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LOGO THERAPY EFFECT ON LIFE EXPECTANCY AND SUICIDAL THOUGHTS AMONG WOMEN WITH AIDS, COMMUNITY OF VALUES REVIVAL

*Atefeh Kamae[1], Mokhtar Weisani[2] and Sajad Sadatizadeh[3]
[1]Department of Psychology, Ramhormoz Branch, Islamic Azad University, Ramhormoz, Iran
[2]Department of Psychology, University of Shahid Chamran Ahvaz
[3]Department of Human Science, Ramhormoz Branch, Islamic Azad University, Ramhormoz, Iran
*Author for Correspondence

ABSTRACT

This study aimed to evaluate the effectiveness of Logo therapy on suicidal thoughts and life expectancy among women with AIDS that covered by Community of values revival. This study was semi-empirical pre-test - post-test with control group. The statistical population included all women with AIDS that covered by community of values revival, 53women from this community were evaluated by Miller (1988) life expectancy questionnaire and Beck *et al.,* (1991) suicidal thoughts questionnaire, 26 subjects who theirlife expectancy scored was lower than 120 and their suicidal thoughts scored was more than 15 randomly divided into two groups, control group (n = 13) and experimental groups (n = 13). Then logo therapy method in 10 sessions were conducted on experimental groups, in the end, both groups were assessed again by using research tools. The results showed that between experimental and control groups in terms of life expectancy and suicidal thoughts after the intervention there was a significant difference ($p<0.01$). Also in the experimental group between life expectancy scored and suicidal thoughts scored before and after intervention, significant differences were observed ($p<0.01$). Logo therapy can increase life expectancy and reduce suicidal thoughts in women with AIDS.

INTRODUCTION

Since 1981 when the first case of AIDS was diagnosed until 2008, 25 million people have died of this disease. According to 2007 statistics, approximately 33 million people in the worldwide were infected with HIV. During the same period, 7/2 million people were infected. These diseases as one of the most destructive epidemics disease have been recorded in human history. Thus, AIDS is a global epidemic and all countries have to deal with this destructive disease (Gonzalez *et al.,* 2012).

In addition to the prevalence of HIV among people and the need for special attention to this issue, another important issue thatprovide the necessity of conducting this study was the risk that have been exposure in the mental health And psychological effects on people that sufferers from this disease.

Physical and mental health, family life, social and group activities, economic progress and individual development, are the factors that affect quality of life in patients with AIDS (Grierson *et al.,* 2004).

Yang *et al.,* (2003) write "The major problem for people with AIDS are the mental and social problems, and the factors that are associated with this problem include consistency in relation, work and family, cultural and economic status, the devastating consequences of this disease include anxiety, depression, suicide, rejection, disappointment and social phobia.

Huggins *et al.,* (2012) in their study entitled the evaluation of anxiety, depression and suicidal thoughts in people with AIDS, stated that, mental disorders such as frustration, feelings of guilt, self-punishment, depression and suicide in people with HI considerably higher than other people including those with cancer, asthma, cardiovascular disease and even in physically disabled people, Perhaps the root of these disorders was the rejection from their family and discriminatory looked from society and people around them, in this study the rate of psychiatric disorders in women significantly was more than men.

Weisani (2012), in his interview with 30 patients with AIDS concluded that a suicidal tendency in this people is extremely high and 9 of them in their medical records have suicide attempts.

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Galvao *et al.,* (2004) in their study entitled Quality of life in women with AIDS, showed that HIV causes economic worries, concern about disclosure of illness to friends and colleagues, hatred of sex, frustration, conflict, loss of self-esteem, social isolation, identity crisis and feel the absurdity of life.

Conducted research on quality of life in women with HIV (especially in mothers that suffering from this disease), show that counseling and psychological interventions necessary to help these women.

