among the deadliest diseases in the world (World Health Organization, 2020). According to the IDF (2017), approximately 425 million people aged 20-79 years old suffered from this disease. This disease also occupied the third rank of the deadliest disease in Indonesia, with approximately 21 million patients, and the highest prevalence was found in Jakarta, Yogyakarta, and East Kalimantan (Kemkes, 2016). In addition, diabetes mellitus has been known for 3,500 years. The word ‘diabetes’ is derived from the Greek word that means ‘passing through’ and ‘Mellitus that means ‘honey’ (Tattersall, 2016). Diabetes mellitus is a dangerous disease where the patient’s body will have several symptoms due to hyperglycemia caused by a decreased insulin sensitivity or insulin resistance (Soegondo et al., 2009). According to (Waspadji, 2009), if not appropriately treated, patients with diabetes mellitus may undergo various complaints, such as chronic complications and disruption to other organs. In certain circumstances, this disease may even cause ketoacidosis, diabetes with infections, and stress, such as diabetes distress.

According to the National Diabetes Specific Scheme (NDSS, 2020), diabetes distress is an
emotional response caused by the reality of living as a patient with diabetes, which may disrupt his/her daily self-management. In fact, it is unique; it may cause emotional exhaustion, hidden anxiety, and worry (Fisher et al., 2012). It also brings a negative effect on self-management behavior and metabolic control. Lifestyle changes, complex diabetes self-management, and routines that require discipline have caused patients with this disease to experience psychological distress and diabetes distress, which can have adverse effects on the self-management in patients with this disease.

Diabetes distress has four aspects: emotional burden, physician distress, regimen distress, and interpersonal distress (Polonsky et al., 2005). Several factors cause diabetes distress, including sudden life changes (Bener, 2011)(Bener, 2011), diabetes mellitus management (Pranata, 2016), communication from health workers (Bai et al., 2009), stigma about the disease (Shahady, 2014), and thinking about complications and costs (Beeney, 2015). In addition, diabetes distress is affected by age and self-efficacy (Wardian & Sun, 2014), intellectual factors (Nurkamilah et al., 2018), support from family and surrounding people, as well as spirituality and religiosity (Ardian, 2016). In fact, diabetes distress has a negative impact on patients because it may complicate treatment efforts and adherence. In other words, diabetes distress is bad for the patients’ condition. Distress activates the hypothalamus and triggers the anterior pituitary gland to secrete adrenocorticotropic hormone (ACTH). ACTH then stimulates the adrenal gland to produce the cortisol hormone, thus increasing the levels of sugar and other nutrients in the blood (Kalat & Pramudito, 2012). Distress also causes noradrenaline, adrenaline, cortisol, and other hormones to mobilize the stored glucose and fat, causing blood glucose, cholesterol, and triglycerides to increase, resulting in decreased immunity, fatigue, susceptibility to infectious diseases, hippocampal disruption, and memory loss (Kalat & Pramudito, 2012). Therefore, patients with diabetes mellitus who experience diabetes distress should get proper treatment.

Moreover, it is crucial to treat diabetes distress holistically in terms of the biological, psychological, social, and spiritual aspects (Britneff & Winkley, 2013). One of the therapies covering these aspects is SEFT (Spiritual Emotional Freedom Technique), which is proven to reduce stress (Bakara et al., 1970) SEFT for healing is a therapy that contains spiritual, energy, and biological elements; it is easy to do, curative, and preventive. SEFT is performed with spiritual prayer by using the body’s energy by gently tapping on the body’s meridian points by referring to the SEFT techniques as proposed by Zainuddin (2018).

