

## A study to assess the effectiveness of psycho education in reduction of anxiety among the HIV positive patients admitted in selected Hospitals, Belgaum, Karnataka

Chanamallappa I Hadaginal

Assistant Professor, Mental Health Nursing, P.D. Bharatesh College of Nursing, Halaga, Belagavi, Karnataka, India

### Abstract

Psycho education refers to the education offered to people who live with a psychological disturbance. A goal is for the patient to understand and be better able to deal with the presented illness. Also, the patient's own strengths, resources and coping skills are reinforced, in order to avoid relapse and contribute to their own health and wellness on a long-term basis. Since it is often difficult for the patient and their family members to accept the patient's diagnosis, psycho education also has the function of contributing to the stigmatization of psychological disturbances and to diminish barriers to treatment. HIV disease is not only a medical issue, but a psychosocial one as well, hence a study to assess the effectiveness of psycho education in reduction of anxiety among the HIV positive patients admitted in selected hospitals, Belgaum, Karnataka was undertaken.

**Objectives:** To determine the level of anxiety among the HIV positive patient before attending the Psycho education. 2. To assess the effectiveness of psycho education in terms of reduction of anxiety among the HIV positive patient. 3. To compare the level of anxiety before and after psycho education among the HIV positive patient. 4. To explore the association of level of anxiety with selected demographic variables of HIV positive patients.

**Hypothesis:** Hypothesis will be tested at 0.05 level of statistical significance. H1 - The mean post-test anxiety score of HIV/AIDS patients exposed to psycho education will be significantly lower than the pre-test anxiety score. H2 - There will be significant association between the levels of anxiety with selected demographic variables of HIV Positive patients.

**Methodology:** Pre-experimental one group pre-test, post-test research design was selected for all HIV positive patients whose age groups fall in between 20- 50 years with the duration of less than 1 year. Non-Probability purposive method of sampling technique was used. Closed ended anxiety questionnaire was prepared to assess the level of anxiety among HIV positive patients. A Likert scale was used to assess the level of anxiety among HIV positive patients and modified version of Standardized Multidimensional – AIDS – ANXIETY questionnaires (MAAQ) was used to assess the level of anxiety among HIV positive patients.

**Result:** It is evident from the data presented that the calculated 't' value ( $t=20.24$ ) was greater than the table value. Area wise the mean post-test level of anxiety score was significantly lower than mean pre-test level of anxiety score in all areas. Hence the hypothesis (H1) was accepted at 0.001 level of significance.

The mean difference between pre-test and post-test knowledge score was a true difference and not a chance difference. This indicates that the psycho education was significantly effective in reducing the level of anxiety among HIV positive patients.

**Conclusion:** The study depicted that psycho education helps in reduction of anxiety among the HIV positive patients.

**Keywords:** assess, effectiveness, psycho education, anxiety, HIV, HIV positive patients

### Introduction

Psycho education refers to the education offered to people who live with a psychological disturbance. Frequently psycho educational training involves patients with schizophrenia, clinical depression, anxiety disorders, psychotic illnesses, eating disorders, and personality disorders, as well as patient training courses in the context of the treatment of physical illnesses. Family members are also included. A goal is for the patient to understand and be better able to deal with the presented illness. Also, the patient's own strengths, resources and coping skills are reinforced, in order to avoid relapse and contribute to their own health and wellness on a long-term basis. The theory is, with better knowledge the patient has of their illness, the better the patient can live with their condition <sup>[1]</sup>.

Since it is often difficult for the patient and their family members to accept the patient's diagnosis, psycho education also has the function of contributing to the stigmatization of psychological disturbances and to diminish barriers to treatment. Through an improved view of the causes and the

effects of the illness, psycho education frequently broadens the patient's view of their illness and this increased understanding can positively affect the patient. The relapse risk is in this way lowered; patients and family members, who are more well-informed about the disease, feel less helpless. The Human Immunodeficiency Virus (HIV) is the virus that leads to AIDS. HIV belongs to a subset of retroviruses called lentiviruses (or slow viruses), which means that there is an interval -- sometimes years -- between the initial infection and the onset of symptoms. Upon entering the bloodstream -- through mucous membranes or blood-to-blood contact -- HIV infects the CD4+T cells and begins to replicate rapidly <sup>[2]</sup>. HIV disease is not only a medical issue, but a psychosocial one as well. Infection and the subsequent progression of this disease present the client with a broad range of personal experiences to negotiate <sup>[2]</sup>.

Acquired Immunodeficiency Syndrome (AIDS) is the final stage of HIV infection. The Centers for Disease Control establish the definition of AIDS, which occurs in HIV-infected persons with fewer than 200 CD4+T cells and/or

persons with HIV who develop certain opportunistic infections. In 1992, the CDC redefined AIDS to include 26 CDC-defined AIDS indicator illnesses and clinical conditions that affect persons with advanced HIV [2].

The only way to determine HIV infection is to be tested, as symptoms and latent periods vary from person to person. It is common during the first two to four weeks of infection that people experience flu-like symptoms and enlarged lymph nodes. This is because the virus migrates to various organs in the body, particularly the lymphoid organs. During this stage people are highly infectious and HIV is present in large quantities in genital secretions [2].

Ever since the HIV/AIDS virus was identified, people have been trying to find ways of educating others about this virus. Many campaigns have been put into place, and people have been made aware of the various effects of the virus. We must remember that this virus has not only physiological effects, but also major psychological effects [3].

