Effect of Logotherapy on Negative Affect Among People Living With HIV/AIDs

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Abstract

The study examined the effect of logotherapy on negative affect among people living with HIV/AIDS. Twenty-four (24) HIV/AIDS patients of Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State comprising of 9 males and 15 females within the age range 18 to 50 years with mean age of 34.13 and standard deviation of 11.01 were obtained using purposive sampling method and were randomly assigned to one experimental and one control group (N=24). The experimental group received logotherapy for 6 treatment sessions once every week for 6 weeks while control group received no treatment. All participants were assessed using the 20-Item Positive and Negative Affect Scale (PANAS) before and after the treatment; after which, the 10 items that measures negative affect were extracted from their responses and analyzed using independent t-test. The result indicated that people living with HIV/AIDS who received logotherapy showed significantly lower negative affect compared to those in the control group at t (22) = - 6.82, sig (.000), p<.05 level of significance. Hence, the hypothesis of the study was accepted. This study therefore recommended that logotherapy can be effective psychotherapeutic modality in the treatment of negative affect associated with HIV/AIDS.

Keywords: Logotherapy, Negative affect and PLHA

Introduction

Human immunodeficiency virus (HIV) represents a significant cause of disease and death globally (UNAIDS, 2013); and is estimated that about 1.8 million people are living with HIV in Nigeria (National Agency for the Control of AIDS-NACA, 2020). HIV is a viral infection that gradually destroys the body's immune system, a situation called Acquired Immuno-deficiency Syndrome (AIDS). AIDS is a fatal disease in which the human immunodeficiency virus (HIV) destroys the ability of the immune system to fight off a wide range of infectious agents (NACA, 2020). An estimate of 103,404 new HIV infections and 44,830 deaths was reported in Nigeria in 2019 (Joint United Nations Programme on HIV/AIDS, 2020). The aftermath of the seropositive diagnoses of HIV/AIDS can be very devastating psychologically and could trigger some negative emotions such as negative affect.

Negative affect as observed among people living with HIV/AIDS threatens treatment outcome and have both physiological and psychological implications which are life threatening. Some people living with HIV/AIDS continue to suffer from negative affect for many years after their initial diagnosis, which brings about poor health and poor adherence to treatment (Bhatia, Hartman, Kallen, Graham, & Giordano, 2011). According to DSM-V (2013), negative affect is characterized by: depressive mood, anxiousness (intense feelings of nervousness, fear and frustration), emotional lability (unstable emotional experiences and aggression) and separation insecurity (fears of rejection by and/or separation from significant others). Agarwal, Mahore and Pathak (2018) stated that people's reaction to the diagnosis of HIV/AIDS results in negative affect which includes shock or anger resulting from the knowledge of their current HIV/AIDS positive status. These individuals also observe some levels of anxiety, tension, loss of interest in life or depression which could be as a result of fear over how the disease will progress, fear of isolation by family, friends and worries about infecting others; which could be because of the threats HIV/AIDS poses to a person's life, goals, expectations, and interpersonal relationships.

Negative affect is an important human factor with holistic contribution to the wellbeing of individuals. Therefore, if not managed properly, it may constitute deleterious impacts on an individual and the society at large.

Solomon and Temoshak (1987) argued that negative affect brings about impaired immune system defence against the HIV and thus greater opportunistic infections. Among women infected with HIV-1, greater pessimism was associated with reduced NK cell lysis (Byrnes et al., 1998). Alternatively, more deliberate cognitive processing about the death of a close friend or partner was associated with greater likelihood of finding positive meaning in the loss, less rapid decline in CD4 cell levels, and lower rates of AIDS-related mortality over a 9-year period in HIV-seropositive men (Bower, Kemeny, Taylor, & Fahey, 1998). Nonetheless, Kemeny (1994) observed that among men living with HIV/AIDS, situational optimism about health outcomes was linked to slower decline of immune function, later symptom onset, and longer survival time. However, studies by Temoshak et. al, (1988; Temoshak, Solomon, Jenkins & Sweet, 1989) indicated that emotional stability devoid of anger, anxiety, aggression, frustration, guilt, fear, shame, hostility and loneliness was associated with higher percentage of helper T4 cells.