Furthermore, there are several differences between this study and previous studies. Several previous studies emphasized specific aspects, not covering all aspects as carried out by Safitri et al. (2017) with dhikr relaxation to reduce the stress level in patients with diabetes, only highlighting the religious aspect. Also, Maghfirah et al. (2015) investigated the effect of progressive muscle relaxation on psychological stress in patients with diabetes, which only focused on the biological aspect. The differences between this study and previous studies are on the therapy and the participants. This study employed the SEFT for healing therapy proposed by Zainuddin (2018). SEFT for healing therapy is a therapy that contains spiritual, energy, and biological elements; this therapy can treat diabetes distress holistically.

Therefore, this study aimed to determine the effectiveness of SEFT for healing therapy in reducing diabetes distress in people with diabetes mellitus at a working age. Is there a difference between the experimental group and the control group after receiving the SEFT for healing therapy?

**METHOD**

This study used an experimental pre-post-test with a control group, in which two groups
were chosen by random assignment as the experimental and the control groups.

This study involved 12 participants of working age (33-61 years) who suffered from diabetes mellitus and experienced moderate and high levels of diabetes distress, as measured using the diabetes distress scale DDS17 at Puskesmas Ngaglik 1 Yogyakarta.

The study participants were screened utilizing the DDS17 developed by Polonsky et al. (2005). Then, the interview measured diabetes distress levels in people with diabetes mellitus at a working age. The DDS17 consisted of 17 favorable items with a validity of 0.99, reliability of 0.87, and the score per item of 1-6 (Polonsky et al., 2005)

DDS17 was structured based on the four aspects according to Polonsky: ‘emotional burden’ (i.e., “Feeling that diabetes is taking up too much of my mental and physical energy every day” and “Feeling angry, scared, and/or depressed when I think about living with diabetes”), ‘physician distress’ (“Feeling that my doctor does not give me clear directions on how to manage my diabetes” and “Feeling that my doctor does not take my concerns seriously enough”), ‘regimen distress’ (“Feeling that I am often failing with my diabetes routine” and “Not feeling motivated to keep up my diabetes self-management”), ‘interpersonal distress’ (“Feeling that friends or family do not appreciate how difficult living with diabetes can be” and “Feeling that friends or family do not give me the emotional support that I would like”).

![Figure 1. The study process](image)

The study process consisted of several stages: collecting initial research data, selecting subjects, and giving interventions. Prior to receiving the interventions, the selected participants who had moderate and high levels of diabetes distress were divided into two groups by random assignment. It consisted of six people in the experimental group and the other six participants in the control group. SEFT for healing intervention was given in two meetings on different days. The first meeting consisted of eight sessions, the second meeting comprised five sessions, and there was homework in between. The SEFT for healing intervention covered three techniques: set-up, tune-in, and tapping, as developed by Zainuddin (2018). The set-up technique was done by reciting a prayer while pressing the sore spot at the same time. This stage aimed to neutralize psychological reversal. The tune-in technique was performed by imagining the pain or psychological burden while repeating the prayer and tapping. The tapping technique was carried out by gently tapping on the 18 key points along 12 meridian lines using the fingertips.
After receiving the interventions, the participants were then given a task/homework to practice these interventions at home according to the instructions sheet and write down the results on the evaluation sheet. After that, they were evaluated at the second meeting.

The data in this study were analyzed using non-parametric statistical analysis with the Wilcoxon signed-rank test and the Mann Whitney U-test utilizing SPSS version 22.

RESULTS AND DISCUSSION

Based on the analysis that had been done, the results are in the following:

Table 1.
Data research description

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Pre-test minimum-maximum (mean)</th>
<th>Post-test minimum-maximum (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>6</td>
<td>Minimal:44 Maximal:89 (x = 63.33)</td>
<td>Minimal:12 Maximal:25 (x = 20.33)</td>
</tr>
<tr>
<td>Control</td>
<td>6</td>
<td>Minimal: 34 Maximal:65 (x = 50.33)</td>
<td>Minimal: 42 Maximal:71 (x = 55.17)</td>
</tr>
</tbody>
</table>

The results showed a diabetes distress score on the pre-test of x = 63.33, while its score
in the post-test was $x = 20.33$, with coefficient $Z = -2.201$ ($p<0.05$). These test results signified a significant decrease in the diabetes distress levels in patients with diabetes mellitus at a working age after receiving SEFT interventions.

