ORIGINAL RESEARCH PAPER
VOLUME-6 | ISSUE-6 | JUNE-2017 | ISSN No 2277 - 8179 | IF : 4.176 | IC Value : 78.46
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

EFFECTIVENESS OF MINDFULNESS BASED COGNITIVE THERAPY ON QUALITY OF LIFE, LIFE SATISFACTION AND DEPRESSION OF PATIENTS WITH HIV/AID

Psychology

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ABSTRACT

Background of the study: Mindfulness based cognitive therapy (MBCT) is a psychological therapy designed to aid in preventing the relapse of depression, specifically in individuals with Major Depressive disorder. It uses traditional Cognitive behavioural therapy (CBT) methods and adds in newer psychological strategies such as mindfulness and mindfulness meditation. MBCT helps in promoting successful aging in people with HIV. The total number of people living with HIV in India is estimated at 2.4 million with uncertainty bounds of 1.93 to 3.04 million in 2009. People who are infected with HIV are faced with a profound sense of loss of many levels. It can lead to depression and has a profound effect on the quality of life and life satisfaction. **Material and Method:** This study was conducted at the outpatient clinic for HIV at Anti-Retroviral center (ART) of Jawaharlal Nehru Medical College and Hospital, Aligarh Muslim University. 50 HIV/AIDS diagnosed patients aged 18-60 years were taken for the study between, January 2016 to June 2016.MBCT was offered as a group therapy to patients as an addition to the basic treatment. **Result and Discussion:** In this study 25 patients were selected for MBCT. It was found that patients who received MBCT an addition to pharmacotherapy showed significant improvement in QOL, life satisfaction and level of depression as compared to those who only receive pharmacotherapy.

KEYWORDS:

Mindfulness, HIV/AIDS, Quality of Life.

INTRODUCTION: HIV-infected patients have an increased risk of physical symptoms and pain and mental health symptoms like depression, anxiety disorders, abuse of alcohol and drugs and personality disorders and there is a high prevalence of psychopathology in those patients. There is a high association between both the symptoms. HIV-related fatigue has a high prevalence and is strongly associated with psychological factors such as depression and anxiety. The risk of suicides and suicidal attempts are also high among HIV patients as compared to general population and the patients suffering from other diseases.

Physical and mental health symptoms have a major negative effect on the quality of life of the patient and also results in depression which remains both undiagnosed and untreated. It also affects the treatability, adherence, and prognosis of the HIV infection. Berger-Greenstein and colleagues (2007) reported that over 70% of participants met criteria for major depression among a sample of patients diagnosed with HIV, substance abuse, and psychiatric illness.

India has the third largest HIV epidemic in the world. There are 2.1 million people living with HIV/AIDS in this country (UNAIDS, 2014). The five states with the highest HIV prevalence are Nagaland, Mizoram, Manipur, Andhra Pradesh and Karnataka (NACO, 2014).

There seems to be equal importance of both psychotherapy and medication as the treatment for mental health problems in HIV-infected patients, especially with depressive symptoms.

Mindfulness-based therapies (MBTs) evolved from Western psychology as practiced in the late 1970s. This type of therapy seeks to have people live in the present moment, and be non-judgmental, accepting, patient, open, curious, kind, and "non-doing". It is hoped that through practicing mindfulness, patients will build the skills needed to pay total attention to the present moment, and accept their physical pain or psychological distress with a non-judgmental awareness. It has been suggested that mindfulness exerts its effects via four mechanisms: attention regulation, body awareness, emotion regulation, and changes in perspective regarding one's self.

In the 1980s, such a combination program which includes both the mental and physical treatments for chronically ill patients was developed by John Kabat-Zinn. He developed the Mindfulness Based Stress Reduction (MBSR) programme for patients with chronic pain and stress-symptoms based on meditation techniques and an alternative way of focussing attention.

Segal, Williams and Teasdale added elements of cognitive therapy and developed the Mindfulness Based Cognitive Therapy (henceforth MBCT). MBCT combines MBSR with Cognitive Therapy to prevent depressive relapse. It is a short, easy to realize 8-week therapy, consisting of 8 sessions with trained therapists. Patients are expected to do intense homework programme which includes exercises and meditation at home for at least one hour per day.

