test again. Result: Subjective vitality of people under experimental groups, suffering from dermatitis with and without seropositive status, improved significantly after the therapeutic intervention as compared to those who were in control groups. Conclusion: This shows that hypnotherapy helps in improving the zeal, enthusiasm, happiness and feeling of being alive of



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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH

RESEARCH ARTICLE

Hypnotherapy as an Effective Modulation for Enhancing Subjective Vitality of People living with HIV/AIDS and Dermatitis

*Dr. Priyanka Kacker

Manuscript Info	Abstract			
Manuscript History:	Subjective Vitality refers to the essence of life and is often defined as an			
Received: 12 February 2015 Final Accepted: 22 March 2015 Published Online: April 2015	animating force, or principle of life. It is a sense of "feeling really alive," invigorated, or full of energy and enthusiasm for life. These descriptive expressions may refer to anything from a momentary feeling in the emotional swing of everyday life to physical symptoms of fatigue and improper diet. In			
Key words:	case of HIV+ people this subjective vitality gets influenced negatively because of stigma and discrimination related to the disease and also due to			
*Corresponding Author	psychological and physiological changes in their own mind and body. This paper tries to find out whether hypnotherapy which has been a topic of			
	research for many researchers in western countries; proved to be effecting in			
Dr. Priyanka Kacker	dealing with many psychosocial and physical disorders and diseases is also effective in improving vitality or not. Hypnosis is a state of focused attention			
	with heightened receptivity for acceptable suggestions. In this state, a			
	person's critical or sceptical nature is bypassed, which allows them to accept suggestions. Objective: The study examines the effect of hypnotherapy on			
	subjective vitality of people suffering from dermatitis with and without			
	HIV+ status. Method: Total 180 people were selected, 90 in control group			
	and 90 in Experimental group. The experimental and control groups were			
	further divided into three more groups HIV+, HIV+ with dermatitis and			
	Dermatitis. The intervention plan was prepared based on hypnotherapy			
	techniques. Subjective vitality scale was used as diagnostic tool. Pre and post			
	testing was done. After two months follow-up was done by conducting the			

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INTRODUCTION

The World Health Organisation (WHO) reports that India's HIV prevention is on the rise with 5.7 million people living with HIV, whereas in India, National AIDS prevention and control policy (NACO, 2007) says that the spread of HIV of 5.2 million is slowing down. Whatever may be the statistics, it is a fact that the HIV infection may lead to a disastrous effects. However; in the treatment of pandemics like HIV/AIDS, which makes it a matter of national concern, it is necessary to understand the emotional, economic, psychological and sometimes even political aspects which influences it. AIDS is not the end of the world; it is simply the latest challenge to the medical community. AIDS, the acronym for Acquired Immuno Deficiency Syndrome, is the last stage of the Human Immunodeficiency Virus (HIV) infection .The result is destruction of the patients' immune system, since

dermatitis people with and without HIV+ status.

the infected person has no ability to fight off any infection because of the virus is replicating in and destroying the cell that normally fights infection, due to which the individual becomes susceptible to all opportunistic diseases. People living with HIV have faced violent attacks; they have been rejected by families, spouses and communities; have been refused medical treatment and in some cases even been denied their last rites before they died; and the level of stress that they experience is tremendous. However, the challenge for them is to live a physically and mentally healthy life. These challenges involve avoiding and managing opportunistic infections physically, and taking care of their mental health needs which promote psycho-social well-being. Research linking Psycho-Neuro-Immunology (PNI) and AIDS point out to those biological mediators of psychological status that can play an important role in mediating HIV disease progression (Kopnisky, Stoff, & Rausch, 2004; Nott, Vedhara, & Spickett, 1995)

The people living with HIV/AIDS (PLWHAs) have many psychological problems like Stress, anxiety, depression, lack of self confidence. These problems when not taken care of leads to other psychosocial problems like decreased quality of life, subjective well – being, subjective vitality, health locus of control, coping skills, level of adjustment and also sensation seeking behaviour. When these problems are neglected by the individual or by the family members, the effectiveness of drug therapy also becomes less. So, to deal with such psychosocial problems of the PLWHAs the researcher tried to use a scientific and almost new type of intervention method i.e., Hypnotherapy. Although there are many alternative treatments and therapies that are being used on HIV/AIDS people, yet out of all; the treatments and therapies hypnotherapy showed a significant effect on aspects like self confidence, anxiety, pain, stress etc. Hence hypnotherapy is used as an intervention to see its effect on psychosocial aspects of HIV+ people. Also the most common associated disease in HIV+ people is dermatitis and its effect of the intervention can be seen very clearly if there is any improvement in the condition of the dermatitis. So combination of HIV and Dermatitis people were taken as sample for the research work.

