



“A STUDY TO ASSESS THE IMPACT OF COUNSELING TO PREVENT ANXIETY AND DEPRESSION AMONG HIV/AIDS PATIENTS IN A.R.T. CENTER AT DISTRICT HOSPITAL VIDISHA”

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Abstract-

Background - HIV/AIDS patients frequently experience anxiety and depression, and mental illness is frequently observed in these individuals. In cases like this, a skilled counselor can be extremely important. The purpose of this study was to determine how beneficial counseling is in the prevention of depression and anxiety in HIV/AIDS patients.

Aims and Objectives- To assess the level of anxiety and depression among HIV/AIDS patients at district hospital Vidisha, and to evaluate the effect of counseling to prevent anxiety and depression among HIV/AIDS patients by comparing the pre test and post test values.

Methods- A researcher approach with one group pre test – post test design was used for the study. Purposive sampling was used. The Beck's depression inventory scale and the Hamilton anxiety rating scale were used to gather data. Counseling was conducted for one hour following the gathering of baseline data. Seven days after counseling post test was conducted by using the same rating scales. Gathered data were assessed by t-test statistics.

Results-The pre-test anxiety score 28.28(50.50%) was higher than the mean post-test anxiety score 15(26.79%). At the 0.05 level, the "t" value calculated in the anxiety pre-test score was statistically significant. The pre-test score of 36.90(58.57%) was higher than the mean post-test depression level of 22.34(35.56%). At the 0.05 level, the "t" value calculated in the depression pre- and post-tests were statistically significant. The results demonstrate that counseling helped HIV/AIDS patients avoid experiencing anxiety and sadness.

Conclusion-According to this study, counseling significantly reduces the risk of anxiety and sadness in those living with HIV/AIDS. In order to live a productive life despite their disease, it would assist the client in adopting healthier coping techniques.

Keywords- HIV, AIDS, Anxiety, Depression, Counseling

INTRODUCTION-

HIV/AIDS is a chronic illness that can last a lifetime and have numerous potentially incapacitating symptoms that lower quality of life (1, 2). It causes serious illness or perhaps death (3). In addition to the symptoms, people living with HIV/AIDS deal with a variety of societal and psychological problems (such as stigma); this combined suffering increases their risk of despair, anxiety, and hopelessness (4). HIV-positive individuals frequently experience stigma, which lowers their quality of life and results in subpar clinical outcomes (3).

Internalized stigma around HIV can result in dangerous behaviors connected to HIV transmission; include not taking anti retro viral as prescribed, having unsafe sexual relations, skipping out on medical care, and being reluctant to disclose one's status when it could endanger oneself or others (5). Endorsing unfavorable ideas and misunderstandings regarding HIV/AIDS is known as internalized stigma. (6, 7) According to a UN program report from 2022, HIV/AIDS is still a big global public health concern. According to the report, there would be 1.3 million new HIV infections in 2022, out of the 39 million persons living with HIV/AIDS worldwide. There have been 630,000 HIV-related deaths worldwide, and 29.8 million people are undergoing antiretroviral therapy. According to the report people living with HIV/AIDS in Asia and the Pacific were around 6.5 million, with 300,000 new HIV/AIDS infections, 150 000 AIDS-related deaths, and 3.7 million accessing treatment. In India approximately 2.4 million people living with HIV/AIDS.(8). Major psychiatric issues such as anxiety and depression are frequently present with HIV/AIDS. These mental illnesses are quite common in people with HIV/AIDS, and they may raise the death rate of AIDS patients. (9, 10) Low self-esteem, poor attention, decreased energy, restless nights, and a sad mood are all signs of depression (11). There is an increased risk of HIV/AIDS transmission when the patient does not adhere to ART. ART increases life expectancy and quality of life. ART can also reduce the rate of transmission from the patients to others (12, 13). Individuals experience greater psychological and social suffering and struggle to adapt to their surroundings. When these patients experience remorse and blame themselves for getting the illness, their self-esteem rapidly declines. Furthermore, a negative attitude on life, anxiety, rage, and despair are caused by this self-blame. Depression is a key predictor of poor adherence to HIV/AIDS medication (14). Social support can be described as the social, psychological, and interpersonal assistance that optimizes health and well-being of an individual's. Among patients with HIV/AIDS, a positive association between increased social support and better clinical outcomes has been found (15, 16). As patients with AIDS exhibit significantly elevated levels of anxiety and depression as a result of several social, physiological, and psychological variables. Medical treatment and counseling must be administered in tandem if HIV/AIDS patients are to experience less psychological suffering, such as anxiety and sadness. The counseling technique gives people genuine hope in their battle against AIDS. AIDS patients found that counseling was a very effective way to lower their levels of worry and depression.(17)

