

The Effectiveness of Logo-Bibliotherapy on the Depression of Selected Filipino Suffering from Myasthenia Gravis

Judy L. Aguinaldo, and Rosalito de Guzman PhD
University of Santo Tomas, Graduate School
Manila, PHILIPPINES.

judyaguinaldo@yahoo.com, rosalitodeguzman@yahoo.com

ABSTRACT

Myasthenia Gravis (MG), a chronic autoimmune neuromuscular disease characterized by weakness of the skeletal muscles of the body caused by circulating antibodies that block acetylcholine receptors at the post-synaptic neuromuscular junction, inhibiting the stimulative effect of the neurotransmitter acetylcholine. They experienced weakening of the muscles in extremities; change in facial expression; difficulty in swallowing; shortness of breath and impaired speech. Furthermore, they are also bothered emotionally and psychologically, they experienced depression, hopelessness and unclear view of their future. It undermines patient's ability to cope with everyday activities, difficult situations, and financial constraint. It leads to isolation and lack of clear perception of their purpose of one's existence. This study utilized Logo-bibliotherapy as an intervention for Filipinos suffering from MG in response to Frankl's view that finding meaning and purpose in life is the basic driving force and the fundamental desire of humans that may relieve them of their depression, and lack of meaning in life. Pre-test Post-test Control Group Design is the method used in this experimental study. There were 30 participants that were randomly assigned into two groups—experimental and control. This experimental design used the Beck Depression Inventory (BDI), Purpose in Life (PIL) and Life Regards Index (LRI) tests. The experimental group was given logo-bibliotherapy intervention. The test revealed that the experimental group has decreased their level of depression ($M=4.60$), increased their Life Regard ($M=166.07$) and Purpose in life ($M=113.5$). Significant difference was observed between posttest of control group and experimental group with depression ($M=30.8$, $p=0.00$, $d=4.92$), life regard ($M=120.87$, $p=0.00$, $d=19.48$) and the purpose in life ($M= 47.87$, $p=0.00$, $d= 4.24$). The result of this study has important repercussion to psychological practice as it can be a strategy to address issues of depression and low purpose in life.

Keywords: Myasthenia Gravis, autoimmune disorder, acetylcholine, Logo-bibliotherapy, depression

INTRODUCTION

Normally when impulses travel down the nerve, the nerve endings release a neurotransmitter *acetylcholine*. Acetylcholine travels through the neuromuscular junction and binds to acetylcholine receptors which generate muscle contraction. In myasthenia gravis (MG), antibodies block, destroy the receptors of the acetylcholine at the neuromuscular junction which prevents the muscle contraction from occurring. These antibodies are produced by the body's own immune system. MG is a chronic autoimmune disease because the immune system which normally protects the body from foreign organisms mistakenly, attacks itself (National Institute of Health).

Myasthenia Gravis can be classified as either ocular or generalized (Muscular Dystrophy Association, 2004). Ocular myasthenia is when the disease confines itself to the eye muscles, drooping of one or both eyelids (ptosis); blurred vision or double vision (diplopia) while generalized myasthenia on the other hand affects the muscle groups.

ness and fatigability of the skeletal (voluntary) muscles of the body. (Conti-Fine BM, Milani M, Kaminski HJ, 006). Although, MG may affect any voluntary muscles, weakness in arms, hands, fingers, legs and neck; impaired speech (dyasthenia), facial expression, swallowing, and shortness of breath are most vulnerable.

Considered as a slowly progressive neuromuscular disorder, Myasthenia gravis is an uncommon disease. The annual incidence of the disease is reported as being 4 patients per 100,000 residents. Myasthenia gravis presents at any age, in all ethnic groups and both genders. Commonly affects young adult women (under 40) and older men (over 60). (TworkS, et al., 2010)

For this reason, the disease is very confusing to the undiagnosed myasthenic. At one time the patient may function normally; and at another time experience severe loss of strength. Others may think that the myasthenic is lazy; or that they are suffering from a psychological problem. This can lead to frustration, depression which only exacerbates the condition

Currently, myasthenia is treated medically with cholinesterase inhibitors or immunosuppressant, and, in selected cases, thymectomy (McGrogan A, Sneddon S, de Vries CS, 2010). Advances in medical therapy have continuously increased the life expectancy of MG patients without definitely curing the disease (Twork et al., 2010). Most often than not, they are not able to participate fully in daily life resulted from impaired mobility? The persistent experiences of weakness may negatively that leads to stress and depression influence MG's perceived quality of life especially among individuals from whom demands of work, family and other responsibilities require significant physical involvement.