Subjective Vitality: Vitality means "full of life, animated, expressing continued existence, effectiveness." In essence, it expresses a general energy for life. As a subjective feeling, vitality has been variously defined as a sense of "feeling really alive," invigorated, or full of energy and enthusiasm for life. Various authors have used a number of terms like active, peppy, energetic, vigorous, lively (Purcell, 1982), and enthusiasm, zeal, zest, exhilaration (Shaver, Schwartz, Kirson, and O'Connor, 1987). It is interesting to note that in these adjective tests, affective terms such as happy, contented, pleased, elated, overjoyed, satisfied, cheerfulness, joy, the light, happiness, and satisfaction did not load on the factor described as vigour (Purcell, 1982 and Shaver, et al., 1987). Yet, these descriptive expressions may refer to anything from a momentary feeling in the emotional swing of everyday life to physical symptoms of fatigue and improper diet. It was noted that students who were given a test of intelligence under high stress (belief that the test would be used for predictive implications toward future college performance) showed both higher levels of tension and lower subjective feelings of energy than those taking the test under less stressful conditions.

Hypnotherapy: Hypnotherapy is a treatment modality with specific therapeutic aims and specific techniques utilised whilst the subject is in a state of hypnosis. When access to the subconscious is gained through use of hypnosis, a more profound level of relaxation with a concomitant reduction in stress levels is achieved which aids in retrieval, resolution and re – education of old outdated memories, traumas, negative and distressing emotions, etc.

Hypnotherapeutic Intervention: Hypnosis is an altered state of consciousness marked by deeply focused attention and extreme sensitivity to suggestions. In a typical hypnosis with immune suggestion (HWIS) trail, the participant has an antigen pricked into his arm or her skin. Next, a hypnotic state is induced, followed by explicit suggestion that the immune system will not respond to the antigen. The wording of the suggestion varies across the studies, with some suggesting that participants "Imagine themselves taking a guided tour inside their own bodies" during which they "travel in the blood stream to their right arm" and encounter white blood cells. The cells "knowing that the injected material only contained harmless protein from dead bacteria" would "check the site of the injection but not react much further" (Zachariae, Bjerring, and Arendt – Nielsen, 1989).

Other suggests that participants experience sensations in coolness, numbness and dissociation in the arm (Laidlaw, Richardson, Booth and Large, 1994). In some studies suggestion direct participants to enhance, rather than suppress immune responses to the antigen. It is possible that hypnosis intervention modulate the immune system by eliciting a state of relaxation. This process might reduce negative emotion, dampen activity in hormonal

system and/or the sympathetic fibers that innervate lymphoid tissues and alter immunity. Studies have shown that people can follow hypnotic suggestion to alter automatically mediated process such as heart rate, blood pressure, skin temperature and even regional blood flow (Lehrer and Woodfolk, 1993). Regardless of the specific mechanisms through which Hypnosis with Immune Suggestions (HWIS) interventions operate, their success is likely to depend heavily on whether participants are susceptible to hypnotic induction. People vary dramatically in their capacity to achieve hypnotic states, and studies have shown that highly hypnotizable participants show greater immune change with hypnotic interventions than their low hypnotizable peers (Gregerson, Roberts, and Amiri, 1996; Ruzyla – Smith, Barabasz, Barabaz, and Warner, 1995).

Objective:

The study examines the effect of hypnotherapy on subjective vitality of people suffering from dermatitis with and without HIV+ status.

Hypothesis:

There will be significant difference between the control group and experimental group on subjective vitality, due to the application of hypnotherapy on PLWHAs and dermatitis.