Given the impact of negative affect among people living with HIV/AIDS, it therefore becomes essential to treat these negative affects among people living with HIV/AIDS. Also, there is scarcity of such research in Nigerian settings; as a result, there is need to explore the effect of logotherapy as a psychotherapeutic approach in this regard.

Logotherapy as a treatment approach was developed by Viktor Frankl. He opined that logotherapy is centered on finding meaning to human existence as well as on man's search for such a meaning. Frankl (1967) believed that humankind can choose how to relate to its own situation; if one can find meaning in suffering, one can cope better with it but when the drive for meaning is blocked, it results to an "existential void". This neurosis is not pathological but an existential anguish; leading to an intense struggle to find meaning to life (Frankl, 1969). He argued that, even in the most ill individual, there remains a healthy core, which is the human spirit. One of the prepositions of logotherapy is that the human spirit is our healthy core. The human spirit may be conceptualized as our basic yearnings and capacity for meaning and spirituality. The human spirit may be blocked by biological or psychological sickness, but it remains intact; the spirit does not get sick, even when the

psychobiological organism is injured. Frankl (1970) listed the fundamental principles of logotherapy: (1) Life has meaning under all circumstances, even the most miserable ones. (2) The main motivation for living is the will to find meaning in life. (3) Individuals have freedom to find meaning in what they do and what they experience or at least in the stand they take when faced with a situation of unchangeable suffering. The logotherapeutic technique enhances four treatment goals: self-distancing from the symptoms, modification of attitudes, reduction of symptoms and an orientation toward meaningful activities and experiences (Asagba & Marshall, 2016).

The effects of logotherapy have been reported by many authors. Atefeh, Mokhtar, Weisani and Sajad (2014) reported that their study examined the effect of logotherapy on life expectancy and suicidal thoughts among women with AIDS, using purposive sampling method, where 26 participants were randomly assigned to 2 groups (experimental and control groups) with 13 persons per group. Duration of HIV infection range, 3-16 years had mean and standard deviation, respectively, 7.17 and 3.08 and the sample age range, 22-54 years had mean and standard deviation, of 35.66 and 8.12 respectively. The experimental and control groups completed Miller life expectancy questionnaire and Beck & Steer suicidal thoughts questionnaire as pre-test. The experimental group participated in logotherapy meetings. They had 10 therapy sessions, once a week, and held for 2 hours. During the treatment period, the control group did not receive any psychological services. After therapy sessions, both experimental and control groups again completed research instruments as post-test. The findings of the study showed that logotherapy increased positive life expectations and reduces suicidal thoughts among women with HIV in experimental group than control group.

Fataneh, Tahereh, Khadijeh and Mehrnoosh (2014) explored the efficacy of logotherapy effect on hope of life among HIV patients. The study comprised of 180 HIV-infected patients. After completing the Snyder's Adult Hope Scale (AHS), randomized sampling method was used in the selection of 24 participants who were randomly assigned into two groups (experimental and control group). The experimental group then participated in 10 two-hour sessions of group logotherapy classes, and the control group received no training.

Adult Hope Scale was recompleted in both groups at the end of the program. The findings showed that logotherapy significantly increased the score of hopefulness in the intervention group.

Suyanti, Anna, and Catharina (2018) reported their study which evaluated the effect of logotherapy, acceptance commitment therapy (ACT), psychoeducation on self-stigma and depression among housewives living with HIV/AIDS, using a quasi-experimental pre-test post-test design. The study comprised of 60 participants within the age range of 20 to 43 years; obtained using purposive sampling method and were randomly assigned into three groups (logotherapy group, ACT group and psychoeducation group). The instrument used in the study was Internalize Stigma of AIDS Tools which included the characteristics of the respondents and items on depression, self-stigma, treatment compliance, and meaning of life. The findings of the study suggest that logotherapy, ACT and psychoeducation were effective in reducing self-stigma and depression among housewives living with HIV/AIDS.