The Mann-Whitney test results between the experimental and control groups indicated no difference in the pre-test score in the diabetes distress levels, with coefficient $Z = -1.281$ and significance value of $p=0.240$ ($p>0.05$). Meanwhile, the post-test score results between the experimental group and control group revealed a significant difference, with coefficient $Z = -2.887$ and a significance value of $p= 0.002$ ($p<0.05$). Therefore, the diabetes distress levels in the experimental group, given the SEFT interventions, were lower ($x = 3.50$) than in the control group ($x = 9.50$).

Based on the non-parametric test results with the Wilcoxon signed-rank test that had been performed, it can be seen that there was a significant difference between the diabetes distress scores before and after the SEFT for healing interventions, with a coefficient of $Z = -2.201$ and a significance of $p$-value $= 0.028$ ($p<0.05$). Besides, the measurement results of diabetes distress in the experimental group in the pre-test were higher than the post-test; the decrease was significant ($x = 63.33$ in the pre-test decreased to $x = 20.33$ in the post-test). On the other hand, there was no decrease in the diabetes distress levels in the control group. The measurement results in the control group (no interventions) showed an increase in the diabetes distress levels in the post-test, where the pre-test showed a mean of $x = 50.33$, which increased to $x = 55.17$ in the post-test. Based on the data, it can be seen that the experimental group had a decrease in the diabetes distress levels after receiving the SEFT for healing interventions. Therefore, it can be concluded that the SEFT for healing interventions had an effect in the form of lowering the diabetes distress levels in people with diabetes mellitus at a working age in the experimental group.

In addition to analyzing the Wilcoxon sign-rank test in the experimental group, the experimental group and control group data were then tested with the Mann Whitney test analysis to determine the differences between the two groups. Based on the Mann-Whitney test, the results disclosed a significant difference between the diabetes distress levels in the experimental group and the control group, with a coefficient of $Z = -2.887$ and a significance of $p= 0.002$ ($p<0.05$). It denoted a significant difference between the diabetes distress levels in the experimental group $x = 3.50$ and the control group $x = 9.50$. The level of diabetes distress in the experimental group was lower than the level of diabetes distress in the control group. In other words, it indicates a significant difference in the level of diabetes distress in patients with diabetes mellitus at a working age before and after receiving the SEFT for healing therapy interventions. Based on the analysis results above, it can also be inferred that the SEFT for healing intervention had an effect in the form of lowering the diabetes distress levels in people with diabetes mellitus at a working age in the experimental group.

In this case, patients with diabetes mellitus who undergo diabetes distress have various complaints, such as emotional distress, lifestyle distress due to diabetes, doctor-related distress, and interpersonal distress (Polonsky et al., 2005). In addition, diabetes distress can also disrupt self-management adherence and metabolic control in the patients’ bodies (Chin Choo Yap, 2015). Therefore, those with diabetes distress should get proper treatment holistically, through biological, psychological, social, and spiritual approaches (Britneff & Winkley, 2013), for example, the SEFT for healing. The SEFT interventions have three techniques: set-up, tune-in, and tapping, which could lower the diabetes distress levels. Aside from having a biological approach, SEFT for healing also has a spiritual element. As stated by Koenig (Ano & Vasconelles, 2005), religious coping plays a role in relieving individuals from stress.

Zainuddin (2018) asserted that SEFT is a technique that combines the body’s energy
system and spiritual healing using a tapping method on specific points in the body. According to Rowe (Zainuddin, 2018), SEFT can relieve both short-term and long-term stress. Dossey (Zainuddin, 2018) contended that prayer and spirituality affect healing, even having the same power as medication and surgery. Energy psychology uses the body’s energy to improve mental, emotional, and behavioral conditions, such as depression, stress, and anxiety (Feinstein & Oregon, 2012). Besides, SEFT has been proven to lower the levels of depression, anxiety, and stress (Bakara et al., 1970), relieve stress (Avianti & Desmaniarti, 2014; Mutmainah, 2018), and improve the quality of patients’ life (Kusnanto et al., 2016).

