

Spiritually Integrated Cognitive Behavior Therapy for Treatment of Depression in a Male Patient with Cardiac Illness and Diabetes

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This case study aimed to ascertain the effectiveness of spiritually integrated cognitive behavior therapy (SICBT) in the treatment of depression in a male patient with cardiac illness and diabetes. It was hypothesized that there would be a significant difference in the level of depression reported by a male patient with cardiac illness and diabetes before and after being treated with spiritually integrated cognitive behavior therapy (SICBT). This case study was carried out at a private hospital in Karachi, Pakistan. The patient in this case study was a 49 year old man. A semi-structured interview and Depression in Chronic Illnesses Scale (DCIS; Yaseen, 2014) were used as pre and post measures. Techniques from spiritually integrated cognitive behavior therapy (SICBT) (Good, 2010) were adapted to alter negative thoughts and modify behavior. Post treatment assessment indicated an improvement in the patient's overall functioning and showed remarkable reduction in symptoms of depression. Patient reported gaining insight and having control over negative thinking. Based on the post treatment assessment, it can be concluded that SICBT can be an effective approach to treat depression in patients with cardiac illness and diabetes. It is critical to note that the factor of subjective inclination towards spirituality needs to be considered while drawing any conclusion.

Keywords: spirituality, cognitive behavior therapy, depression, cardiac illness, diabetes

Depression has become the key cause of worldwide disability and affects individuals of all ages, and countries from all walks of life (Farahzadi, 2017). People experience depression in different ways as it affects daily life, productivity, relationships, and some chronic health conditions. There are many causes of depression ranging from brain related factors to environmental factors (Marcus et al., 2012). Common etiology includes personal or family history, early childhood trauma, and low self-esteem, being self-critical, stressful events, certain medication or drug, and/or medical conditions such as cardiac illness or cardiovascular diseases, which is a general term that refers to conditions affecting the heart or blood vessels (Huffman et al., 2013).

Depression is a common occurrence among patients with cardiac diseases (Bekelman et al., 2007). Prevalence of depression is 13.9 % to 36.5 % in patients with heart failure diseases (Bekelman et al., 2007). In addition, depression in patients with cardiac diseases results in poor quality of life, with a decline in health status and social functioning (Farahzadi, 2017). Many patients with cardiac diseases feel worried and anxious as well. This is because cardiac illnesses have become the leading causes of morbidity and mortality across the globe. Many researches show a direct association of cardiac illnesses with psychological illnesses and have been observed to be caused by one another. However, the exact nature of the link is still unknown (De Hert et al., 2018).

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Individuals with chronic medical conditions are more likely to be depressed as compared to healthy people. Type 2 diabetes mellitus (T2DM) is one such medical condition. T2DM patients are two times more likely to develop depression than the general population. The cause-and-effect relationship between these two entities remains unclear as to whether diabetes increases the risk of depression or depression increases the risk of diabetes. Despite the well-known association, physicians often fail to recognize and appropriately address depression while managing diabetics. This could be due to the limited time period available for consultations, a perception that treating depression is not in the domain of physicians treating depression, or doctors' under-recognition of the potential impact of depression on diabetes (Arshad & Alvi, 2016). Depression associated with cardiac diseases and diabetes is distinct due to the medical and social factors that accompany the diseases. World Health Organization (WHO) reports that annually 57.02 million deaths occur from heart diseases. According to the College of Physicians and Surgeons Pakistan (CPSP), across the globe, over 40 % of disease burden is because of the group in cardiovascular diseases, whereas for all other diseases it measures less than 60 % (WHO, 2017). It is however treatable through different methodologies.

Both psychological therapies and medications have proven to be useful in treating depression. Psychotherapy, through different schools of thought, has been used for decades to treat depression. Therapies such as solution-focused therapy, dialectical behavior therapy, and cognitive behavior therapy are considered useful. Cognitive behavior therapy (CBT) is one of the most used and effective methods for the treatment of depression, which targets the beliefs and thoughts of the person (Pearce & Koenig, 2013). SICBT that is another method used for treating depression. Through enhancing and modifying the beliefs and values of patients' spiritual narratives, this method is used for recovery, treatment adherence, low post-treatment relapse, and reduced disparities (Bekelman et al., 2007).

Objective of the Study

To investigate the usefulness of the SICBT in reducing depression in a male patient with cardiac illness and diabetes.

Hypothesis of the Study

There will be a significant difference in the level of depression experienced by a male patient with cardiac illness and diabetes before and after the SICBT.