Theoretical Framework

The study is anchored on the appraisal theory of emotion propounded by Magna Arnold (1960) which stated that people implicitly appraise or evaluate everything they encounter, and that such evaluations occur immediately and automatically. According to Arnold (1960), appraisal is the process of determining the significance of a situation for an individual; that is, whether it is good or bad for them. It is an evaluative process that serves to 'diagnose' whether the situation confronting an individual has adaptation relevance and to produce an appropriate emotional response (Smith & Kirby, 2001). Thus, the result of this evaluation or appraisal can result in either positive or negative affect. In the case of negative affect, it then becomes pertinent to employ a psychotherapeutic approach.

HIV/AIDS can challenge people's core assumptions about them and their world (Bulman, 1992). The nature of HIV as well as the numerous social and occupational losses; causes many individuals to question beliefs they hold about themselves. Thus, the importance of applying psychotherapeutic approach (logotherapy) becomes inevitable to help people appraise undesirable events in personally meaningful ways and find ways of understanding the negative aspects of the experience, and ultimately reach a state of acceptance.

Research question

Will logotherapy reduce negative affect among people living with HIV/AIDS?

Purpose of the Study

The general purpose of the study is to determine the effect of logotherapy on negative affect among people living with HIV/AIDS in Nnamdi Azikiwe University Teaching Hospital, Nnewi.

Hypothesis

Logotherapy will significantly reduce negative affect among people living with HIV/AIDS.

Method

Participants

The study was carried out at Nnamdi Azikiwe University Teaching Hospital, Nnewi. The target population of this study consisted of people living with HIV/AIDS at Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State. Twenty-four (24) HIV/AIDS patients currently under treatment participated in the study. The age range of these participants were between 18 - 50 years (M = 34.13 and SD = 11.01). Simple Random Sampling method (fishbowl) was used to assign the participants to the various treatment conditions (Logotherapy and Control group). The participants were nine (9) males and fifteen (15) females.

Instruments

Positive and Negative Affect Scale (PANAS).

The scale was developed by Watson, Clark and Tellegen, (1988) to measure the state of one's emotion. It contains 20 items that measure both positive and negative affect. It contains a scoring pattern of 5-point likert scale and the following response choices: 1''Very slightly or not at all'', 2''Little'', 3''Moderately'', 4''Quite a bit'', 5'' Extremely''. Watson et al. (1988) reported an internal consistency for the scale ranged between .86 to .90 for positive affect and .84 to 87 for negative affect. The test-retest reliability for the PANAS (1 week) was obtained as .79 for positive affect and .81 for negative affect (Watson

et al., 1988). In Nigeria, Agbo (2016) reported an internal consistency with coefficient alpha of .80 for positive affect and .71 for negative affect. A concurrent validity was reported by correlating PANAS to Subjective Happiness Scale (SHS) = −.39 for negative affect and .51 for positive affect.

Inclusion criteria

Patients who met the following criteria were eligible for the study:

- Patients who understand English language.
- Patients who are at least 18 years of age and above and signed informed consent.
- Patients living with HIV/AIDS and also have negative affect score ranging from 30 (moderately) to 50 (extremely) using PANAS.

Procedure

The researchers obtained permission from Research Ethics Committee of Nnamdi Azikiwe University Teaching Hospital, Nnewi to conduct the research. The procedure for collecting data was divided and carried out in three stages as follows: pre-test phase, treatment phase and post-test phase.

Pre-test phase: Participants were selected using purposive sampling method, signed informed consent and PANAS was administered to them serving as pre-test. After the pre-test administration, those who met the inclusion criteria were assigned to two groups using Fishbowl Random Sampling Technique (FRST). This was a simple random technique involving participants picking a folded paper of A and B. Those who picked A were labeled group A (experimental group) while those who picked B were labeled group B (control group).

Treatment phase: The treatment utilized an individual therapy approach. Group A was treated with six sessions of logotherapy which was administered by a trained clinical psychologist. Each session lasted about forty-five minutes. It was administered once a week which lasted for six weeks; while Group B on the other hand received no treatment but rather participated as a control group for group A.