The psychological aspect of Myasthenia gravis (PaulRH, MullinsLL, Gilchrist JM, 2009) can be categorized into two areas: (1) the effect of patient's psychological health on the expression of their disease, and (2) the effect of disease on the psychological health of the patient. The study further indicated four major factors believed to foster good psychological adjustment to the patients, such as (1) the patients feeling of control over one's physical condition, (2) managing the uncertainty, (3) intrusiveness inherent in the illness, and (4) inadequate social support

Judith Schiffbauer, in her published article indicated the following common sources of stress, depression, anxiety (1) frustrations and anger when the body can't do what the patients wants to do; (2) patient's anxiety from continual worry that new symptoms may appear and medication may have side effects; (3) patient's dissatisfaction with personal appearance (drooping of eyelids, weight gain, weak facial muscle causing inability to smile and slurred speech); (4) significant changes in the patient's lifestyle such as having to quit job, school and others; (5) interpersonal relationship may be strained as the patient and his/her family try to cope with the limitations of the disease, (6) feeling of being stigmatized, (7) lack of understanding of the disease, when family members and friends find difficult to understand why weakness can vary daily or even hourly that lead to the patients feeling of being cheated and resentful.

When myasthenia gravis patients experienced loss, i.e. loss of muscle strength, it could perhaps lead also to a loss of functioning at home, at work or at play; and loss of perception of themselves as having a "well body". The stages of denial, anger, bargaining, depression and acceptance are normal for people coming terms with any type of major loss. The suffering they have experienced, their inability to do their own responsibility, the feeling that others doubt that they are really ill because of the absence in physical indications of the disease. Nothing seems certain any more, only the weakness that keeps them reminding that

things are not the same this, may lead them to feel demoralized, frustrated, and then sadness, depressed sets in and worst suicidal ideation (Myasthenia gravis association, 1997-2009).

The researcher used the theory of Victor Frankl's Logotherapy and Caroline Shrodes Bibliotherapy that derived to Logo-bibliotherapy Intervention Program which she rendered to the myasthenia gravis. In this study, the main objective of Logo-bibliotherapy is to facilitate the patients' quest for meaning and empower them to live meaningfully, responsibly, regardless of their life circumstances.

Logotherapy, originally refers to humanistic/existential school of psychotherapy that focuses on the human spirit and the meaning of human existence as well as on man's search for such meaning. It is deeper and broader than other psychotherapy in a sense that it dares to enter the spiritual dimension of human existence and focuses on the core values, the meaning and belief systems. (Frankl, 1988 p.160)

According to Frankl (1988) man tries to determine the cause of their suffering and pain. It is humans' fundamental desire and driving force of life to find meaning and purpose that may relieve them of their suffering.

Both Frankl (1959/1985,1990) and Lukas & Hirsch (2002) believe that life has meaning under all circumstances, even those that involve intense and unavoidable suffering. The challenge to the individual is to find that unique meaning for him/herself. What life provides is not the meaning itself, but the opportunity to decide on an individual basis what is meaningful (Lukas & Hirsch, 2002). This purpose – this uniqueness -- enables, but the individual to sustain suffering with dignity, but when lacking, emptiness and frustration may prevail. Thus, from this perspective, self-actualization and the attainment of happiness are not the goals of life. Rather, they usually come naturally upon finding one's purpose (Baumeister & Vohs, 2002; Frankl, 1959/1985, 1990; Lukas and Hirsch, 2002; Tosi, Leclair, Peters & Murphy, 1987).

Carolyn Shrodes developed the first theoretical model suggesting that bibliotherapy is effective because readers can identify with characters and can work through a problem along with a character, achieving insight about their own situation (Shrodes, 1955).