The research results have shown that counseling and psychological services enhance the quality of life, psychological well-being, happiness, self-esteem and reduce social anxiety in people with AIDS (Lechner *et al.,* 2003; Chernoff, 2007; Weisaniand, 2013)

To deal with the psychological reactions caused by AIDS, there are different approaches and techniques including methods such as Logo therapy techniques, meditation, art therapy and cognitive - behavioral therapy. Among these methods, it appears that Logo therapy by creation of life concept for people can encourage them to continue their live.

Beginning of Logo therapy is clearly rooted in Frankl childhood. One night when she had four years old, he thought that one day he would die and concluded that death gives meaning to the life. Or when he had 17 years, in the philosophical workshop that was organized by Edgar Zylsl in adult education school, the title of his speech wasthe meaning of life. However, the first reflection of Logo therapy returns to the Frankel (1926) at the International Congress of individual psychology.

Frankl believes that frustrated, depressed and restless people and those who feel lonely often complain of life absurdity. Logo therapy calls on people to try and work, he says that what keeps people from moving are not misery and adverse human nature but loss of life meaning is catastrophic.

If we recognize suffering bravely until the last moment, life will have meaning and the meaning of life can even include the potential meaning of pain and suffering. Frankel says there is nothing in the world that just as meaning of life can help to the humans. Snyder (2001), the founder of hope theory and therapy based on hope, defined hope as a structure that comprises of two concepts: "The Pathway design ability to the desired goals, despite the obstacles and having sufficient motivation for using this Pathway".

 hoped is one of the most important psychological needs of human beings, it is an emotional force that will lead imagination to a positive case.it gives energy to the people, and acts as a catalyst for their work. Hope gives flexibility and exhilaration to individual, increase life satisfaction and is the ability to get rid from the life injuries (Pritchett, 2004). According to Snyder, hopelessness is a shocking state that is clear by impossibility of issues and powerlessness. Hopelessness persons are severely disabled and cannot assess their different situations and cannot make decisions in different situations.

On the other hand, a suicide thought isone of the issues that are threatening for AIDS patients.
(Quoting by Consoli et al., 2013), defined Suicide as: Achill Delmas
Suicide is the act that a person does to kill himself, while the choice of life and death is in his strength but Based on ethical principles should not do that.

Sigmound Freud on suicide definition says:

When suppress, desire to killing another person, than may feel angry towards himself. Whenpeople committed to suicide actually they wanted to kill other people, but it situation has not been provided for them so they killed themselves. According to what was mentioned, the aim of this study was to investigate the effectiveness of Logo therapy on hope and suicide thoughts among women with HIVWith this hypothesis that this treatment can increase life expectancy and reduce suicidal thoughts.

MATERIALS AND METHODS
Methods
This study was semi-empirical pre-test - post-test with control group. The statistical population included 94 women with AIDS that covered by community of values revival.

available Sampling method was used in this study, this means that among 53 women who completed life expectancy questionnaire and suicidal thoughts questionnaire as pre-test, 26 subjects who their life expectancy scored was lower than 120 and their suicidal thoughts scored was more than 15 and based on DSM-IV as a diagnostic criteria, was found to have suicidal tendencies were selected as researchsample.

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And then based on explain objectives of this study and women consent to participate in this study, randomly divided into two experimental and control groups (each group n = 13).

The experimental group participated in Logo therapymeetings. 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.

Two Questionnaires were used to Collect Data
1-Miller Life Expectancy Questionnaire (1988): This questionnaire included 48 aspects of hope and failure modes, this article have been selected based on covert or overt behavioralcharacteristics in desperate and hoping individuals.

This scale has been developed based on Likert 5-degree spectrum, this scale grading from very opposite to strongly agree.

Scores domain of hope scale, wasbetween 48 to 240, that high scores indicate high individual hopes and low scores indicate a lack of individual hope (helplessness).

12-point from Miller's questionnaire was formed from a negative material that in evaluation and grading, scores inversely belongs to them. These questions are: 11, 13, 16, 18, 25, 27, 28, 31, 33, 34, 38 and 39

In Asgari and Sharaf research (2012), to determine the validity of this scale, scores were correlated with happiness scale, and found a significant positive relationship between them (p<0.001, r=75.0, N=50).