METHOD- Since the goal of this study was to determine whether counseling can effectively prevent clients' anxiety and sadness, a pre-experimental, one-group pre-test, post-test research design was chosen. Just one group is watched twice—that is both before and after the independent variables are introduced. The level of the phenomena after treatment less the level of the phenomenon prior to treatment would be the treatment's effect. Here, 50 HIV/AIDS patients made up the study sample. The sample was chosen by the use of purposeful sampling, at ART center district hospital Vidisha.

Inclusion criteria- The HIV/AIDS patients admitted at the ART center district hospital Vidisha and Giving informed consent.

Exclusion criteria- Patients not giving consent and who are critical and need referral .
Using a semi-structured proforma, the full medical and psychiatric history of fifty patients who were enrolled in the study were completed. The Hamilton Anxiety Rating Scale (HAM-A), and Beck’s Depression Inventory scale was used to assess the anxiety and depression.

Statistical analysis– Statistical analysis was done using SPSS software v26 in terms of the objectives of the study using descriptive statistics like mean and standard deviation and inferential statistics like chi square and ‘t’ test on the basis of objectives and the hypothesis of the study.

RESULTS:

In the above-mentioned study, 50 diagnosed cases of HIV/AIDS with anxiety and depression following the inclusion criteria were enrolled in to the study.

Patient’s socio-demographic variables (age, sex, marriage, socio-economic status, occupation, domicile, family type, and education, religion, Habits) were studied. Table 1 show most of our patients (31, 62%) belong to age group of 31-40 years of age. There was preponderance of male patients 36(72%). Married patients were 38(76%). Most of the patients hail from urban areas 36 (72%) and belonging to lower middle socio-economic status (23, 46%). Maximum were educated up to middle school (35, 70%) and were skilled worker (22, 44%). Most dominant patients 40(80%) were Hindu and maximum 30(60%) lives in nuclear family.

Table 1: Socio-demographic variables in terms of frequency and percentage (N=50)

Variables	Patients number (N=50)	%
Age (in years)		
20-30	11	22
31-40	31	62
41-50	6	12
>51	2	4
Gender		
Male	36	72
Female	14	28
Marital Status		
Married	38	76
Unmarried	3	6
Widow/separated	9	18
Domicile		
Rural	14	28
Urban	36	72
Occupation		
Unemployed	5	10
Skilled worker	22	44
Unskilled worker	11	22
Shop owner/ clerical/ Farmer	9	18
Professional	3	6
Education		
Illiterate	7	14
Primary to middle school	28	56
High to higher school	12	24

Graduates and above	3	6
Socio-economic Status		
Upper	0	0
Upper middle	2	4
Lower middle	23	46
Upper lower	19	38
Lower	6	12
Family type		
Extended/joint	20	40
Nuclear	30	60
Religion		
Hindu	40	80
Muslim	9	18
Christian	1	2
Habits		
Smoking	11	22
Alcohol	23	46
Other substance intake	7	14
No habits	9	18

Regarding the counseling to prevent anxiety among HIV/AIDS patients. The statistical paired t-test indicates that the difference between the pretest and post test score found statistically significant at 5 percent level ($p < 0.05$). The paired ‘t’ test value obtained was 42.963, $P < 0.05$.

Table no 2- symptoms wise Pre test and Posttest mean scores of patients before and after counseling to prevent anxiety among HIV/AIDS patients.

