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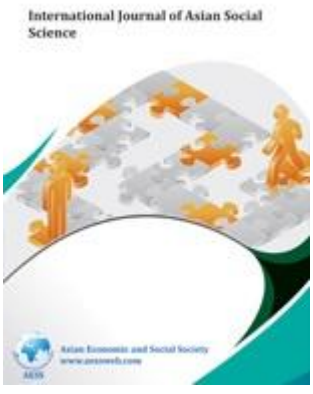

Effectiveness of Coping Training Programme in Enhancing Psychosocial Adjustment for Persons Living with HIV/AIDs in Nakuru North District, Kenya

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Abstract

This was an experiemntal study which assessed the effectiveness of a coping training programme in enhancing psychosocial adjustment among persons living with HIV/AIDS (PLWHA) in Nakuru North Distrct, Kenya. A sample of 60 PLWHA assigned into an experimental (N=30) and control groups (N=30) participated in the study. Coping training was administered to the experimental group. Findings showed that training in coping enhanced psychosocial adjustment among the PLWHA.Though no statistically significant differences were found between the two groups in coping with HIV/AIDS, self-esteem and depression, the experimental group showed some improvement in these variables. A statistically significant ($r = 0.368$; $P < 0.05$) relationship between coping training and psychosocial adjustment was reported. Participants found the programme to be beneficial to them and they evaluated it positively.

Key words: Training, coping, psychosocial adjustment, HIV/AIDs

Introduction

There being fewer professionally trained counselors compared to the increasing number of persons living with HIV/AIDS (PLWHA) who are in need of counseling services, support group activities are an alternative means for psychosocial intervention. Nakuru North District had only one active support group at Subukia health centre whose emphasis was, drug adherence, nutrition and income generating projects. Information on HIV/AIDS, self-esteem and coping with disease strategies was thus inadequate for the PLWHA in the support group; hence psychological symptoms such as anxiety, depression and hypochondria were evident among most PLWHA.

According to the AIDS epidemic update (UNAIDS/WHO, 2007), the estimated number of persons living with HIV worldwide in 2007 was 33.2 million. Over 6,800 persons become infected everyday with HIV while over 5,700 persons die from AIDS, mostly because of inadequate access to HIV prevention and treatment services (Magutu, 2008). According to Kenya AIDS Indicator Survey (2007), an estimated 1.4 million adults in Kenya are infected with HIV. Preliminary results of the 2007 (KAIS) indicate that 7.4 percent of adults age 15-64 are infected with HIV, the virus that causes AIDS. According to KAIS, 78.5% of Kenyans live in rural areas and the burden of HIV (total number of people living with HIV) in

rural areas remains higher than in urban areas.

The HIV pandemic remains the most serious challenges to public health. Sub-Saharan Africa still bears the largest burden of HIV, with AIDS remaining the leading cause of death. Sub-Saharan region had almost a third (32%) of all new HIV infections and AIDS-related deaths globally in the year 2007 (Magutu, 2008).

Learning that one is HIV positive is frightening and very traumatizing. Once the diagnosis of being HIV positive is made, one goes through several stages. They experience shock, fear, and anger and later get into depression. Research shows that serious depression affects six out of 10 people living with HIV/AIDS (*HRSA* Care Action, 2009). A study of people living with HIV/AIDS in Ontario found that 57% had a major depressive disorder (HIV & Depression FAQ, n.d). The behavior of the affected persons changes leading to denial and bargaining. Some other behavior changes would include isolation and self-neglect, infecting others and suicidal tendencies (Magutu, 2008). Some people experience acute stress disorder after an HIV-positive diagnosis, or after the death of a significant other. The overwhelming anxiety that the person usually experiences can seriously disrupt his social or occupational functioning (Sue, Sue, & Sue, 2000).

Because stress has a very negative effect on the immune system, increased stress often causes a decrease in the number of CD4 cells. It is, therefore, very important for HIV-infected individuals to learn how to cope with stress. HIV-infected people should be encouraged to join support groups, to practice relaxation techniques, to visit friends, to talk to people, to obtain factual information about their condition from professional people and to ignore wild rumours and sensationalized anecdotal 'information' about AIDS. HIV-infected individuals should concentrate on positive living to promote health and well-being; they should think positive thoughts, not forget to see the funny side of things (even in their darkest moments), engage in enjoyable and life affirming activities and enjoy life to the fullest (Van Dyk, 2001).