During the training, the therapists discuss the homework and encourage the patients to do their exercises. However, it is important that patients implement mindfulness in their daily life, and not only during the research period. There are number of research evidences suggesting that MBCT may be an effective means of treating depression (Hofmann, et al., 2010; Kuyken & Williams, 2012). Research studies showed that MBCT could reduce self reported distress, and improve quality of life and healthier HIV biomarkers, indicating its effectiveness for the psychological treatment of HIV/AIDS (Gonzalez- Gazia et al., 2013; Rodriguez, T., 2014).

As most evaluations of the effectiveness of MBCT have been done almost immediately after the 8-week period, it is unclear whether the positive effect of MBCT in patients will last for a substantial period of time. None of the studies mentioned above reported on the long- term effects (one year) of MBCT on mental health symptoms in HIV-infected patients and the feasibility of the addition of MBCT to care as usual. It remains unclear if supplementing regular treatment with MBCT constitutes a worthwhile addition.

METHODOLOGY:

Objectives:

- To assess the impact of MBCT on quality of life of HIV patients.
- To assess the impact of MBCT on life satisfaction of HIV patients.
- To assess the Impact of MBCT on level of depression of HIV patients.

Procedure: This study was conducted at the outpatient clinic for HIV at Anti-Retroviral center (ART) of Jawaharlal Nehru Medical College and Hospital, Aligarh Muslim University. 50 HIV/AIDS diagnosed patients aged 18-60 years were randomly selected for the study, between January 2016 to June 2016.MBCT was offered as a group

therapy to 25 patients as an addition to the basic treatment. The design and the purpose of the study were explained, and the patients gave written informed consent. The data was collected on subjects individually by administering different questionnaires that is WHOQOL-BREF, Hamilton Depression Rating Scale (HAM-D) and Satisfaction with Life Scale (SWLS). The data was collected by pre and post data collection technique. Prior to data collection researcher had establish a rapport with the subject. The purpose of the research was explained to the subject to develop the subject's keen interest to cooperate the task and after subject's readiness to support the purpose, they were asked to fill the questionnaires. The Mindfulness based cognitive therapy was given to the patients in 8 sessions as an addition to the pharmacotherapy. The MBCT was given to our patients by the same protocol, with eight weekly sessions of 2.5 hours and one follow up session after four weeks. On average, participants had to spend one hour per day on homework assignments. After that the patients were asked to fill the same questionnaires in order to see the effectiveness of the therapy before and after the programme. After the completion of the questionnaires subject was told that his or her responses would be kept confidential and should be used for research purpose only.

Tools:

- **WHO Quality of Life questionnaire (WHOQOL-BREF):** WHOQOL-BREF was developed by WHOQOL group. It contains a total of 26 questions among them 24 items are based on a 4 domain structure that is, Physical health, Psychological, Social Relationships and Environment, in addition 2 items are from the Overall Quality of Life and General Health facet. The items are based on 5 point Likert Scale ranging from very poor, poor, neither poor nor good, good and very good.

- **Hamilton Depression Rating Scale (HAM-D):** Max Hamilton originally published the scale in 1960 and revised it in 1966, 1967, 1969 and 1980. The questionnaire is designed for adults and is used to rate the severity of their depression by probing mood, feelings of guilt, suicide ideation, insomnia, agitation or retardation, anxiety, weight loss, and somatic symptoms. The Hamilton Depression Rating Scale (HAM-D) has proven useful for many years as a way of determining a patient's level of depression before, during, and after treatment.

- **Satisfaction with Life Scale (SWLS):** The Satisfaction with Life Scale (SWLS) is a measure of life satisfaction developed by **Ed Diener** and colleagues (**Diener, Emmons**, Larsen & Griffin, 1985) to assess satisfaction with people's lives as a whole. The scale does not assess satisfaction with specific life domains, such as health or finances, but allows subjects to integrate and weigh these domains in whatever way they choose. It takes only a few minutes to complete. It is a 5-item scale designed to measure global cognitive judgments of one's life satisfaction (not a measure of either positive or negative affect). Participants indicate how much they agree or disagree with each of the 5 items using a 7-point scale that ranges from 7 strongly agree to 1 strongly disagrees. Normative data are presented for the scale, which shows good convergent validity with other scales and with other types of assessments of subjective well-being.

