

A clinical study on the effectiveness of biopsychosocial-spiritual treatment approach for diabetic patients

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Abstract

The purpose of conducting this study was to examine the effectiveness of a biopsychosocial-spiritual model in the management of symptoms of a diabetic patient. A 38-year-old female diagnosed with diabetes complained of bouts of sadness and fatigue, a reduced interaction with others, difficulty in falling asleep, felt irritable and experienced severe pain in the joints. The Siddique Shah Depression scale was used to assess her in a semi-structured interview with a subjective rating in which she scored a depression of 293.83 (F06.31) due to diabetes. A total number of 11 sessions were held with her during the implementation phase of the intervention plan. A post assessment was carried out and from the pre and post rating on Siddique Shah Depression Scale, it was evident that her overall symptoms had improvement by 33%. Current study highlights the effectiveness of a biopsychosocial-spiritual treatment approach for managing symptoms associated with diabetes. Keywords: Diabetes, Biopsychosocial-Spiritual Treatment Approach.

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Introduction

In diabetes, mellitus glucose does not metabolise properly and includes an abnormally high glucose level over a long duration due to issues in the discharge or in the function of insulin.¹ Depression is prevalent in individuals with diabetes. The results of a study have revealed that 38% of diabetic patients suffer from depression.² Depression includes having a low mood, inability to feel joy in things that were pleasant in the past, a disturbed sleep pattern, variations in eating habits, feelings of exhaustion, aimless behaviour, a guilt-ridden spirit, unable to make judgements or choices and a desire to end one's life. For a person to be diagnosed with depression the above mentioned signs ought to last for two weeks.³ Effectiveness of the biopsychosocial model is evident from

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the pleasant changes it brings in the lives of those diagnosed with medical diseases.⁴ According to this model, any illness can be properly treated if it's biological, psychological and social aspects are taken into account.⁵ Later researches show that a spiritual dimension can be added to this model to make it holistic. Seeking a higher power or wanting to learn, and embrace what they consider holy is called spirituality.⁶ It fulfills a person with fundamental desires to know the world and one's standing in it.⁷ Individuals with high levels of spirituality have an optimistic mindset⁷ which in turn enhances their overall health by improving bodily functions.

A similar study conducted in Pakistan found the effectiveness of the biopsychosocial-spiritual approach in a sample of individuals who had experienced heart attacks.⁸ However, in Pakistan most studies on the treatment of various psychological disorders caused by other medical conditions, especially diabetes have applied biopsychosocial approach. The present study takes the spiritual aspect into consideration to make the therapeutic plan more effective and to contribute to the literature on therapeutic approaches in Pakistan. A case of a patient having diabetes accompanied with depression is presented in detail.

Case Study

A 38-years-old female patient, second among five siblings was diagnosed having diabetes along with depression. Her treatment began from 1st January 2018 till 16 March 2018. An ABA research design was used. In phase-A, an assessment was carried out through subjective rating of the problem using the Siddiqui Shah Depression Scale.⁹ Subjective ratings were used to gauge the severity of the problem from the patient's perspective in which she rated her issues on a scale of 1 to 10, with 1 showing minimum problem and 10 showing a severe problem. A semi-structured interview was carried out with her for in-depth insights to her problems so as to design an effective intervention plan. The Siddiqui Shah Depression Scale (SSDS)¹ was used in order to assess and quantify the

Table: Demographic detail of the patient.

Gender	Female
Age	38 years
No of siblings	5
Birth order	2th
Socioeconomic class	Middle

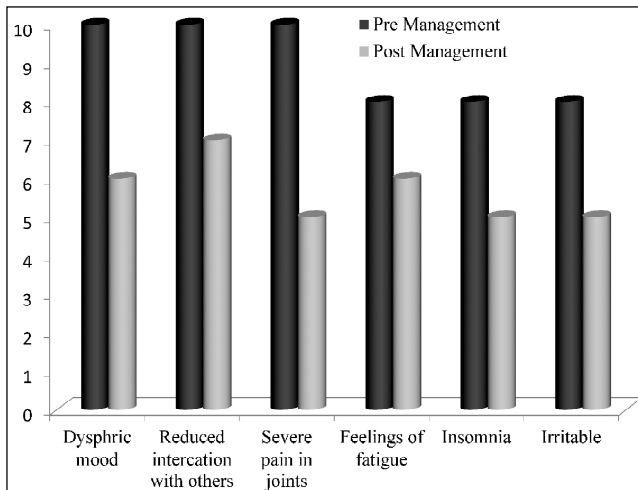


Figure: Comparison of pre and post ratings of complaints by patient.