Bibliotherapy is the use of selected literature to help the reader grow in self understanding resolve real life issues. The individual is believed to receive the benefits of bibliotherapy by passing through three stages: (1) Identification – the individual identifies with the character or event in the story. (2) Catharsis – the individual involved in the story emotionally and is able to release pent-up emotions under safe conditions. (3) Insights – the individual, after the catharsis, became aware that his/her problems might also be addressed or solved (McIntyre, T. 2004).

This pioneering effort of the researcher to apply Logo-bibliotherapy to these depressed individuals, despite unforeseen difficulty and challenges on the part of the former, is not only based on theories, concepts/ principles underlying her chosen field of inquiry, but above all, it is founded on the researcher's faith, hope, love and commitment to God and people. To understand fully what is myasthenia gravis and to be able to impart it to the public with hopes that this study will help in a way to alleviate the pains and suffering the myasthenics is undergoing, is not only taken for this researcher's as a study to be accomplished, but a mission to be fulfilled.

METHODOLOGY

Research Design

The researcher utilized the **Pretest-Posttest Control Group Design** to determine the effectiveness of the Intervention Program in alleviating the depression level of selected Filipino suffering from Myasthenia Gravis. Uriate et al., (1992) cited that this experimental design involved two groups of participants; both were randomly assigned to controlled group and experimental group. The two groups were pretested with Beck Depression Inventory (BDI), Purpose in Life (PIL) and Life Regard Index (LRI) and post tested with the same test instruments as the pretest after the intervention program has been administered. Only experimental group was given the intervention program.

It is usually the preferred method used in true experimental design to measure change and compare participant groups because it allows the administrator to assess the effect of the experimental manipulation by looking at the difference between the pretest and posttest.

The experimental design permitted the comparison of the participants' depression level, life regard, purpose in life before and after the intervention sessions thru the use of Beck Depression Inventory (BDI-II), Life Regard Index (LRI), Purpose in Life (PIL).

Research Participants and Sampling Technique

There were thirty participants included in the study. The thirty participants were the total number of adult inflicted with myasthenia gravis, an autoimmune neuromuscular disorder that affects the muscle (serious muscle weakness). Some participants were the patients of Dr. Marita B. Dantes, Head of Neurology Section of National Kidney Institute in Quezon City and from the Out Patient department (OPD) Neurology Pavillion of Philippine General Hospital, Manila. They were randomly assigned to two groups, control and experimental group.

The participants were male and female ranging from twenty (20) to sixty (60) years old. Aside from the physiological complains of myasthenia gravis patients such as dropping of the eyelids, blurred or double vision, slurred speech, weakness in the arms and legs, chronic muscle fatigue, they also complained on difficulty in sleeping, loss of appetite, intense loneliness, neither motivated nor having drive in life.

Research Data and Gathering Procedure

The data gathering procedures was divided into three phases: pre-experimental, experimental and post-experimental phase.

Pre-experimental Phase

The researcher personally visited Dr. Marita B. Dantes, one of the best Neurologists in the country in diagnosing myasthenia gravis and administering medicines to the said patients. The researcher sought permission as well as information on the patients with myasthenia gravis.

The researcher also went to the Neurology section of the Out Patient Department OPD of Philippine General Hospital in Manila and discussed the purpose, methodology and procedure of the research with the nurses and neurologist of the said department.

The researcher also went to several hospitals to search for participants, but was not able to find one, because of the rarity of this sickness.

For this phase, the participants of the study were selected based on the result of the Beck Depression Inventory II, Purpose in Life and Life Regard Index. Furthermore, structure interview and observation from the researcher and a psychologist was likewise employed for the validation of the interview. After which, participants was randomly assigned to the control and experimental group.

Experimental Phase

A consent letter was given to all the participants.

There were four participants who were pilot tested with the said intervention program. They were interviewed, pretested with the BDI-II, PIL, LRI and randomly assigned to the control and experimental group. Eight sessions, two times a week of Logo-bibliotherapy was rendered to the two participants who belonged to the experimental group, and no intervention to the control group. A checklist was given to one of the immediate families or to the caregiver of the participant of the experimental group, checklist on the behaviour after each session of the Logo-bibliotherapy Intervention Program.