RESULT AND DISCUSSION:

TABLE-1

Showing socio- demographic details of HIV patients

Variables	MBCT	TAU	Test of significance	P
Age				
18-38	19(76)	17(68)	t-test	
39-59	06(24)	08(32)	.874	0.05
Gender				
Male	15(60)	16(64)	X^2	
Female	10(40)	09(36)	.771	0.05
Education				
Illiterate	04(16)	02(08)		
Primary	07(28)	06(24)		
Secondary	12(48)	11(44)	F	
H.edu	02(08)	06(24)	.207	0.05
Religion				
Hindu	10(40)	13(52)		
Muslim	11(44)	10(40)	X^2	
Christian	04(16)	02(08)	.575	0.05
Marital Status				
Married	19(76)	16(64)	X^2	
Unmarried	06(24)	09(36)	.355	0.05
Occupation				
Employed	18(72)	14(56)		
Unemployed	06(24)	09(36)	X^2	
Student	01(04)	02(08)	.488	0.05
Domicile				
Rural	11(44)	12(48)	X^2	
Urban	14(56)	13(52)	.77	0.05
SES				
Upper	00(00)	00(00)		
Upper Middle	05(20)	09(36)		
Lower Middle	11(44)	12(48)		
Upper Lower	08(32)	03(12)	X^2	
Lower	01(04)	01(04)	.326	0.05

Table-1: Is showing the demographic details of the HIV/AIDS patients divided in both experimental and control groups. There were 50 patients selected by purposive sampling method for the study out of which 25 patients were put into experimental group who received MBCT after the treatment was provided and remaining 25 were in control group who did not received any training programme after the treatment. The age range of the patients was between 18-60 years. Majority was of male population in both the groups that is 60% and 64% and mostly were acquired secondary education (48%) and (44%), were employed (72%) and (56%) and lived in urban areas (56%) and (52%) respectively.

TABLE-2

Showing the difference in the mean scores of Experimental and Control groups on the level of Depression, Life Satisfaction and Quality of Life before providing training programme

Variables	Total Subjects	Group-1 (N=25)		Group-2 (N=25)		t
	(N)	Mean	S.D	Mean	S.D	
Depression	50	18.52	2.34	18.64	2.32	-.205
Life Satisfaction	50	11.52	2.63	12.04	2.49	-.766
Quality of Life	50	82.68	5.06	82.28	5.92	.300

Table-2 is showing the scores of both the groups that are experimental group and control group before receiving any therapy or treatment. The mean scores on the level of depression are 18.52 and 18.64, respectively. The scores on life satisfaction are 11.52 and 12.04 and the scores on the level of quality of life are 82.68 of the experimental group and 82.28 of the control group. There is not much variation in the scores of all the three variables. Both experimental and control group scored almost same scores on all the three levels with very little differentiation.

TABLE-3

Showing the difference in the mean scores of Experimental group on the level of Depression, Life Satisfaction and Quality of Life before and after training programme

Variables	Total Subjects	Group-1 (N=25)		Group-2 (N=25)		t
	(N)	Mean	S.D	Mean	S.D	
Depression	50	18.52	2.34	18.64	2.32	-.205
Life Satisfaction	50	11.52	2.63	12.04	2.49	-.766
Quality of Life	50	82.68	5.06	82.28	5.92	.300

Table-2 is showing the scores of both the groups that are experimental group and control group before receiving any therapy or treatment. The mean scores on the level of depression are 18.52 and 18.64, respectively. The scores on life satisfaction are 11.52 and 12.04 and the scores on the level of quality of life are 82.68 of the experimental group and 82.28 of the control group. There is not much variation in the scores of all the three variables. Both experimental and control group scored almost same scores on all the three levels with very little differentiation.

TABLE-3

Showing the difference in the mean scores of Experimental group on the level of Depression, Life Satisfaction and Quality of Life before and after training programme

Variables	(N)	Group-1 (before training)		Group-2 (after training)		t
		Mean	S.D	Mean	S.D	
Depression	25	18.52	2.34	5.24	2.18	24.587
Life Satisfaction	25	11.52	2.63	29.04	2.20	-30.177
Quality of Life	25	82.68	5.06	99.24	1.87	-14.062

Above given table consists of the scores of the experimental group which receives before and after training programme along with the treatment for HIV. The scores on depression before and after training are 18.52 and 5.24. There is a great decrement in the level of depression after receiving training. The scores on life satisfaction are 11.52 and 29.04 respectively. It shows that the training programme helps in enhancing quality of life of the patients. Lastly, the scores on quality of life also shows an increment that is before the training programme the score was 82.68 and after receiving the training programme the score increases to 99.24. All these scores showing a positive effect of training programme on the life satisfaction and quality of life and a major decline in the level of depression.