In this study, the design was to carry out the SEFT interventions in two meetings with homework in between. The first meeting consisted of eight sessions, while the second meeting only comprised five sessions, referring to the SEFT techniques developed by Zainuddin (2018), i.e., set-up, tune-in, and tapping.

Before performing a series of the SEFT techniques, the participants were allowed first to perform a trial of the SEFT techniques as an introduction. The participants performed the interventions seriously and quietly, and they followed all the instructions properly. Some of them even shed tears. After performing the trial or demonstration, all the participants stated that their pain already improved, they felt better and more comfortable, and they admitted that the pain was not as bad as they felt before the trial.

At this stage, the participants were allowed to arrange their prayers according to their complaints (Zainuddin, 2018). At this stage, the participants also followed all the instructions quietly and seriously, and they made efforts to locate the sore spot.

At the second stage, tune-in, the participants did the tune-in by feeling the pain they had or by imagining a specific unpleasant event related to their diabetes disease, while continuing to focus on it and repeatedly reciting “O ALLAH. I sincerely surrender” or “O ALLAH. I sincerely accept this disease, I sincerely accept the sadness or fear that I have, I surrender to You to heal my disease, I surrender to You to relieve my sadness and fear”. This process aimed to neutralize negative emotions or physical pains. The second stage and the third stage, i.e., tapping, were done simultaneously.

The third or last stage was tapping, which was carried out while continuously doing tune-in and focusing on the problem or the pain. These two stages were done repeatedly while gently tapping on the 18 meridian points in the body. It aimed to relieve anything that blocks energy flow to overcome both emotional and physical burdens (Saputra, 2012). The participants closed their eyes and did all the steps quietly and seriously. Four participants, YH, ST, SL, and RM, shed tears and bowed their heads, while others closed their eyes.

After doing the three SEFT for healing techniques mentioned above, the six participants in this study said that they felt more relieved than before; they could accept diabetes; they felt better, more comfortable, and more energized. In terms of physical or physiological perspective, the participants admitted that they experienced decreased pain that they previously felt; for example, the pain in legs and hand stiffness improved. In addition, they also experienced an increase in enthusiasm for living with diabetes; they accepted their destiny, surrendered to God, and made peace with the existing conditions.
According to Beeney (2015), diabetes distress is closely related to poor self-management behavior, such as diet, physical activity, and monitoring and checking for complications. The distress experienced activates the hypothalamus and triggers the anterior pituitary gland to secrete adrenocorticotropic hormone (ACTH). ACTH hormone then stimulates the adrenal gland of the patients to produce the cortisol hormone, thus increasing metabolism and the levels of sugar and other nutrients in the blood (Kalat & Pramudito, 2012). It may harm diabetes patients because this condition may increase the levels of blood glucose, cholesterol, and triglycerides; decrease the immune system; cause fatigue, hippocampal disruption, and memory loss; and increase susceptibility to infectious diseases. Therefore, SEFT is considered able to overcome these complaints.