degree of severity of her depression symptoms. SSDS having a total of 36 items was a four point self-report measure, ranging from 0 = never to 3 = always; for diagnosing as well as measuring the levels of depression i.e. the mild scores were between 21- 36, moderate scores between 37- 49 and severe scores were above 50. The SSDS has no reverse score and the maximum score is 108 with an alpha reliability of 0.92 for clinical population.¹ The patient attained a score of 49, which indicated she had signs of moderate depression.

In phase-B, an intervention plan was applied through biopsychosocial-spiritual treatment approach. Rapport building was carried out in the initial session. For the biological aspect of the treatment, she was advised regular doctor visits and to take her medications in a timely manner so that her physical changes are monitored properly and unfavourable events like joints pain decrease, which in return would reduce her depression.

For the psychological aspect of her treatment, she was instructed in deep breathing exercises to relax her. She was first asked to close her eyes for a few minutes and imagine being in a pleasant place. Then she was instructed to take a deep breath through the nose, hold it inside for 10 seconds and exhale through the mouth. Another technique called cost-benefit analysis¹⁰ was

conducted with her for making her realise the possible pros and cons of having depressing thoughts. She attempted the distraction techniques which work by interrupting the process of attentional narrowing, in order to distract oneself from feeling worried and sad.

Her unnecessary negative thoughts was also addressed through another technique called cognitive restructuring¹⁰ in which the patient identified upsetting situations, recorded negative feelings and automatic thoughts, identified cognitive distortion as well as rational thoughts and evaluated the restructuring process.

The Positive self-talk¹⁰ session consisted words or brief phrases that she found inspiring to keep her going in the face of hardships and for achieving things in life. She started listening to the positive voices inside her head instead of the negative ones. Then she wrote down positive statements about herself on a card and put them in her pocket and which she would read 2-3 times a day to remind herself of her positive traits and to protect herself from negative thoughts.

After that some health enhancing behaviours were highlighted to reduce her physical discomfort. She was instructed to sleep for 7 to 8 hours every night. She was also advised to reduce her intake of snacks high in cholesterol and consume more green vegetables and fruits.

Life style modification tips were given so that she would resume her interest in carrying out routine activities. A daily chart was prepared with her that consisted engaging in healthy behaviours, such as increasing interaction with others, stitching clothes etc. Also, sleep hygiene tips were given to her to improve her sleep.

With regards to social aspect, self-reinforcement technique¹⁰ was carried out with her. Firstly, goals were set such as increasing her interaction with her family members. Then she decided which reinforcer she would give herself once she completed her goal. She was also taught social problem solving¹⁰ that involved solving interpersonal problems and interacting effectively with others.

For the spiritual aspect, she was coached in the significance of being grateful for what she had in life. She was given an assignment for being grateful for at least one good thing that happened to her each day. Mindful meditation was also taught to the patient for strengthening her spiritually.

She was given homework assignment at the end of each session. Her feedback was also taken to analyse her progress. A proper termination session was planned in which all techniques were discussed and explained in case of any confusion.

Post assessment was carried out in the final phase and the patient's score on the Siddiqui Shah Depression Scale had reduced to 39 with an overall improvement of 33%. Her subjective rating scores were also reduced. Her interactions with others had increased, feelings of fatigue were reduced, she started sleeping better than before and the pain in her joints also decreased.

Discussion

The aim of the study was to investigate the effectiveness of biopsychosocial-spiritual treatment approach in treating depression caused by diabetes. Results of the study revealed that this approach is effective in reducing overall symptoms in a patient and it was consistent with the results evident from a previous study in which similar biopsychosocial-spiritual treatment approach was applied on a sample of individuals who had experienced heart attacks.⁹

Conclusion

Current study highlighted significance of using biopsychosocial-spiritual treatment approach for managing symptoms of patients having diabetes. Using

such an approach would lessen the struggles faced by such individuals in various domains of their lives. Hence, it would significantly improve their overall coping skills and daily functioning.

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