TABLE-4

Showing the difference in the mean scores of Control group on the level of Depression, Life Satisfaction and Quality of Life without receiving any training programme but a treatment for HIV was provided

Variables	(N)	Group-2 (Before HIV Treatment)		Group-2 (After HIV Treatment)		t
		Mean	S.D	Mean	S.D	
Depression	25	18.52	2.34	15.28	1.79	6.425
Life Satisfaction	25	11.52	2.63	16.36	2.05	-9.219
Quality of Life	25	82.68	5.06	89.48	2.20	-5.97

The above given table is showing the difference in the mean scores on the level of depression, life satisfaction and quality of life of the HIV/AIDS patients without receiving any training programme but only received treatment for HIV. It can be clearly seen that there is not much difference in the scores of the group before and after treatment without any training. The mean scores on depression level are 18.52 and 15.28, the scores on life satisfaction are 11.52 and 16.36 and finally the mean scores on quality of life are 82.68 and 89.48, respectively. The treatment though reduces the level of depression and enhances life satisfaction and quality of life up to an extent but fails to bring that much difference which was shown in experimental group after receiving training programme. This shows that training programme is effective and beneficiary in increasing overall quality of life and reducing the level of depression.

DISCUSSION:

First table is defining the demographic features of the HIV patients included in the present study. The second, third and fourth tables are showing the difference between the mean scores of depression, life satisfaction and quality of life of the two groups without applying any training programme. There is very less or no difference between the scores of the two groups on all the three variables that is, depression, life satisfaction and quality of life. The scores on depression without applying any training programme or treatment are 18.52 and 18.64 for first and second group respectively. The scores on life satisfaction are 11.52 for the first group and 12.04 for the second group and the scores on quality of life are 82.68 and 82.28 respectively. On the other hand, tables five, six and seven are showing the difference between the mean scores of two groups on depression, life satisfaction and quality of life by providing training programme to one group that is, 25 patients and the other group of 25 HIV patients is tested without providing any training programme. There seems a large difference between the mean scores of the two groups when tested by applying before and after training method that is, scores of depression of the first group are 18.52 before training and 5.24 of the second group after training programme. The scores of life satisfaction are 11.52 for the first group and 29.04 for the second group. Finally the scores on quality of life are 82.68 for the first group and 99.24 or the second group. It can be seen that a great level of difference occurs in the scores of both the groups before and after the training process. The level of depression declines as well as quality of life and life satisfaction increases. The last three tables that is table number eight, nine and ten are showing the difference in the scores of the group one which did not receive any training programme but a treatment for HIV is provided to them. The scores for depression are 18.52 before the treatment is provided and 15.28 after the treatment. The scores on life satisfaction are 11.52 and 16.36 before and after the treatment respectively and lastly the scores on quality of life are 82.68 and 89.48 respectively.

CONCLUSION:

India is the third leading HIV prevalent country in the world and the HIV patients are at high risk of depression, anxiety, stress, personality disorders and lack of life satisfaction. With these mental symptoms physical pain and fatigue is also a present among the patients with HIV. Suicides, suicidal attempts, drug abuse, etc. are also present more in HIV patients as compared to general population or the patients suffering from other diseases. Both these physical and mental symptoms have a major negative impact on the quality of life of the HIV patients. In order to improve the quality of life and life satisfaction as well as declining the level of depression, anxiety, stress and negativity in the HIV patients the treatment and medication is not only sufficient that is why a mindfulness based cognitive therapy is provided to the patients which is a short, easy 8-week therapy, consisting of 8 sessions with trained therapists. Patients are expected to do intense homework programme which includes exercises and meditation at home for at least one hour per day. During the training, the therapists discuss the homework and encourage the patients to do their exercises. However, it is important that patients execute mindfulness in their daily life, and not only during the research period then only it will prove effective. The effectiveness of mindfulness based cognitive therapy can be seen clearly from above given tables. There is a difference in the scores of the patients before the treatment and after receiving the treatment but it is not as much effective as the mindfulness based cognitive therapy because the scores are not as much changed as were in the case of the training programme. We can safely conclude that the mindfulness based cognitive therapy proves very effective as compared to any other treatment programme which can be seen from the mean scores of depression, life satisfaction and quality of life in all the three conditions. This training programme is very useful and efficient but there is a need of much more research work in this area in order to find out the long term effects of mindfulness based cognitive therapy.

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