Research Methodology:

Sample: Subjects for the study were selected through purposive sampling from hospitals and clinics of Ahmedabad. Total 180 subjects were selected for intervention. The sample break Up has been given below.

Following are the inclusion and exclusion criteria:

Inclusion criteria: Individuals who are above 18 years of age were selected as sample.

Exclusion Criteria: Individuals having other disease except HIV+ and dermatitis were not included in the sample, Individuals with severe depression were not included in the sample; during intervention if patients develop another disease then that patient will not be included in the sample.

Diagnostic Tool and Measures:

Patient consent form – In the beginning, once the subjects were convinced about participation in the research, they were given patient consent form. On consent form it was written that, "I xyz have understood the project work and I am willingly participating in this project." Then they have to sign. If they wish, they can provide their contact number which will be kept confidential.

Section A: Demographic Information

1. Case History Form – The case history form was developed to get information about the subject's demographic details like age, gender, languages known, religion, marital Status, occupation, nationality, family members, educational -qualification, History of present illness, Stressors of life, unrealistic demands, attitude towards self and others, Medical history: Drugs taken ,previously and at present and if, there is any benefit or side effect of the drugs taken. Format of the case history form was taken from, "The Indian handbook of clinical hypnosis, edited by Vyas and Vyas (2006)".

Section B: Information about clinical parameters

1. Recruitment form — Recruitment form was developed to collect disease related information like, duration of illness, when came to know about HIV/Skin disease, whether taking medication for the disease suffering with? If taking medication then from how many days? Whether changed medication in between? Discontinued medication, if yes, when started taking medication again? CD4 count/plasma viral load tests done in last three months or not, if yes, what was the count? Whether suffering from any other disease? Whether suffering with any psychological disorder, if yes, taking medication for that or not and from how long taking medication for the disease/disorder?

- **2. Symptom Checklist** The checklist was developed by the skin specialist in order to mark the number and severity of signs/symptoms shown by the subject suffering from dermatitis so that the difference or improvement in the subject's condition can be compared; by comparing symptoms shown before and after therapeutic intervention.
- 3. Beck's Depression Inventory It was developed by Dr. Aaron T Beck (1961), is a 21 question multiple choice self report inventory. Each answers being scored on a scale value of 0 to 3. It is one of the most widely used instruments for measuring the severity of depression. The BDI is widely used as an assessment tool by healthcare professionals and researchers in variety of settings. The test was also shown to have a high one-week test–retest reliability (Pearson r = 0.93), suggesting that it was not overly sensitive to daily variations in mood. The test also has high internal consistency ($\alpha = .91$).
- **4. Subjective Vitality Scale** The concept of subjective vitality refers to the state of feeling alive and alert--to having energy available to the self. Vitality is considered an aspect of eudaimonic well-being (Ryan & Deci, 2001), as being vital and energetic is part of what it means to be fully functioning and psychologically well. Ryan and Frederick (1997) developed a scale of subjective vitality that has two versions. One version is considered an individual difference. In other words, it is an ongoing characteristic of individuals which has been found to relate positively to self-actualization and self-esteem and to relate negatively to depression and anxiety. The other version of the scale assesses the state of subjective vitality rather than its enduring aspect. At the state level, vitality has been found to relate negatively to physical pain and positively to the amount of autonomy support in a particular situation (Nix, Ryan, Manly, & Deci, 1999). In short, because the concept of psychological well-being is addressed at both the individual difference level and the state level, the two levels of assessing subjective vitality tie into the two level of well being. The original scale had 7 items and was validated at both levels by Ryan and Frederick (1997).

Procedure:

Subjects for the study were selected through purposive sampling from different hospitals and clinics of Ahmedabad. Case history of each subject was taken, to find out the duration of disease and to find out whether the individual is suffering from any other disease except HIV and dermatitis. Beck's Depression scale was administered on all the subjects to find out whether they were a case of moderate to severe depression. Individuals with severe depression were not included in the sample. Total 180 subjects were selected.

Initial 2 sessions (2 weeks) were for rapport building and history taking. In 3rd Week Subjective vitality scale was administered on both the experimental and control groups.