No	Symptoms	Maximum score (HAM-A)	Patients score (%)						Paired ‘t’ test
			Pre test		Post test		Improvement		
			Mean	SD	Mean	SD	Mean	SD	
1	Anxious mood	4	76.0	16.72	30.0	20.2	46.0	12.75	25.536
2	Tension	4	62.0	22.15	31.5	16.6	30.50	11.62	18.565
3	Fear	4	46.0	21.65	25.0	16.75	21.0	17.02	8.723
4	Insomnia	4	60.50	17.55	32.5	14.50	28.0	10.87	18.198
5	Intellectual	4	35.5	19.62	24.5	15.55	11.0	14.42	5.391
6	Depressed mood	4	77.50	15.35	35.35	15.25	42.35	13.7	21.642
7	Somatic symptoms sensory	4	34.50	16.67	20.5	13.07	14.0	12.52	7.897
8	Somatic symptoms muscular	4	33.5	17.20	21.0	11.70	12.50	12.62	7.000
9	Cardiovascular symptoms	4	45.0	21.42	33.5	16.45	11.50	13.55	5.996
10	Respiratory symptoms	4	45.5	16.52	27.0	13.20	18.50	12.17	10.745
11	Gastrointestinal symptoms	4	53.5	16.75	29.0	14.60	24.50	10.70	16.187
12	Genitourinary symptoms	4	55.5	18.42	29.5	17.27	26.0	15.95	11.534
13	Autonomic symptoms	4	32.5	20.35	18.0	16.77	14.50	17.55	5.838
14	Behavior at	4	49.5	19.22	18.5	19.42	31.0	15.62	14.037

interview									
Combined	56	50.50	8.59	26.79	7.99	23.71	3.90	42.963	

Significant at 5% level t (0.05, 49df) = 1.96

The overall pretest mean score was 50.50±8.59, whereas the post test mean score was 26.79±7.99, indicating a mean improvement of 23.71±3.90. The results of the statistical paired t-test show a significant difference (t = 42.963) between the pretest and posttest scores on the counseling to reduce anxiety among patients with HIV/AIDS.

Table no 3- symptoms wise Pre test and Posttest mean scores of patients before and after counseling to prevent depression among HIV/AIDS patients.

No	Symptoms	Maximum score (Beck depression inventory)	Patients score (%)						Paired 't' test
			Pre test		Post test		Improvement		
			Mean	SD	Mean	SD	Mean	SD	
1	Sadness	3	73.33	26.00	44.67	17.30	28.67	17.83	11.369
2	Pessimism	3	66.70	20.20	41.33	20.83	25.33	14.37	12.457
3	Sense of failure	3	65.33	24.23	46.0	21.17	19.33	17.93	7.624
4	Dissatisfaction	3	60.00	28.97	41.33	23.87	24.67	16.23	10.745
5	Guilt	3	61.33	25.53	40.67	20.53	20.67	17.67	8.267
6	Sense of punishment	3	69.33	27.63	46.67	23.33	22.67	18.37	8.726
7	Self dislike	3	36.67	31.77	22.00	20.87	14.67	16.70	6.205
8	Self accusations	3	59.33	22.63	35.33	21.73	24.00	15.13	11.225
9	Suicidal ideas	3	18.67	27.07	5.33	15.60	13.33	16.50	5.715
10	Crying	3	64.67	22.73	34.67	15.00	30.00	16.83	12.600
11	Irritability	3	84.67	18.07	52.00	21.47	32.67	15.77	14.639
12	Social withdrawal	3	76.67	20.47	38.67	15.60	38.00	15.07	17.826
13	Indecisiveness	3	48.00	24.43	30.0	15.43	18.00	18.07	7.039
14	Body image change	3	36.67	35.80	18.67	23.50	18.00	16.77	7.584
15	Work retardation	3	50.00	25.43	28.67	16.50	21.33	17.50	8.615
16	Insomnia	3	60.00	19.03	34.00	17.17	26.00	13.93	13.181
17	Fatigability	3	55.33	22.93	42.0	18.83	13.33	16.50	5.715
18	Anorexia	3	64.67	19.53	38.0	20.20	26.67	17.83	10.583
19	Weight loss	3	48.00	27.07	29.33	20.90	18.67	19.23	6.861
20	Somatic preoccupation	3	56.00	22.67	30.67	16.27	25.33	17.23	10.386
21	Loss of libido	3	71.33	22.33	44.00	17.10	27.33	18.67	10.349
Combined		63	58.57	7.58	35.46	5.03	23.11	5.03	32.480

Significant at 5% level t (0.05, 49df) = 1.96

The mean score before the exam was 58.57±7.58, and after it was 35.46±5.03, with an average improvement of 23.11±5.03. The results of the pretest and posttest on the counseling to prevent depression show a significant difference (t = 32.480), according to the statistical paired t-test among those suffering from HIV/AIDS. Thus, at the 0.05 level of significance, we conclude that the research hypothesis is accepted and the null hypothesis is rejected.