Faso *et al.,* (2013) in another research to check the reliability of the hope scale used Cronbach's alpha coefficient. The results showed that the Cronbach's alpha coefficients among the male students, female students and all students, respectively was, 0.88, 0.83 and 0.87.

2-Beck & Steer Suicidal thoughts Questionnaire (1991): This questionnaire is a self-assessment tool with has 19-question.that set according to the three degrees from zero to 2. The individual total score is calculated by summing the scores and located from zero to 38. Scale questions includes items such as death wish, active and inactive suicide tended, duration and frequency of suicidal thoughts, feelings of self-control, inhibitory factors for suicide and individual readiness for suicide.

In Beck's suicidal thoughts tests there are 5 screening questions. If respondents answer in these 5 questions indicates active or inactive suicidal tendencies, so the participants will answer to the 14 next questions, the average time for completion of this scale is 10 minutes.

Beck's suicidal thoughts scale is highly correlated with standardized testing ofclinical depression and suicidal tendency (SSI). Correlation coefficients range of Suicidal thoughts was 0/9 for patients who have been hospitalized to 0.94for the clinic patients.

This scale also was associated With Beck suicide in depression question from 0.58 to 0.69.

In addition thisscale was associated with Beck Hopelessness Scale and the Beck Depression questionnaire from 0.64 to 0.75 (quoted by Ismail, 2009). Beck *et al.,* (1993) obtain the reliability of this scale by using Cronbach's alpha coefficient; this value was from 0.87 to 0.97.

Anisee *et al.,* (2007) the reliability of this scale that obtain by using Cronbach's alpha coefficient this value was 0.95, in this research the reliability of this scale that obtain by using Cronbach's alpha coefficient was 0.89.

Analysis of data obtained from this research performed by using SPSS19 software in both descriptive and inferential parts by using descriptive statistics andanalysis of covariance.

RESULTS AND DISCUSSION
Results
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, respectively, 35.66 and 8.12, respectively. 28% of sample was employed and 73% was unemployed, and diploma education level with (42%) had high frequency percent. Some demographic characteristics of the sample are in Table 1.

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Table 1: The frequency and frequency Percent of sample demographic:

Variables	Grouping	Frequency	Frequency Percent
Duration of HIV infection (per year)	3-6	7	27%
	7-10	16	62%
	10 and over 10	3	19%
Educationlevel	Illiterate	4	15%
	Guidance	8	31%
	Diploma	11	42%
	college	3	11%
Age	25-22	3	11%
	29-26	9	35%
	33-30	7	27%
	37-34	4	15%
	over38	3	11%
Occupation	Employed	7	27%
	Housekeeper	19	73%

Analysis of data from the study show that there was a correlation between variable like duration of AIDS infection, education level and age with life expectancy respectively (r=-0.44),(r=0.26) and (r=-0.41) that in level (p<0.01) and (p<0.05) was significant. Also there was a correlation between demographic variables with suicidal thought, this observed correlation respectively was (r=0.47), (r=-0.31) and (r=0.36), at all three levels (p<0.01) were significant.

Table 2: Correlation coefficients of variables like Duration of HIV infection, Education level and Age with life expectancy and suicidal thoughts

Variables	Suicidal Thought		Life Expectancy	
	Correlation coefficient	P	Correlation coefficient	p
Duration of HIV infection (per year)	0.47	0.01	-0.44	0.01
Education level	-0.31	0.01	0.26	0.05
Age	0.36	0.01	-0.41	0.01

Table 3 given the Mean andStandard deviation cores of suicidal thoughts and life expectancyScores of patients in both control and experimental groups at pre-test and post-test. The tableresults shows that between mean of suicidal thoughts and life expectancy scores in women with HIV in both experimental and control groups at post-test, there is a difference.