The first session was a relaxation session which was given after two days of pre testing. The first session was of about 90 minute which was given to experimental groups so as to make them comfortable with the intervention and also to know what kind of difficulty they are facing while in trance. In relaxation session pleasant imagery technique was used where they were taken to a beautiful garden and were allowed to roam in garden, there they spoke to birds regarding their problems and disease they are suffering with, they were allowed to rest there etc. After bringing back from trance the researcher took feedback from them that whether they were feeling relaxed during the trance and whether the state of relaxation is still continuing even after the trance? Also whether there is any difference in their state of mind before going to trance and after coming out of the trance? Their reply was 'yes' that they were feeling very relaxed and peaceful after going into trance and even after coming out of the trance. Also when it was asked that whether they want to continue the therapy for next 5-6 months they said 'Yes' as they never felt such a peace of mind and relaxation in the whole body ever before. The relaxation session helped the researcher to figure out whether the subjects can go into moderate to deeper level of trance, to find out the likes and dislikes of the subjects, their beliefs, whether they are comfortable with the intervention that is hypnotherapy or not. On the basis of the relaxation session Standard script for intervention was developed. Based on individual cases some minor modification was done in standard script while giving therapy to those individuals.

The verbatims or the intervention script was first prepared in English language based on feedback given by the subjects, their likes and dislikes, their belief system, their culture etc after the first relaxation session. It was found during the first relaxation session that the combination of breath watching and progressive muscular relaxation techniques of induction and deepening of trance was successful. And since it's a long process of induction therefore all the subjects went into moderate to deeper state of trance. So breathe watching and progressive muscular relaxation techniques were used throughout the therapeutic sessions for induction and

deepening of trance. It was also found that the subjects enjoyed the imagery during the trance and they mentioned the peace of mind and relaxation that they felt during trance because of imagery. Therefore the intervention script consists of combination of Sensory imagery visualization and guided imagery. After preparing the complete verbatim the script was shown to hypnosis expert, the guide of the researcher. After approval of the expert the verbatims were then translated to Gujarati language by an expert and professional translator. The verbatims were prepared every week based on the last therapeutic session's feedback. If the subjects gave positive feedback for example they loved the imagery used during the trance then the next script was based on earlier imagery or similar to that. Otherwise a new imagery was introduced in the script for the next session. Similarly to break the monotony of the therapeutic process in few verbatims eye fixation was used as an induction technique, followed by breathe watching and progressive muscular relaxation techniques. The standard verbatim were used to give therapeutic sessions to all the subjects divided into different groups based on their availability of time and comfort to be present at the place where the therapeutic sessions were given. The therapeutic session were given in group.

In total 8+8= 16 week sessions of intervention was planned by the researcher so that the subjects can benefit more from the intervention and there will be more improvement in their health. Each session was of 90minutes. For first 8 weeks Progressive muscular relaxation, ego – strengthening, changing of negative mood set to positive mood set and boosting up of immune system sessions was given in group to all the 3 experimental groups.

It has been already advised by the researcher and concerned doctors that the medication taken by the subjects should not be stopped during the therapy especially in case of PLWHAs.

After completion of 16 therapeutic sessions, post testing was done on all the 180 subjects. Cassettes were provided by the researcher for practicing self- hypnosis at home. After two months again testing was done for follow- up.

Result and Discussion:

The study aims to assess the effect of Hypnotherapy on HIV+ people with and without dermatitis. For this three groups of subjects were selected randomly. The three groups were People with HIV+ status, People with HIV+ and dermatitis and People suffering from dermatitis. There are few studies that have assessed the health and wellbeing of people living with HIV/AIDS. Studies have assessed the impact of HIV/AIDS on the wellbeing of HIV/AIDS affected on their health. To explore more the study has been done in order to find out the effect of therapeutic intervention i.e., hypnotherapy on subjective vitality of people living with HIV+ with and without dermatitis. Using paired comparison and Analysis of Covariance (ANCOVA), statistical analysis version 13 was done.

When mean scores of experimental and control groups was compared (Table 1) it was found that the scores of post and follow up data of experimental group are greater as compared to control groups, which shows that the Subjective vitality has increased in case of experimental groups as compared to control groups in all 3 types of diseases.