A comprehensive approach in managing a patient who is HIV-positive is important. Psychosocial support, nutritional counseling, management of opportunistic infections and antiretroviral therapy; make up some of the important components of providing care, support and treatment (Magutu, 2008). Some developing nations such as Uganda, have met the AIDS crisis head-on, attempting to educate citizens and change high-risk behaviors in the population. However, other nations have been shown to even acknowledge the disease (Business AIDS Watch, 2008).

Hoffman (1991) recommended that interventions should include dissemination of AIDS-Specific information, provide opportunity for participants to express emotions, encourage participants to give and receive help from each other, allow participants to share useful coping techniques and provide the opportunity for participants to come to terms with both their diagnosis and their likely premature deaths. Namir, Wolcott, Fawzy and Alumbaugh (1990) made several recommendations for interventions based on the findings of their study on coping strategies for PLWHA. They recommended the use of interventions that would increase Self-esteem and feelings of control in PLWHAs. These interventions would encourage the use of problem-solving techniques, participation in treatment decisions, and the usage of active as opposed to avoidant coping strategies. Interventions should help PLWHA in their efforts to change risky behaviors and to become more involved in beneficial social activities. It is important to teach assertion and ways to enhance Self-concept. Against this background, the present study was conducted to asses the effectiveness of coping training programme in enhancing psychosocial adjustment among the PLWHA. **I**t was hypothesized that:

i. There is no statistically significant difference in the level of coping with HIV/AIDS between the PLWHA who underwent coping training and those who did not.
ii. There is no statistically significant difference in the level of self-esteem between PLWHA who undergo

coping training programme compared to those who do not.

iii. There is no statistically significant difference in the level of depression between PLWHA who undergo coping training programme compared to those who do not.

iv. There is no statistically significant relationship between coping training and psychosocial adjustment among the PLWHA.

Literature Review

Research studies in Psychoneuroimmunology (PNI) have found that Psychological stressors such as anxiety, loneliness, helplessness, hopelessness, distress, rage, anger, depression, tension, tiredness, negativity and interpersonal problems all have an adverse effect on the immune system. Subjects who manifested these negative emotions showed a decline in killer T cell activity, as well as a lower CD4 cell count. A correlation was also found between different personal coping styles and immunological reactions. Positive coping factors such as a fighting spirit, a sense of humour, the ability to relax, hope, social contact, social support, mothering and caring behavior as well as the emotional expression of traumatic experiences, all enhanced the immune system (Ader, Felten & Cohen, 1991; O'Leary, 1990; Van Zyl, 1990).

Psychologically, coping can be defined as the process of managing taxing circumstances, expending effort to solve personal and interpersonal problems, and seeking to master, minimize, reduce or tolerate stress or conflict. In coping with stress, people tend to use one of the three main coping strategies: appraisal focused, problem focused, or emotional focused coping (Weiten & Lloyd, 2006). Appraisal-focused strategies occur when the person modifies the way they think, for example: employing denial or distancing oneself from the problem. People may alter the way they think about a problem by altering their goals and values, such as by seeing the humour in a situation. People using problem focused strategies try to deal with the cause of the problem. They do this by finding out information on the disease, learning new skills to manage their disease and rearranging their lives around the disease. Emotion focused strategies involve releasing pent-up emotions, distracting one-self, managing hostile feelings, meditating, using systematic relaxation procedures, and others. People may use a mixture of these different types of coping, and coping mechanisms will usually change over time. All these methods can prove useful, but some claim that those using problem focused coping strategies will adjust better to life than those others (Weiten & Lloyd, 2006). Individuals are likely to experience recurrent problems if their resources become depleted as a result of excessive coping needs. Negative psychosocial outcomes in areas such as emotional well-being, social behavior and vocational performance are potential stressors that deplete coping resources (Lazarus & Folkman, 1984). In contrast, positive outcomes will boost the individual's resources, thus influencing subsequent adjustment. In this context, adjustment following a stressful event is likely to become a spiraling process that either improves or declines in a self-perpetuating, cyclical manner (Lazarus & Folkman, 1984).