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Table 3: Mean and Standard deviation cores of suicidal thoughts and life expectancy Scores of patients in both control and experimental groups at pre-test and post-test

Variables	Statistical indicators	Experimental groups		Control groups	
		pre-test	post-test	pre-test	post-test
Life expectancy	Mean	109.14	181.43	11.56	114.61
	Standard deviation	9.76	15.66	10.08	11.23
Suicidal thoughts	Mean	28.30	12.16	29.47	30.79
	Standard deviation	5.44	3.21	6.13	5.91

As can be seen in Table 3, in the experimental group, atthe post test life expectancy score has increased 72points, This means that, the life expectancy score of women with HIV in the experimental group, from the mean and standard deviation, respectively, 109.14 and 9.76 in the pre-test reached to the mean and standard deviation, respectively, 181.43 and 15/66 in the post test stage.

While such changes were not observed in the control group, the life expectancy score of women with HIV in the control group, from the mean and standard deviation, respectively, 11.56 and 10.08 in the pre-test reached to the mean and standard deviation, respectively, 114.61 and 11.23 in the posttest stage.

Table 3 also shows that In the experimental group, at the post test suicidal thoughts score has decreaseScore dropped 26 points, this means that, thesuicidal thoughts score of women with HIV in the experimental group, from the mean and standard deviation, respectively, 28.30 and 5.44 in the pre-test reached to the mean and standard deviation, respectively, 21.16 and 3.21 in the posttest stage

While such changes were not observed in the control group, the suicidal thoughts score of women with HIV in the control group, from the mean and standard deviation, respectively, 29.47 and 6.13 in the pre-test reached to the mean and standard deviation, respectively, 30.79 and 79.30 in the post-test stage.

The results of the statistical assumptions of normality and equality of variance showed that Both default of variances equality (Louine's test) and normality (Kolmogorof-Smirnof test) is established for variables like life expectancy and suicidal thoughts respectively was equal to ($p<0.01$) and ($p<0.05$) because the number of women with HIV in the experimental and control groups was equal (13 = n), so used ofcovariance was allowed.

Results of covariance analysis and the impact of group membership on suicidal thoughts and life expectancy of women with HIV in the post-testshows in Table (4).

The Results after controlling the pre-test variable as covariate variable and demographic variables (duration of HIV infection, education and age were associated with rates of life expectancy and suicidal thoughts) As a covariate variables must removetheir impact on life expectancy and suicidal thoughts variables.

The results showed that the difference between the mean scores of suicidal thoughts and life expectancy of the sample Based on group membership (experimental and control groups) in post- test at level ($p<0.01$) and ($p<0.001$) is significance.

The Efficacy of treatment (group membership) in the post-test for life expectancy was 0.74 and for suicidal thoughts was 0.79, which it means that 0.74 and 0.79, respectively, individual differences in life expectancy and suicidethoughts are due to the effect of the treatment.

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Table 4: The Results of covariance analysis and the impact of group membership on suicidal thoughts and life expectancy of women with HIV in the post-test

Effect	Dependent variable		Mean square	F	df	Significance level	Effect Rate
Pre-test	post-test	Life expectancy	2132.19	1	5.82	0.24	0.12
		Suicidal thoughts	249.88	1	4.73	0.37	0.18
Group Membership	post-test	life expectancy	2651.12	1	117.15	0.001	0.74
		suicidal thoughts	398.11	1	39.71	0.001	0.79
Duration of HIV infection	post-test	life expectancy	9.80	1	0.27	0.63	0.014
		suicidal thoughts	5.71	1	0.19	0.84	0.023
Education	post-test	life expectancy	6.53	1	0.06	0.91	0.003
		suicidal thoughts	4.13	1	0.94	0.56	0.09
Age	post-test	life expectancy	11.87	1	0.62	0.28	0.04
		suicidal thoughts	9.82	1	1.03	0.14	0.11

Discussion and Conclusion

Results from several studies show that the life expectancy and quality of life in women with AIDS is very low (Huggins *et al.,* 2012; Galvao *et al.,* 2004; Lechner *et al.,* 2003; Chernoff, 2007). Results from Griereson studies (2004) showed that women with AIDS scores in all dimensions of quality of life questionnaire are extremely low and the quality of life for these patients also lower than patients with other chronic diseases.