Table no 4- pretest and posttest mean scores of patients before and after counseling to prevent anxiety among HIV/AIDS patients.

	Maximum score	Patients score			Paired ‘t’ test
		Mean	Mean (%)	SD	
Pre test	56	28.28	50.59	8.59	42.963*
Post test	56	15	26.79	7.99	
Changes /enhancement	56	13.28	23.71	3.90	

* Significant at 5% level, t (0.05, 49df) =1.96

Table 2 shows overall pretest mean percent was 50.50±8.59 and posttest mean percent score was 26.79±7.99 with the mean enhancement in the score by 23.71±3.90. The statistical paired t-test indicates the significant difference between pretest and posttest scores (t = 42.963).

The paired t-test analysis was used to find the statistical significance of the score of patients

Table no 5- pretest and posttest mean scores of patients before and after counseling to prevent depression among HIV/AIDS patients.

	Maximum score	Patients score			Paired ‘t’ test
		Mean	Mean (%)	SD	
Pre test	63	36.90	58.57	7.58	32.480*
Post test	63	22.34	35.46	5.03	
Changes /enhancement	63	14.56	23.11	5.03	

* Significant at 5% level, t (0.05, 49df) =1.96

Table 3 shows overall pre-test mean was 58.57±7.58 and post-test mean score was 35.46±5.03 with the mean enhancement in the score by 23.11±5.03. The statistical paired t-test indicates the significant difference between pretest and posttest scores (t = 32.480).

The paired t-test analysis was used to find the statistical significance of the score of patients regarding the counseling to prevent depression among HIV/AIDS patients. The statistical paired ‘t’ test indicates that the difference between the pretest and posttest score found statistically significant at 5 percent level (p<0.05). The paired‘t’ test value obtained was 32.480, P < 0.05.

Table no 6- Classification of patients score level of counseling to prevent anxiety among HIV/AIDS patients at A.R.T. center Vidisha.n=50

Anxiety score level	category	Classification of patients			
		Pre test		Post test	
		Number	Percent	Number	percent
Mild	<50% score	24	48.0	50	100.0
Moderate	51-75% score	26	52.0	-	-
Severe	>75 % score	-	-	-	-
Total		50	100.0	50	100.0

The above table shows the classification of patient’s scores level of counseling to prevent anxiety among HIV/AIDS patients at ART center district hospital Vidisha. In pretest 24 (48.0%) samples had mild anxiety, 26(52.0%) samples had moderate level of anxiety and none of the sample had severe level score regarding counseling to prevent anxiety among HIV/AIDS patients at ART center Vidisha. In posttest test 50(100.0%) samples had mild anxiety; none of the samples had moderate

level of anxiety and severe level of anxiety regarding counseling to prevent anxiety among HIV/AIDS patients ART center Vidisha.

Table no 7- Classification of patients scores level of counseling to prevent depression among HIV/AIDS patients at A.R.T. center Vidisha.n=50

Depression score level	category	Classification of patients			
		Pre test		Post test	
		Number	Percent	Number	percent
Mild	<50% score	6	12.0	50	100.0
Moderate	51-75% score	44	88.0	-	-
Severe	>75 % score	-	-	-	-
Total		50	100.0	50	100.0

The above table shows the classification of respondent’s scores level of counseling to prevent depression among HIV/AIDS patients at ART center Vidisha. In pretest 6 (12.0%) samples had mild depression, 44(88.0%) samples had moderate level of depression and none of the sample had severe level score regarding counseling to prevent depression among HIV/AIDS patients at ART center Vidisha. In posttest test 50(100.0%) samples had mild depression; none of the samples had moderate level of depression and severe level of depression regarding counseling to prevent depression among HIV/AIDS patients at ART center Vidisha.

DISCUSSION:

The goal of the current study is to evaluate how well counseling works in preventing anxiety and sadness in HIV/AIDS patients. An evaluative design was used for the study in order to meet its goals, and 50 participants who met the inclusion and exclusion criteria were chosen through the use of purposive sampling. The Beck Depression Inventory, the Hamilton Anxiety Rating Scale, and Sociodemographic information were used to evaluate the participants.