A review of 35 stress management programs for people living with HIV/AIDS, including training in guided imagery, progressive muscle relaxation, interpersonal skills, medication and other aspects of living with HIV, and coping skills found that these strategies improved mental health and quality of life, and reduced fatigue (Scott-Sheldon et al., 2008). A study by Pakenham, Dadds & Terry (1994) on 96 HIV-infected gay men and 33 seronegative comparison group found that adjustment was related to social support and coping strategies. In the same study, four coping strategies were related to low levels of psychological distress.

The self-esteem of HIV–infected people is often severely threatened. Rejection by colleagues, friends and loved ones can cause one to lose confidence and a sense of one's social identity and thus to experience reduced feelings of self-worth. The inability to continue in a career to participate in social, sexual and loving relationships also diminishes the client's self-esteem. The physical consequences of HIV infection such as physical wasting and the loss of strength and bodily control contribute even more to a lowering of self-esteem (Van Dyk, 2001).

Depression is a mood, state of sadness, gloom, and pessimistic ideation, with loss of interest or pleasure in normally enjoyable activities (Colman, 2006). HIV-infected individuals often experience depression because they feel that they have lost so much in life-and that they themselves are to blame for it. The absence of any cure and the resulting feeling of powerlessness, knowing others who have died of AIDS, the loss of personal control over their lives, self-blame and feeling of guilt (Van Dyk, 2001) serve to increase depression. Certain core characteristics are often seen among people with depression. These characteristics may be organized within the four psychological domains, used to describe anxiety; the *affective*, the *cognitive*, the *behavioral* and the *physiological domains* (Sue, Sue, & Sue, 2000).

In a study (Remien et al., 2006) of 978 HIV infected women it was found that enhanced stress and coping interventions focused on improving coping self-efficacy, bolstering social supports, and decreasing stress could help to reduce the negative effects of the HIV disease on mood. Another study by Gore-Felton et al.(2006) on 85 PLWHA showed that the use of maladaptive coping strategies to deal with the stress of living with HIV/AIDS, particularly engaging in various kinds of avoidant behaviors, was significantly associated with greater depression. The authors recommended development of effective adaptive coping strategies aimed at decreasing depression among adults living with HIV. The level of posttraumatic stress disorder (PTSD) of a sample of 47 women living with HIV/AIDS was reported (Martinez et al., 2002) to be significantly related to perceived social support from friends ($r = -0.34$, $p < 0.02$) and family ($r = -0.29$, $p < 0.05$).

Colman (2006) defines adjustment as adaptation to a particular environment or set of circumstances. Van Dyk (2001) states that, while experiencing a loss means different things to different people, every person who experiences a loss is forced to adjust to the new circumstances and the new environment that have been created by the loss. He further says that what makes it even worse is the realization that the HIV-positive diagnosis is merely the first stage in a long and painful process of loss, which will inevitably culminate in one's death. Psychosocial adjustment is a behavioral adaptation to one's psychological development in and interaction with a social environment. During the past several years there has been increased interest in the concept of adjustment to illness as the number of persons living with one or more chronic illness has increased. These chronic illnesses have made demands on persons to develop or enhance their coping skills, psychological integrity, and social support systems (Derogatis & Fleming, 1996). Derogatis and Fleming, further say that, psychosocial adjustment tends to be defined differently from one situation to another. This adjustment is more than an intrapsychic process and it includes interactions between the person and other persons and the institutions that represent his or her sociocultural environment. A person's behaviors tend to be highly correlated with judgments concerning his or her levels of psychosocial adjustments. This adjustment to illness can be just as important as the status of his/her physical disease state. A disability due to injury, chronic illness or a genetic condition can have a major impact on an individual's social, psychological, physical, and economic status. Adjusting to living with a disability may be rapid or may take some time and may or may not need some counseling intervention. Research has also indicated that there is a significant variation both within and across individuals in the speed and quality with which individuals move through the adjustment process (Kendall & Terry, 1996). Literature suggests that this variation is heavily influenced by individuals' available resources (Lazarus & Folkman, 1984). Specifically, access to sufficient resources has been found to encourage the development of more positive schemas and, thus, more appropriate coping efforts, resulting in greater psychosocial well-being (Lazarus, 1993). Eugene et al. (2003) in an investigation of 230 persons with symptomatic HIV disease and AIDS showed that there is a positive relationship between HIV coping and adjustment models.