Method

Design of the Study

A pre-post quantitative research design was used in the current case study in which a pre-treatment assessment was done, followed by a 12-week session plan, after which a post treatment assessment was conducted.

Sample

The participant in this case study was a 49 year old man, of Pakistani origin, with Islamic faith, who had cardiac illness and diabetes with a moderate level of depression as measured through the Depression in Chronic Illness Scale (DCIS; Yaseen, 2014). The participant was able to read, write, and comprehend the English language. The participant's educational level was graduation. He was offered treatment through a private hospital in Karachi, Pakistan. He was diagnosed with cardiac illness and diabetes for one year and a few months.

Assessment Protocols

Demographic Information Form

The form consisted of items related to demographic information, including name, age, gender, qualification, marital status, address, religion, etc. This form also included questions related to socio-economic background, employment status and duration of employment, and the history of the cardiac condition and diabetes such as duration of the disease, course of medical treatment, and doctors' consultation.

Semi-Structured Interview Form

This form was administered to collect data about the participant's developmental history for the purpose of understanding his particular individual context. The form comprised questions covering history of physical illness, early childhood, family and work, etc.

Depression in Chronic Illness Scale (DCIS; Yaseen, 2014)

The DCIS was administered. It is a culturally receptive scale to measure depression in chronically ill patients. It is an 18 item Likert scale, and each item is scored from 0 to 3 (*strongly agree* = 3, *agree* = 2, *disagree* = 1, *strongly disagree* = 0), and the total score ranges from 0 to 54. A score between 0-16, indicates no and/or minimal depression, 17-25, indicates mild depression, 26-33 indicates moderate depression, and higher than 33 depicts severe level of depression. The scale has demonstrated good psychometric properties, as the scale's internal consistency is .83 and test-retest reliability is .85.

Procedure

Approval from the Ethical Review Committee was obtained. Permission was requested from the authors for the use of DCIS and the use of a twelve-week manualized SICBT treatment plan. After securing permission, and approval of relevant authorities at the hospital, the participant was offered information about the treatment. The identified participant had a cardiac condition and diabetes for one year, with moderate depression.

The participant was informed about the voluntary nature of his participation and his right to withdraw at any time, the purpose of the research, and the maintenance of confidentiality. The participant was presented with the pre-intervention measures, including the demographic information form, semi-structured interview form, and the DCIS by Yaseen (2014), followed by the twelve-week manualized SICBT treatment plan. This plan is based on a total of 12 sessions over the course of 12 weeks, lasting for 60 minutes each, as adapted from Good (2010).

Table 1

Details of the Twelve-week Manualized SICBT Treatment Plan

Session	Aims and Objectives	Description and Homework
1 Explanation and education about depression	To go through the working treatment plan, psycho-education and learning, setting goals,	An overview of the structure, the total number of sessions with the expectation for each session and answering participant's queries. The spiritual assessment and goal setting. The depression symptoms questionnaire was administered.

Session	Aims and Objectives	Description and Homework
2 Education about the SICBT approach	<p>spiritual history for designing an individualized treatment plan.</p> <p>Identification of participant's specific symptoms of depression, suicidality and self-harm assessment.</p> <p>Education about approaches utilized within the treatment plan.</p> <p>To answer the queries of the material and content related to the previous session,</p> <p>To introduce Surah Rahman (audio version).</p>	<p>The assessment of suicidality and self-harm.</p> <p>In case of any suicidal thoughts, a safety plan was developed to ensure the safety of the participant.</p> <p>Homework: The hand-out on depression and CBT was shared.</p> <p>To prepare questions from the handouts regarding depression and symptomatology.</p> <p>To read the given Quranic verses from Surah Al-Qaf as a reminder of Allah's blessings.</p> <p>Homework from the previous session was reviewed.</p> <p>Questions were answered from the hand-out on depression, cognitive-behavior therapy, or Quranic guidelines.</p> <p>Briefing on SICBT and how it works.</p> <p>Spiritual coping strategies were discussed, and intervention regarding altering thought cycles was discussed.</p> <p>The participant also said prayer at the end of the session.</p> <p>Homework: The activity monitoring schedule to keep a record of his daily activities to collect objective information about functioning and track the activities/events that lead to higher-level enjoyment or higher level of depression.</p> <p>Homework was reviewed, learning and performing deep breathing exercises.</p> <p>A behavior plan was devised.</p> <p>This was done by completing a doing more questionnaire, which helped in goal setting, self-monitoring, and rewards for the participant to keep motivated.</p> <p>The audio version of Surah-Ar-Rahman (The Beneficent) by Mishrari Rashid Alafasy was played.</p> <p>The participant was guided to say a prayer at the end of the session.</p> <p>Homework: To implement the behavioral</p>
3 Behavior Strategies	<p>The key focus of the session was on behavioral strategies, which were highlighted briefly in session 2.</p> <p>The aim was to design a behavior plan for the participant.</p>	<p>Homework was reviewed, learning and performing deep breathing exercises.</p> <p>A behavior plan was devised.</p> <p>This was done by completing a doing more questionnaire, which helped in goal setting, self-monitoring, and rewards for the participant to keep motivated.</p> <p>The audio version of Surah-Ar-Rahman (The Beneficent) by Mishrari Rashid Alafasy was played.</p> <p>The participant was guided to say a prayer at the end of the session.</p> <p>Homework: To implement the behavioral</p>