Socio-Demographic Variables-

Age and sex-

The majority of patients were in the age group of 31-40 years (31,51.6%) followed by 20-30 years group (11,22%). 41- 50 yrs of age group constitute (6,12%) and least 2(4%) patients present in more than 51 yrs of group. Based on the sex, 36(72%) samples were males and 14(28%) samples were females. Other researchers also had similar findings.

Marriage-

The majority of the patients in the present study were married (38, 76%), while 9(18%) patients were widow/separated and 3(6%) patients were unmarried in present study. Other researchers also concluded similar results. (12)

Domicile-

The majority of our patients hailed from urban areas (36, 72%) while 28% were from rural areas (table 1).This is due to mobilization of people from rural to urban areas in search of jobs.

.Occupation- The majority of patients were skilled workers (22, 44%) followed by a unskilled worker 11(22%). 9(18%) of patients were shop owner/clerical/farmer. Unemployed and professionals were 5(10%) and 3(6%) respectively.

Education- Majority of our patients were educated up to middle class (35, 70%), followed by high to higher school (12, 24%). Only 3(6%) patients were graduates or more. (12)

Family type- Majority of our patient’s (30, 60%) lives in nuclear families, while 20(40%) patients lived in joint family. This could be due to social structuring of our country. Other researchers had similar finding in their studies. (12)

Socioeconomic status- The majority of subjects belonged to lower-middle socioeconomic status (23,46%) followed by upper-lower class (19,38%) (table 1). This simply seems to be due to the socioeconomic structure of the community in this region and hence increased affinity of HIV/AIDS infection the middle class. (11)

Religion - In relation to the religion, 40(80%) patients were belonged to in Hindu, 9(18.0%) patients were from Muslim community, while least were christens 1(2%). This is possibly because of predominance of Hinduism in this area.

Habits-

Regarding their habits, 23 patients (46%) reported drinking alcohol, 11 patients (22.0%) reported smoking, and 7 patients (14.0%) reported having other substances, while 9 patients (18.0%) reported not having any negative habits.

Level of anxiety and depression among HIV/AIDS patients-

In the study, the overall anxiety and depression score of HIV/AIDS patients was examined. The results show that the mean anxiety score for the pretest as a whole was 28.28 (50.50%) with SD of 8.59%.and the depression score was 36.90 (58.57%) with a standard deviation of 7.58%. HIV status and depressed mood in patients who had tested positive for the virus were determined through a longitudinal research.

There were 425 men in the sample. A 6-item depression subscale from the Brief Symptoms Inventory was used to measure depressive mood. The results indicated a significant correlation between depressed mood and HIV status (P = 0.001).

When compared to HIV positive asymptomatic individuals, those with an AIDS diagnosis reported much higher depressed symptoms. (18, 19)

Effect of counseling on anxiety and depression among HIV/AIDS patients in comparison with pre test and post test values-

The study examined the total anxiety and depression score among patients with HIV/AIDS. The results show that the mean anxiety score for the pretest as a whole was 28.28 (50.50%) with SD 8.59%.and the percentage of depression was 36.9 (58.57%) with a standard deviation of 7.58%. Following the counseling session, a post-test was administered, and the results showed that the mean scores for anxiety and depression were, respectively, 15 (26.79%) and 22.34 (35.56%) with standard deviation of 5.03%. It demonstrates that following the counseling portion, there is a statistically significant decrease in the anxiety and sadness pre- and post-test ratings.

According to previous research, patients took their medicine more consistently and became more engaged in the therapy when they experienced mental relaxation and thought that medication and therapeutic training were necessary to manage daily routines and treatment processes (20, 21). When compared to patients who did not receive counseling, the characteristics we saw in the participants who did receive treatment were significantly different (22). Counseling has been shown to be an effective therapy strategy for improving life satisfaction and quality of life while lowering symptoms of anxiety and depression (23, 24). Additionally, research shows that counseling was a successful treatment for enhancing people with HIV/AIDS' quality of life and general psychological well-being (25).

Limitations of the study-

1. The study being a hospital-based study, the results cannot be generalized to the general population.

2. Sample size is small.

Conclusion- Counseling greatly improved social support and quality of life by reducing depressed symptoms and emotional disturbance, which may have been brought on by social stigma. Additionally, counseling has demonstrated to be the preferred supportive intervention for patients with HIV/AIDS, producing noteworthy and dependable results when addressing mental health issues utilizing efficient modalities to guide the patients and understand the significance of psychological treatment addressing the problems of patients.

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