After the pilot testing had been done, the same procedure was implemented with the other twenty six participants. A total of thirty participants, fifteen from the control and fifteen participants from the experimental group participated in this study/

To avoid the reactive effects of the experimental procedures that may hamper the generalization, the researcher didn't inform the participants as to which group they belong in the experimental. All the participants were randomly assigned to the control and experimental group. Both the control and experimental group was treated with equal attention. All the sessions were done in the residences of the participants.

Post-experimental Phase

Once the intervention program was completed, the researcher conducted a post- test to the two groups using similar protocols (BDI-II, PIL, LRI) to measure the difference between both control and experimental group to investigate the cause-and -effect relationships between the level of depression, purpose in life and the life regard index. The results were evaluated by subjecting to the pre-intervention and post-intervention scores to statistic analysis for significant difference.

RESEARCH INSTRUMENTS

Beck's Depression Inventory (BDI)

BDI was a 21-item instrument designed to assess the severity of depressions in adolescence and adults. It was widely accepted instrument in clinical psychology and psychiatry for assessing the intensity of depression in psychiatric patients and for detecting possible depressions in normal populations.

The 21 symptoms and attitudes assessed by the original BDI include: 1) mood, 2) pessimism, 3) sense of failure, 4) self-dissatisfaction, 5) guilt, 6) punishment, 7) self-dislike, 8) self-accusations, 9) suicidal ideas, 10) crying, 11) irritability, 12) social withdrawal, 13) indecisiveness, 14) body image change, 15) work difficulty, 16) insomnia, 17) fatigability, 18) loss of appetite, 19) weight loss, 20) somatic preoccupation, and 21) loss of libido.

The Purpose in Life Test (PIL)

The test was an attitude scale constructed from the orientation of Logotherapy (Crumbaugh and Maholick's 1964; Crumbaugh, 1969). Purpose in Life (PIL) test was designed to measure an individual's experience of meaning and purpose in life. It consisted of Parts A,B&C. In

this study only Part A will be employed because it is only portion of the instrument that was objectively scored. The test was done in consideration of the participant's physical condition. Part B & C was energy draining for the myasthenia gravis patients who experienced fatigability. Part A of PIL was usually reliable enough to detect the meaninglessness and for most research purposes. Part A of the PIL consisted of 20 statements, each had responded by indicating personal agreement or disagreement on a 7-point scale. And total scores therefore, ranged from 20 to 140, Scores of 91-below defined the significant level of "lack of meaning and purpose in life".

The Life Regard Index (LRI)

The LRI, based on the concept of positive life regard, was developed by Battista and Almond in an attempt to provide a simple non-biased measure of meaning in life. The test was composed of 28 items with a 5-point scale, and was divided into two subscales, Framework and Fulfillment. The Framework scale (FR) measured the ability of an individual to see his life within some perspective or context, and had derived a set of life-goals, purpose in life or life view from them. The Fulfillment scale (FU) measured the degree to which an individual sees himself as having fulfilled or as being in the process of fulfilling his framework of life-goals. Each scale was composed of 14 items, half-phrased positively, half negatively to control for response set. The sum of these two scales comprises the Life Regard (LRI) Scale and was included to evaluate its uses as an overall indicator of positive life regard.

Note: The "Framework (FR)" and the "Fulfillment (FU)" scores were not separately cited in the discussions of the result since there were no equivalents of these parts in the PIL. The "LRI" or the sum of FUL & FR was the score considered in the interpretation with the PIL.

RESULTS

Difference in the Pre-test Score Between Control and Experimental Group

	Difference		t	p-value	Ho	Cohen's d
	Mean	Std. Error				
Depression	-5.4	2.3	-2.34	0.03	Reject	0.86
Life Regard	-4.8	3.16	-1.52	0.14	Do not reject	-
Purpose in Life	3.47	2.9	1.2	0.24	Do not reject	-

df=28

Ho: There is no difference in the pre-test score between the control and experimental group.

Result: There is a difference between the pre-test of control and experimental group on their depression, but both groups belong to severe depression level.

There is no difference in the pre-test scores between the control and experimental group. Both groups have negative life regard and low in purpose in life.