Session	Aims and Objectives	Description and Homework
4 Behavior Strategies	To learn about the concepts of being more and doing less with the learning of new techniques.	<p>strategy developed in the present session for increasing pleasurable activities, and reducing the ones that contribute to increasing the level of depression. This included increasing self-monitoring towards achieving the goals and following through with the rewards when earned along with the weekly checklist.</p> <p>Review homework and answering the basic concept of doing more was explained in the previous session, and the concept of being more and doing less was explained in this session.</p> <p>The process of shaping, which involves creating a series of steps to follow to carry out a certain behavior and stimulus control, that is related to dealing with the environment where one carries out the behavior included in doing more.</p> <p>The idea of being more was explored. Doing less was explored, and it was linked to bitterness and problems with forgiveness and overindulgence, which can contribute to depression by impeding spiritual growth. The participant was guided to do a deep breathing exercise after which Surah-Ar-Rahman was played.</p> <p>The participant was guided to say a prayer at the end of the session.</p>
5 Cognitive Strategies	<p>To focus on exploring cognitive aspects and the impact it has on depression.</p> <p>To explore the ways in which</p>	<p>Homework: The participant was also asked to focus on being more, spiritual identity development, and doing less related to behaviors that were inconsistent spiritually.</p> <p>Review the homework and answer queries regarding previous session and homework, The researcher reminded the participant of the cognitions previously discussed whilst looking at the depression symptom questionnaire.</p> <p>The participant was informed about the cognitive-behavior model.</p>

Session	Aims and Objectives	Description and Homework
6 Cognitive Strategies	<p>varying interventions of the spiritual domain can be used integrated with the cognitive-behavior model.</p> <p>To work on identifying cognitive strategies of SICBT.</p>	<p>The participant was guided to do a deep breathing exercise after which Surah-Ar-Rahman was played.</p> <p>The therapist incorporated the prayer. Homework: To maintain a cognition log.</p> <p>The therapist reviewed the cognition log.</p> <p>The analysis and discussion of several cognitive distortions.</p> <p>The participant and the therapist worked together to identify ways to combat cognitive distortions, such as using Surah-Ar-Rahman and Quranic passages from Surah al Inshirah (as this Surah was revealed for easing the pain of Prophet PBUH, surrendering to Allah and prayer).</p> <p>Therapist also reviewed the spiritually integrated dysfunctional thought record step-by-step with the participant and explained how it would be filled as homework for monitoring negative cognitions.</p> <p>A deep breathing exercise and prayer was done.</p> <p>Homework: The participant was requested to fill spiritually-integrated dysfunctional thought records for monitoring negative cognitions.</p>
7 Cognitive Strategies	<p>To focus on verbal and visual beliefs and how they play out in their life.</p> <p>To learn and explore ways on how Quranic passages or stories can be used to challenge irrational cognitions.</p>	<p>Review of homework of spiritually-integrated dysfunctional thought record.</p> <p>The participant was informed about the two types of beliefs: Verbal and visual, and this was linked with Quranic stories or passages of Prophet Noah (A.S) and Prophet Ibrahim (A.S). Allah helped them in difficult times, challenging irrational cognitions and creating healthy counterstatements reflective of Allah's love and supervision through different verses from the Quran.</p> <p>Surah-Ar-Rahman was played.</p>