Post-test phase: After the treatment phase, the PANAS was administered to the two groups: group A and B; and data collected. The PANAS of the groups before and after the treatments were used for data analysis.

Design and Statistics

The research was an experimental study which involved a pretest posttest control group design. Based on the design, independent t-test was adopted for data analysis.

Table 1: Summary table of Means (M), standard deviations (SD) of the pre-test and post-test of the study (N = 24).

TABLE: 1

TABLE OF MEANS				
	PRE-TEST	N	Mean	Std. Deviation
Negative affect	(GROUP A)	12	84.67	9.39
	(GROUP B)	12	82.67	7.10

Note, N means the total number of the participants in each groups. From the table 1 above, pre-test group A numerically obtain the highest of M=84.67, SD=9.39. Compared to pre-test group B with M=82.67, SD=7.10. This indicated that there is no mean difference between the two groups (group A and B) before the intervention.

Table 2 shows that there is a statistically significant difference between the treatment condition (logotherapy) and the Control group on negative affect among people living with HIV/AIDS at t (22) = - 6.82, sig (.000), p<.05 level of significance. We can be 95% confident that the true difference between these means is CI= (-45.64, -24.36). Hence, we hereby accept the hypothesis of the study.

Table 2

		T	Df	Sig.	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Negative affect	Equal variances assumed	-6.82	22	.000	-35.0000	5.1296	-45.6382	-24.3618
	Equal variances not assumed	-6.82	15.82	.000	-35.0000	5.1296	-45.8847	-24.1153

Discussion

The present study examined the effect of logotherapy on negative affect among people living with HIV/AIDS. The hypothesis of the study stated that logotherapy will significantly reduce negative affect among people living with HIV/AIDS. It is notable that logotherapy significantly reduced negative affect in comparison with the control group. This finding can be explained by the fact that logotherapy exposed the participants to the reality that people have the opportunity to attain the highest and most profound meaning of life in irreversible situations like an incurable disease. This was achieved by making the participants understand that attitude toward suffering is much more important than the suffering itself. Thus, helping them feel more responsible for their lives thereby achieving happiness and motivation along with accountability toward themselves and others by experiencing fundamental transformations in their beliefs. This is in line with the studies by Suyanti, Anna, and Catharina (2018; Atefeh, Mokhtar, Weisani & Sajad 2014; & Fataneh, Tahereh,

Khadijeh & Mehrnoosh, 2014) which observed that logotherapy was effective in decreasing negative affect associated with HIV/AIDS.

Indeed, the result obviously suggested that logotherapy could be a very good psychotherapeutic tool in the hands of clinicians. The result also bridged locality gap in knowledge as it regards to the Nigerian setting.

Implications of the Study

The findings of the study have implications for the government's ministry of health, clinical psychologists and other professionals in the medical field should employ this psychological intervention known as logotherapy in reducing negative affect associated with HIV/AIDS. Furthermore, medical practitioners should include the assessment and treatment of emotional stressors associated with the diagnosis of HIV/AIDS such as negative affect and others in their treatment plans.

Recommendations

The researchers recommended that

1. Psychologists especially clinicians should employ logotherapy as a psychotherapeutic approach in the treatment of negative affect associated with HIV/AIDS.
2. It should be made a matter of policy to include psychological treatment in the treatment protocol for HIV/AIDS patients.

Limitations of the Study

The result should be viewed within the context of its limitations necessitated by the limited size of patients living with HIV/AIDS that participated in the study and also by restricting the study to a particular hospital.

Conclusion

This study investigated the effect of logotherapy on negative affect among people living with HIV/AIDS at Nnamdi Azikiwe University Teaching Hospital, Nnewi. The study found that logotherapy was potent in reducing negative affect among people living with

HIV/AIDS. Based on the outcome of the study, the researchers concluded that the study is essential to those in the medical and psychological settings even to the general populace. This will contribute to better understanding of the treatment of emotional distress experienced by patients living with HIV/AIDS in Nigeria and all over the world.

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