Presumably, individuals with higher levels of resources will progress through the adjustment cycle at a faster rate with better outcomes and fewer recurrent problems than those with low

levels of resources. Typically, the resources that have been found to influence the adjustment process include personal resources (i.e., relatively stable characteristics such as self-esteem or social skills) and environmental resources, such as social and family support or financial security (Kaplan, 1990; Melamed, Grosswasser & Stern, 1992; Moore, Stambrook & Winson, 1991).

This study was guided by the Social Cognitive Theory developed by Albert Bandura which assumes that behavior, environment and the person/cognitive factors are important in understanding personality (Bandura, 1986). The theory stresses that, behavior is determined not only by its controlling environmental conditions, but also by how thoughts modify the impact of the environment on behavior. Bandura's conception of reciprocal determinism is the view that, personal factors in the form of cognition, affect biological events, behavior, and environmental influences, create interactions that result in a triad reciprocality. Bandura states that individuals possess various capabilities that underlie their functioning in the context of the interaction between person, situation and behavior. The Self-reflecting capability is the uniquely human ability to have self-image, to be able to reflect on oneself, and to evaluate oneself. For Bandura, the central component of this capability is people's self-efficacy perception, in other words, their beliefs about their capabilities to function effectively in a given situation.

Methodology

Research Design

The experiemental design was used in this study. It involves assigning subjects into experimental and cotrol groups. The experimental group is given treatment which is not given to the control group after which the two groups are compared. Observed differences on the variables of interest are attributed to the treatment. Each group was assigned 30 subjects.

Participants

Participants were the 60 PLWHA who attended the Subukia Health Centre support group. Their ages ranged from19 years and above. The 60 PLWHA were straified into two groups to ensure gender and age representation and then randomly assigned into an experimental group (N=30) and a control group (N=30). Both the groups were tested before and after the coping training. The experimental group was trained on coping while the control group did not receive any form of training. The programme took four weeks with two hours of training in each week. Post testing was given to both the groups after the training. The interview schedule was conducted on the experimental group only.

Instrumentation

The Self-esteem Scale (SES), the Coping with Disease Scale (CODI), the Wakefield Self-Report Screening Test for Depression (WSRSD) and an Interview Schedule developed by the researchers were administered during the study. The Self-esteem likert-type scale developed by Rosenberg (1965) consists of ten items measuring an individual's evaluation of Self-esteem.

The Coping with a Disease (CODI) Scale by Carinna Petersen was adopted and modified for this study. The response format is a frequency-related, 5-point Likert scale (Never, Almost never, Sometimes Quite often,and Always).

The Wakefield Self-Report Screening Test for Depression (WSRSD) was adopted to assess the subjects' level of stress. The scale has 12 items and uses a four-point Likert scale. The interview schedule sought information on respondent's perception towards the coping training programme and feelings about their HIV/AIDS status after the coping training and their views on the programme.

Procedure

The instruments were administered in a group format. The Self-esteem Scale, the Coping with Disease Scale and the Depression Scale were administered to both the experimental and control groups at pre-test. The experimental group was informed of the training programme, and where and when it was to take place. The training took place in the Health Centre where the group regularly met. The researchers conducted the training, for one session each week for a period of four weeks. Each session took two hours. The group was given coping

training that focused on; dealing with depression, information on self-esteem, information on HIV/AIDS, and coping with HIV/AIDS; while the control group did not receive any form of training. A post-test was administered to both groups at the end of the training.

Results and Discussion

The first hypothesis stated that there is no statistically significant difference in the Level of Coping with HIV/AIDS between the PLWHA who underwent coping training and those who did not. The results of the independent t-test analysis are presented in table 1.

The t-test on coping with HIV/AIDS failed to reveal a statistically significant difference *(p > 0.05)* between the mean score of PLWHA who underwent the coping training and those who did not. Although the results did not show statistically significant difference in the level of coping with HIV/AIDS, the mean score for the experimental group was higher than that of the control group. These findings do not seem to provide strong support to previous studies that have reported a positive realationship between training and coping with HIV (Scott-Sheldon et al., 2008; Ramien, et al., 200). However, the interview schedule indicated that 76% of the participants were able to cope with the HIV/AIDS and live positively. This implied that the experimental group appreciated the training and had learned how to cope with HIV/AIDS.