Session	Aims and Objectives	Description and Homework
8 Cognitive Strategies	To address the questions regarding cognitive aspects, which include self, others, the future, and Allah or spirituality. Identifying the cause or root of these belief systems, which contributed to increase depression, worked on modifying these beliefs in a spiritually consistent manner with the participant's way of living.	<p>The session included a deep breathing exercise and also incorporated a prayer.</p> <p>Homework: To fill the index cards as homework. These cards included a question on the one hand "What am I particularly struggling with right now?" And on the other hand, the religious story or guideline that challenged that statement. These cards were used for converting negative thoughts into positive ones.</p> <p>Review of the homework of index cards.</p> <p>The participant was informed about the cognitive quadrants, including beliefs about self, others, future, Allah, and spirituality. The participant had to fill different worksheets in order to identify his cognitive quadrants. Discussed ways in which these beliefs have an influence on life and how they can be changed towards healthier beliefs as per the spiritual doctrine.</p> <p>The participant was guided to do a deep breathing exercise after which Surah-Ar-Rahman was played.</p> <p>The participant was guided to say a prayer at the end of the session.</p> <p>Homework: To continue evaluating the cognitive triad and research on various Quranic passages or truths which would negate irrational beliefs and restructure his personal beliefs to develop healthier working ones. Cognitive quadrant form as homework in which he had to write the Quranic verses that challenged old beliefs and incorporate new ones.</p>
9 Surrender and Control	To initiate the surrendering process in front of Allah and allow Him to control the	<p>A review of the religious beliefs of the participant.</p> <p>The unconfessed sin/spiritual incongruence was recognized, and Quranic references of a loving Allah were discussed.</p>

Session	Aims and Objectives	Description and Homework
<p data-bbox="232 953 375 1024">10 Meditation</p>	<p data-bbox="488 243 748 940">client's life. To teach surrendering concerns, worries, burdens, and depression to Allah as a coping skill for ensuring that the participant feels relieved and stress-free considering that stress, concerns, worries, and burdens are taken away and placed into the hand of Allah.</p> <p data-bbox="488 953 748 1318">The session aimed to teach the meditation process and review the process of guided imagery for gaining perspective, quiet reflection, and inner peace.</p>	<p data-bbox="824 243 1344 310">Surah-Ar-Rahman (The Beneficent) was played.</p> <p data-bbox="824 323 1425 520">The therapist took the participant through a guided imagery exercise (followed by calming breath exercise), which helped the participant release concerns into the care of Allah's loving hands.</p> <p data-bbox="824 533 1425 646">The therapist asked the participant to reflect on the experience. The therapist allowed time to process any experienced emotions.</p> <p data-bbox="824 659 1409 730">The therapist incorporated a prayer at the end of the session</p> <p data-bbox="824 743 1425 940">Homework: To write a letter to Allah including a description of the burdens of the participant, present relationship with Allah and the desired one, and the personal efforts to bridge the gap.</p> <p data-bbox="824 953 1409 1192">Reviewing homework, the participant learned the meditation process that incorporated breathing, visual meditation, visualizations, and counting breaths, and the importance of gaining perspective, reflection, and inner peace.</p> <p data-bbox="824 1205 1425 1570">The surrender/control from the last session, Serenity Prayer, and the ways of maintaining the message in the Quranic passages from Surah An-Nahl and serenity prayer for acceptance in the life of the participant such as reading a self-enhancement book, joining a Quran research, and continuing to work on developing ways to challenge those previous negative beliefs.</p> <p data-bbox="824 1583 1425 1780">Used other meditation methods by counting breaths and a mantra, which included focusing on a single word or phrase such as "Ar-Rahman," and repeating it silently to impact the thoughts positively.</p> <p data-bbox="824 1793 1360 1856">Listening to Surah-Ar-Rahman during the session.</p>

Session	Aims and Objectives	Description and Homework
11 Relaxation	Introductory Discussion, Explanation of Relaxation	<p>The session ended after saying the prayer.</p> <p>Homework: The therapist asked the participant to listen to Surah-Ar-Rahman daily, for a week, till the next session</p> <p>Review of meditational exercises that were previously taught.</p> <p>The therapist explained the rationale for relaxation technique. Progressive muscle relaxation was practiced.</p> <p>The participant was given time to reflect on the new exercises and encouraged to implement relaxation over the next week.</p> <p>Surah-Ar-Rahman was played.</p> <p>The session ended with a prayer.</p> <p>Homework: The progressive muscle relaxation (PMR) exercise to be practiced daily throughout the week.</p>
12 Review and Overview of Treatment/ Closure	This session aimed to review whatever has been discussed and practiced as the treatment, and analyze the change for possible relapse prevention	<p>The session started by answering any of the participant's queries related to the reading material given in the previous sessions, followed by the discussion of different things to give closure for the developed therapeutic relationship and treatment.</p> <p>The participant and the therapist reviewed the ways the participant has changed through the treatment and examined the goals established initially and how the participant has achieved them during this treatment.</p> <p>The closure activities entailed a discussion of the depressive symptoms that the participant had from the start of the treatment, areas of change, the learned tools, and identifying the ones that are effective and helped in the reduction of the individual symptoms.</p> <p>The participant communicated personal views on spirituality and noted any changes in this respect.</p> <p>The therapist and the participant also reviewed the learned skills and strategies and how,</p>