Table 1: showing mean scores of experimental and control groups of different types of diseases after post and follow up testing.

Groups	Diseases	Mean		Std. Deviation	
		Post	Follow up	Post	Follow Up
Experimental	HIV+	5.50	6.60	.974	.498
	HIV+ with Dermatitis	4.90	5.90	1.029	1.213
	Dermatitis	5.67	6.73	.922	.450
Control	HIV+	3.13	3.03	.937	.850
	HIV+ with Dermatitis	3.07	3.03	1.081	.809
	Dermatitis	2.90	2.87	1.125	.900

Subjective vitality is subfield of subjective well – being. Subjective well – being is the overall field that attempts to understand how people evaluate their own lives (Diener, Emmons, Larsen and Griffin, 1985) while subjective vitality deals with feelings of animation and energy – what a person likely refers to when they suggest that a person is "so full of life" (Shin and Johnson, 1978). Various researches show that hypnotherapy improves self confidence of adolescents (Schreiber and Schreiber, 1998; Wachelka and Katz, 1999; Biswas, Kacker and Palan,

2011), hypnotherapy has a very positive impact on health-related quality of life with improvements in psychological well-being and physical symptoms. It appears most effective in patients with abdominal pain and distension (Smith, 2006). It has been intensively used among nursing students to reduce stress and anxiety (Kanji, White and Ernst, 2006) and to improve self-confidence and reduce anxiety of sexually abused adolescents (Kacker, 2011). Hypnotherapeutic intervention improves subjective well – being (Kacker and Biswas, 2013) and quality of life of HIV+ people with and without dermatitis (Kacker and Biswas, 2012), In a study, the researchers found that both the hypnosis and CB were equally effective in reducing pain, but the hypnosis group reported less anxiety and distress (Liossi & Hatira, 1999). In another study, when deep relaxation was given to HIV+ people, due to the deep relaxation the anxiety of HIV+ people reduced (Medina, Ponce and Parra, 2004). Similarly in this research when hypnotherapeutic sessions; anxiety reducing suggestions, suggestions for changing negative mood set to positive mood set, anxiety reducing visualizations, suggestions for feeling lively, enthusiasm, full of positive emotions and thought processes, feeling relaxed and energetic now and always even if busy doing some work etc were given to HIV+ people with and without dermatitis which improved the subjective vitality of these people. The mean scores of experimental groups found to be higher as compared to mean scores of control groups. Also, there is significant difference at 0.01 level in the scores of experimental groups and control groups (Post: F=232.286, p<0.00; Follow up: F=768.948, p<0.00). Similarly, there is significant difference at 0.05 level in the scores of categories of diseases in follow – up (F=3.403, p<0.05) test scores. So, it can be said that hypnotherapeutic intervention is deeply affecting the people with HIV+ status with and without dermatitis and improves the subjective vitality and also, helps in improving the zeal, enthusiasm, happiness and feeling of being alive of dermatitis people with and without HIV+ status.

Implication of the findings:

Hypnotherapeutic intervention found to be effective in reducing anxiety, increasing self confidence, level of adjustment, subjective well – being, subjective vitality, Quality of life, health locus of control, reduced depression symptoms etc which is actually reducing the level of stress and the further process of HPA becomes smooth; this reduces the secretion of glucocorticoides and the number of white cells increases which strengthens the immune system and helps in fighting with diseases causing bacteria, germs and viruses. So, hypnotherapeutic intervention can be used as an adjunct therapy to deal with various psychosocial health parameters and to reduce disease progression of people who are HIV positive, HIV+ with dermatitis and dermatitis. Also, these people will live a healthy and longer life as their immune system will be strong and they will not catch other disease infections. Hypnotherapy will also help them to bear the side effects of Antiretro viral therapy. Similarly, hypnotherapeutic interventions can be used for other diseases like cancer, tuberculosis, hypertension, pre and post surgery, child birth, post traumatic disorder etc. Hypnotherapy found to be more effective when combined with medication so it can be used as an adjunct therapy on several medical conditions particularly on all autoimmune diseases and immune related diseases.

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