The second hypothesis sought to establish whether there is a staistically significant difference in the level of self-esteem between the PLWHA who underwent coping training and those who did not. The result of the the t-test are presented in table 2.

The results in Table 2 show that there is no statistically significant difference *(p > 0.05)* between the mean score of PLWHA who underwent the coping training programme and those who did not. The insignificant diffference can be partly attributed to the short duration of training which may not have had the desired impact. Although the results did not show a significant difference in the level of self-esteem between those who underwent the training and those who did not, the mean score for the experimental group was higher than that of the control group. From the results of the interview schedule, 63% of the participants reported that they had learned how to build their self-esteem. This implied that the experimental group had improved in their level of self-esteem compared to the control group.

The third hypothesis stated that there is no statistically significant difference in the level of depression between PLWHA who undergo coping training programme compared to those who do not. The results of the independent t-test analysis are presented in table 3.

The results showed that there is no stsistically significant *(p > 0.05)* difference in the level of depression between PLWHA who undergo coping training programme compared to those who do not. These findings do not support previous research that have shown that exposure to coping strategies reduces feelings of depression (Pakenham et al., 1994; Remien et al., 2006; Gore-Felton et al., 2006). Nevertheless, the mean score for the experimental group was lower than that of the control group. The low score in the level of depression implied that the experimental group had a lowered level of depression compared to the control group at post-test.

The results reported in the first three hypotheses that showed that the differences in participants' level of coping with HIV/AIDS, self-esteem and depression were not significant statistically are understandable. The duration of the coping training programme was only four weeks, with two hours of training each week; which may have been too short to yield any significant statistical differences. A substantial amount of time may be needed for the participants to experience a statistically significant effect of the training. Research has indicated that there is a significant variation both within and across individuals in the speed and quality with which individuals move through the adjustment process (Kendall & Terry, 1996).

The fourth hypothesis sought to establish whether there is a statistically significant relationship between coping training and

psychosocial adjustment among the PLWHA. Pearsons' product-moment correlation was used to determine the strength of association that exists between coping training and psychosocial adjustment. A singnificant correlation coefficient ($r = 0.368$; $P < 0.05$) was reported. These results imply theat the PLWHA who undergo coping training will experience improved psychosocial adjustment.

Hoffman (1991) recommended interventions that should provide opportunity for participants to express emotions, encourage participants to give and receive help from each other, allow participants to share useful coping techniques and provide the opportunity for participants to come to terms with both their diagnosis and their likely premature deaths. Namir et al. (1990) made several recommendations for interventions based on the findings of their study on coping strategies for PLWHA. They recommended the use of interventions that would increase self-esteem and feelings of control in PLWHA. These interventions would encourage the use of problem-solving techniques, participation in treatment decisions, and the usage of active as opposed to avoidant coping strategies. Interventions should help PLWHA in their efforts to change risky behaviors and to become more involved in beneficial social activities. They said that it is important to teach assertion and ways to enhance self-concept. The outcome of this study is a step towards coming up with empirical evidence to show the effectiveness of coping training programme in enhancing psychosocial adjustment for PLWHA that confirms these views.

Conclusion and Recommendation

Although no statistically significant differences were reported bewteen the level of coping with HIV/AIDS, self-esteem and depression between subjects who underwent coping training and those who did not, it was concluded that coping training can enhance psychosocial adjustment if it is well coordinated and run for a longer period of time. The study recommended incoperation of coping training as part of the activities that should be given a lot of emphasis in the support groups of PLWHA.

Table-1 T-test Results on Coping with HIV/AIDS

Group	N	Mean	SD	t-cal	df	*p*
Experimental	30	3.46	1.31	0.67	58	0.480
Control	30	3.31	1.61			

Table -2 T-test Results on the Level of Self-esteem

Group	N	Mean	SD	t-cal	df	*p*
Experimental	30	2.10	1.33	1.28	58	0.289
Control	30	1.84	0.88			

Table -3 T-test Result on the Level of Depression

Group	N	Mean	SD	t-cal	df	*p*
Experimental	30	0.98	1.02	1.38	58	0.277
Control	30	1.36	1.09			

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