Session	Aims and Objectives	Description and Homework
		<p>when, and why they could be used.</p> <p>Finally, the participant set the goals for future and discussed relapse prevention with the therapist.</p> <p>In the end, all queries of the participant were addressed.</p>

Results

The result was compiled and analyzed using pre-post analysis. After completion of the twelve-week manualized SICBT treatment plan, post-treatment assessment was conducted using the measure of DCIS. Participant's post treatment score of 18, as compared to the pretreatment scores of 31, indicated a significant decrease.

Discussion

Results showed significant difference in the level of depression from the pretreatment score of 31 (pre-test) to the post treatment score of 18 (post-test). This decreased value (18) is just above the range of no depression (score falling in the range of 0-16). This indicated that the treatment procedure is effective in decreasing the level of depression of the participant. Thus, the hypothesis that SICBT would be effective in reducing the level of depression, was supported.

One of the reasons behind the effectiveness of the treatment was the participant's faith as a Muslim and belief in Quranic verses. These verses were used in the treatment plan according to the faith of the research participant.

All the strategies utilized in the current research, including religious coping strategies, are very much a part of the coping strategies among the Muslims in Pakistan. Similarly, the researcher used Quranic and spiritual elements during meditation as well. Common phrases such as "Allah," "Al-Rahman," "Raheem," "Alhamdulillah," "Allah is with me" were used during meditation to reinforce not being alone and having divine support.

The inclusion of Surah Rahman and prayer in the treatment helped the researcher model the spiritual part of the intervention effectively and assisted in regulating positive emotions and strengthening faith in times of difficulty. Surah Rahman has been associated with possible mechanisms of activating and releasing emotions that affect the symptoms of depression, such as negative thinking patterns. This is similar to Mahjoob et al. (2016), which showed the positive effect of listening to recitation from the Holy Quran, without its rhythmic tone, on participants' mental health in Iran. Behavior and cognitive strategies were utilized including activity monitoring schedule, deep breathing exercises, goal setting, and self-monitoring which would have been helpful in self-regulation and in creating awareness about the connection between thoughts, feelings and behavior. The present positive gains through treatment utilizing SICBT, highlight that psychological intervention of this type helped the participant to alter his cognitive distortions and use faith based practices in decreasing depression whilst allowing greater positive emotions. These findings are in line with Azhar and Varma (2000). The spiritual component of the treatment provided assistance in building the capacity to allow emotions (as opposed to suppressing them), leading to a sense of wellbeing. The present outcome is in line with the research by Pearce et al. (2015) which highlighted the integration of spiritual and religious beliefs in intervention as a means of reducing depression rather than the use of secular therapies

for religious patients. Some of the major tools of the present therapeutic approaches, (which were also part of the current treatment plan), included scripture memorization to renew one's mind, contemplative prayer, challenging thoughts using religious teachings, engaging in religious practices (e.g., gratitude, altruism, forgiveness), and involvement in a religious community. The basis and foundation of this therapy is the integrative therapeutic plan in which an individual's own beliefs, behaviors, and resources are analyzed and utilized to facilitate recovery.

Conclusion

The present research aimed to investigate the efficacy of SICBT in reducing depression in a male patient with cardiac illness and diabetes. Results of the current case are in favor of utilizing SICBT to reduce the level of depression.

Implications

The present research provides a therapeutic direction for the treatment of depression in patients suffering from cardiac illnesses and diabetes with the help of SICBT. It also reinforces the need to pay close attention to a person's faith and utilization of spirituality in treatment planning and implementation.

Limitations and Recommendations

- The research included a participant with the Muslim faith. Future research could include participants from other faith traditions.
- The research participant was a man in his 40s. Future work can focus on different age ranges including different genders.

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Contribution of Authors

Sr. No.	Author	Contribution
1.	Erum Kausar	Conceptualization, methodology, research conduction, analyses and interpretation, write-up
2.	Zainab Hussain Bhutto	Critical review of manuscript and supervision