Moreover, the SEFT techniques in this study were performed on several points in the participants’ bodies, accompanied by prayers and spiritual beliefs that could bring a positive effect, lowering the diabetes distress levels experienced by the patients and improving the patients’ feelings in terms of physical, biological, psychological, and spiritual conditions. According to Pasiak (2012), the spiritual element in SEFT has a positive relationship with health, in which spiritual beliefs can influence someone’s emotional responses to any changes caused by chronic diseases. The spiritual dimension can also function as a defense when dealing with emotional stress, physical diseases, even death. Besides, the spiritual elements in the set-up and tune-in techniques can be comforting; relieve stress, fear, and anxiety; get closer to God, and strengthen the spiritual belief that God will heal his/her diseases. Spiritual therapy can also bring a relaxation response that is beneficial and comforting (Syed, 2017). Comfort and positive hopes obtained from such spiritual beliefs can lower diabetes distress experienced by people with diabetes mellitus. In this regard, calm psychological conditions affect the limbic system and autonomic nerves, resulting in a pleasant and relaxing feeling that stimulates GABA (gamma-aminobutyric acid) and endorphins. Endorphins are chemical compounds of local opioid neuropeptides and peptide hormones produced by the central nervous system and pituitary gland, making someone feel happy, stimulating a pleasant feeling, improving appetite, modulating hormones, improving immunity, and relieving pain. Meanwhile, endorphins are a local opioid associated with morphine receptors to reduce pain when the body feels comfortable, thus reducing the cortisol produced when someone experiences stress.

Zainuddin (2018) explained that the energy psychology in SEFT therapy is performed by gently tapping with the fingertips on 18 points in 12 meridian lines of the body, representing 361 acupuncture points. The tapping stimulates the center of a group of active cells (electrically active cells) on the body’s surface, causing stimulation in the form of signal transduction in the biochemical processes in the body due to stimulation on the EFT points (Feinstein & Oregon, 2012) According to (Brooks & Church, 2010), an increase in neurotransmitter signaling downregulates hypothalamic – pituitary – adrenal axis (HPA), thus reducing the cortisol hormone production related to a patient's stress.

The relaxation process in SEFT therapy also relaxes the smooth muscles of the arteries and veins as well as other muscles in the body, decreasing epinephrine and norepinephrine levels in the blood and stimulating the hypothalamus. It then causes the soul and organs to feel calm and comfortable; a decreased level of epinephrine and norepinephrine in the blood causes the blood pumped by the heart to decrease, thus lowering blood pressure (Mills, 2012). It also aligns with the research results by Lane (2009), showing that giving manual stimulation of acupuncture points can control cortisol, reduce pain, slow heart rate, relieve anxiety, and control autonomic nerves, which in turn can result in the feeling of relaxation and calmness, as expressed by the participants.

Further, the whole series of the SEFT for healing intervention processes bring a positive effect, i.e., lowering the level of diabetes distress in people with diabetes mellitus at a working age.
It is evident from what the participants admitted after receiving the intervention and the decrease in the diabetes distress levels as measured using DDS17. Therefore, it can be concluded that the hypothesis in this study was accepted.

However, this study also had a limitation, i.e., the interventions were conducted in the morning. In fact, the participants had many regular activities to do in the morning, such as going to work, going to the market, taking care of their children, etc., but they said that they left their activities for a while or they finished them early to attend the intervention meetings voluntarily. Meanwhile, the researchers chose to carry out the intervention in the morning because the study was conducted during the rainy season. It often rained in the afternoon until the night in the research location, which could harm the participants who had the wound because they had to dry it.

**CONCLUSION**

Based on the analysis results above, a conclusion can be drawn that the SEFT for healing intervention was proven to be effective in lowering the diabetes distress levels in people with diabetes mellitus at a working age. It is evident from the significant difference in diabetes distress levels between those in the experimental and control groups. The participants in the experimental group had a lower level of diabetes distress after being given the intervention, while those in the control group who were not given the intervention had a higher level of diabetes distress. The hypothesis in this study was accepted.

**Recommendation**

This study’s results have revealed that SEFT for healing therapy effectively lowers diabetes distress in people with diabetes mellitus at working age. Thus, it is expected for the participants to repeat the SEFT techniques anytime needed. For future researchers, it is recommended to use SEFT for healing therapy to people with diabetes and involve a more significant number of participants. It is also expected for professional health workers to use SEFT therapy as one alternative to help to lower the diabetes distress in people with diabetes.

**REFERENCES**