The findings of this research indicated a significant relationship between duration of illness, education level, age with life expectancy and suicidal thoughts. Based on the present study results Life expectancy rates and suicide thoughts in women with AIDS in terms of duration of infection is quite different, Women with this disease for over ten years had the lowest rates of life expectancy and had most rates of suicidal thoughts.

Faced with a disturbing fact that she is suffering from the deadly disease AIDS, lead to mental imbalance and creates negative emotions towards herself and herperipheral environment.

Because the common belief that exist in her environment about AIDS, and because the nature of disease, AIDS considered socially very undesirable And if HIV infection be exposed to other, Usually, networks of friends and acquaintances, would avoid from her, As a result of this rejection from family, a person will suffer from some form of social anxiety that day by day person are more isolated than before.

Moreover, when one realizes that has an incurable disease, this fact can cause frustration and depression in person. These factors in a short term caused psychological and social problems.

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It also causes that long time neededfor aperson toadapt with AIDS and therefore people who for a long time suffered from AIDS disease they had very high tend to suicide. The findings are consistent with results of Gholami *et al.,* (2011), Moghay *et al.,* (2011) and Gonzalez *et al.,* (2012) research.

The results of this study found a significant relationship between education levels with life expectancy and suicidal thoughts, that Respectively positive and negative correlations were observed, these findings is consistent with the results of Chernoff (2007), Gonzalez *et al.,* (2012) and Bauer (2008).

In explaining these findings we can say because one of the factors affecting mental disorders such as anxiety and depression in women with AIDS are worrying about the economy (Galois *et al.,* 2004; Visas and Moradi, 2008) so people who had a higher education level usually had a better socio-economic and family status.

In addition, people who have higher level of education, have a broader friendship and communication networks such as the Internet and other communication media, that reduces their social isolation and declining life expectancy and increased suicidal thoughts.

The main result of this study is that Logo therapy increase life expectancy and reduces suicidal thoughts in women with HIV in experimental groups than control group. Recent findings are consistent with Kazemi (2012), Naguchy *et al.,* (2006), Kang *et al.,* (2009) and Gonzalez *et al.,* (2012) results.

What causes people to be disappointed is not their Suffering and adverse fate in fact it is loss of life meaning that is tragic. Meaning just is not in sense of fun, joy and happiness but in suffering and death we can also found meaning.

If we accept death until the last moment, life will be significant. So it can be said that the meaning of life is not conditional, because life meaning would have to include suffering and death (Frankl, 1963).

A person with AIDS is someone who sees life as meaningless, Feels that reached to the end, without to take value and purpose of life, Compare her life with others and constantly posed this question, why I've this frightening and horrible disease. She always looks for a reason for her pain.

People are always looking for meaning even for suffering they need some reason this means that, when accesses to the meaning, their tolerance and acceptance of the situation become easier for her.

In fact, Logo therapy helps the patient to be able to discover the meaning behind this situation, so when you get the hidden meanings will not disappoint. One of the basic Principles of Logo therapies is that, the purpose of life is not to escape from the pain and achieve to the pleasure, discover the meaning of life considered as abasic principle, so people accept suffering when they find its meaning (Naguchy *et al.,* 2006).

Logo therapy training with an emphasis on freedom and responsibility so makes Patients to change their position, Strengthen their desire to live and escape from hopelessness, helplessness and suicidal tendencies. And finally optimistic feeling about the future will form in patients.

Also participating in group and Logo therapy training is an opportunity for individual to express their emotions emphasis on potential strengthens to overcome to her problems Reduce depression, hopelessness and helplessness (Huggins *et al.,* 2012).

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