Difference in the Post-test Score between Control and Experimental Group

	Difference		t	p-value	Ho	Cohen's d
	Mean	Std. Error				
Depression	30.8	2.28	13.49	0	Reject	4.92
Life Regard	-120.87	2.26	-53.36	0	Reject	19.48
Purpose in Life	-62.67	2.1	-29.85	0	Reject	10.9

df=28

Ho: There is no difference in the post-test scores between control and experimental group.

Result: There is a difference in the post-test scores between control and experimental group.

After the Logo-bibliotherapy Intervention Program rendered to the experimental group, the depression level became normal depression, from negative to positive life regard, and from no definite to definite purpose in life.

DISCUSSION

The myasthenia gravis looks normal with all the sense organ intact, upper and lower extremities moving, and yet they can't move for a longer time than normal people. The reason is the immune system of the MG is creating abnormal antibodies that attack the acetylcholine receptors at the neuromuscular junction. Acetylcholine is responsible for the contraction of different muscles for vision, chewing, swallowing, breathing and movement of extremities.

MG patients who are married confessed that they feel incapable to satisfy the needs of their partner. Meanwhile, in gatherings, MG patients do not interact with relatives and friends since they talk with called nasal twang, they are hardly understood by people. Also, summer time is v horrible for MG patients, breathing is the utmost problem, they cited they are like fish away from water habitat, like near death experience. Oxygen is very thin that they feel it is not enough to keep them alive. Moreover, they are also prone to bone fractures and dislocations and painful cramps due to weakening of the muscles.

Consequently, these experiences bring depression to MG patients; they lose the hope of living.

They think they bring burden to the family and worthless as a person in existence. What are the purposes of their life were not being ponder anymore that leads to meaningless in life. Also, since depression may cause other illnesses and complications, MG patients might develop certain diseases and even cancer. Results from the BDI-II, they feel sad, future is hopeless, being punished, can't get any pleasure from the things they used to do, irritable, agitated at times, lost interest in other people or activities, lost interest in sex, worthlessness, no or less energy, trouble in making decision were all present among MG.. What is good about the culture of the Filipino, they think twice to end their life, this MG scored low on suicidal thoughts or wishes. Furthermore, MG feel depressed due to the sickness, change of lifestyle, from working citizen to someone just stay home, financial constraint, dependent on family members which they were not used to. They are not similar to those people who got depression due to substance abuse that leads to hallucination. Mg are cognitively upright with their thinking, and rendering the Logo-bibliotherapy gave a niche to change their perspective in their life.

Logo-bibliotherapy is anchored to Logotherapy by Victor Frankl. Participants belong to the experimental group received the said psychotherapy. They were made to realized that they were not a victim of circumstances! They might have the symptoms but he is not the symptoms.

They were able to find meaning within their "meaning triangle". 1. Creativity (creating a work or a deed). 2. Experiencing a value (by experiencing something or encountering someone). 3. Change of attitude towards unavoidable suffering.

CONCLUSION

When we experienced tragedy, misfortune, sickness, and other calamities strikes one's lives, stress, depressions, frustrations and many other debilitating emotions will surely set in. The situation will cause a feeling of hopelessness, no purpose in life, unmotivated. The spirit to live is dying.

After administering Logo-bibliotherapy, MG participants found their purpose of existence. Usually it's their family that they wanted to be with and renewed trust in GOD. Motivated to live their lives to the fullest and still can do little things to make their family happy which is the creativity in meaning triangle.

In my study, all the participants in the experimental group had shown significant changes of attitude after the Logo-bibliotherapy program. For them, all is not hopeless and they have still many purposes to live on as long as they have breath and alive. Moreover, one is feeling intense sadness, depressed, hopelessness diminished after the quest for one's purpose in life. It makes life more meaningful, and worthy to live life to the fullest. Therefore I conclude that Logo-bibliotherapy is effective.

RECOMMENDATION

Logo-bibliotherapy is not limited to MG patients only. In fact, anyone can undergo this therapy especially those who are experiencing depression, anxiety, existential vacuum, boredom, losing purpose in life, meaningless of one's being. Older people who experienced empty nest. Working citizens who experienced burnout from job.

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