“The psychological or internal challenges a person with HIV/AIDS faces vary from individual to individual. Not everyone will experience all of the emotional responses or stages of the emotional responses described. Each HIV/AIDS situation is as unique as the people involved. There are individuals who might face catastrophic changes not only in their personal and job relationships, but in their physical bodies and in their self-images and self-esteem.” (Watstein and Chandler, 1998). As a result of these changes in both working and personal relationships, the behaviour of those infected may change. They may become withdrawn, aggressive, and rude to colleagues and friends. This may be because the infected person may feel (or imagine) being victimized [3].

**Statement of the problem**

A Study to assess the effectiveness of psycho education in reduction of anxiety among the Hiv positive patients admitted in selected hospitals, Belgaum, Karnataka.

**Objectives of the study**

- To determine the level of anxiety among the HIV positive patient before attending the Psycho education.
- To assess the effectiveness of psycho education in terms of reduction of anxiety among the HIV positive patient.
- To compare the level of anxiety before and after psycho education among the HIV positive patient.
- To explore the association of level of anxiety with selected demographic variables of HIV positive patients.

**Assumptions**

**The researcher assume that**

- Anxiety will be more common among the HIV positive patient.
- There is a need for Psycho education in reduction of anxiety among HIV positive patients.
- After attending the psycho education programme there will be reduction in anxiety level among HIV positive patients.
- There will be significant changes in the level of anxiety before and after attending the psycho education.

**Hypothesis**

Hypothesis will be tested at 0.05 level of statistical significance

**H1:** The mean post-test anxiety score of HIV/AIDS patients exposed to psycho education will be significantly lower than the pre-test anxiety score.

**H2:** There will be significant association between the levels of anxiety with selected demographic variables of HIV Positive patients.

**Research design**

The research design selected for this study was pre-experimental one group pre-test, post-test design because this study was intended to ascertain, to reduce the level of anxiety among HIV positive patients who were subjected to a psycho education programme. Thus, only one group was observed for twice, i.e. before & after introducing the independent variables. The effect of the treatment would be equal to the level of the phenomenon after the treatment minus the level of the phenomenon before treatment. This can be represented as.

**Research Design - pre experimental**

One group pre - test post- test design

**Table 1**

Group	Pre Test (1ST Day)	Intervention (1st Day)	Post Test (8TH Day)
Experimental Group	O1	X	O2

The present study was conducted among 50 samples of HIV positive patients who are fall in between 20- 50 years with the duration of less than 1 year in selected hospitals of Belgaum, Karnataka.

The sampling technique used for the present study is Non-Probability purposive method of sampling and was considered appropriate for the study.

A closed ended anxiety questionnaire was prepared to assess the level of anxiety among HIV positive patients. A Likert scale was used to assess the level of anxiety among HIV positive patients and modified version of Standardized Multidimensional – AIDS – ANXIETY questionnaires (MAAQ) By William. E.Snell :Jr and Phillip D, Finney was used to assess the level of anxiety among HIV positive patients.

**Description of the tool**

The tools were divided into two parts;

**Part A:** Demographic Data of HIV positive patients. It consists of 12 items of demographic variables. Such as: Age, Sex, Employment, Economic, Education, Type of family, Residence, Religion, marital status, Habits, Duration of illness, any information received regarding HIV/AIDS.

**Part B:** Modified version of Standardized Multidimensional – AIDS – ANXIETY questionnaires (MAAQ) By William. E. Snell: Jr and Phillip D, Finney to assess the level of anxiety among HIV positive patients before and after attending the psycho education.

**Section I**

Contains 25 items to assess the level of anxiety among HIV positive patients before & after Psycho education.

**Table 2:** Scoring criteria

Score	Characteristics
0	Not at all characteristic of me
1	Slightly characteristic of me
2	Somewhat characteristic of me
3	Moderately characteristic of me
4	Very characteristic of me

**Table 3:** The scores ranges from

S. No	Scores IN %	Level of Anxiety
1	Below 20	Normal range.
2	21 – 40	Mild.
3	41 – 60	Moderate.
4	61 – 80	Severe.
5	81 – 100.	Extremely Severe

**Development of psych education module**

The psycho education module was developed for HIV positive patients of selected hospitals of Belgaum. The steps involved in the development of psycho education module were,

- Assessing the learning needs of the study population.
- Review of literature on the topic.
- Preparation of the blue print.
- Consultation with guide & experts in the field.
- Preparing set of related teaching aids.
- Development of criteria checklist for content validity.
- Preparation of final draft of psycho education module.

**Data collection procedure**

Data collection is the precise, systematic gathering of information relevant to the research purpose or specific objectives, questions or hypothesis of the study. Prior permission was obtained from the concerned authorities like Director, Medical & Nursing superintendent and ART Medical officer BIMS hospital, Belgaum. Keeping in mind the ethical aspect of the research data were collected after obtaining informed consent of the sample. The respondents were assured the confidentiality of the information provided by them. The data were collected on 24th Dec 2011– 5th of Jan 2012. The researcher introduced himself to the participants. The objectives of the study were explained to the

patients. Data were collected by administering the questionnaire and it nearly took 10 to 15 minutes to fill the data of each sample by the patients. The data collected were recorded systematically and were organized in the master sheet and further data analysis was carried out.

**Result**

**Description of demographic characteristics of HIV positive patients**

Regarding their age 22 (44%) of the samples belongs to the age group of 41 – 50 years, 20 (40%) of the samples aged between the 31 – 40 years and 8 (16%) of the samples were 20 – 30 years. Majority 29 (58%) of the samples were male and remaining 21 (42%) were female. Most of the study samples were illiterates 24 (48%), 15 (30%) of them had primary education, 8 (16%) were studied up to PUC and remaining 3 (6%) were had secondary education.

While considering the marital status 30 (60%) of the samples were married, 14 (28%) were widow/widower and remaining 6 (12%) were unmarried. Majority 39 (78%) of the samples were living in joint family and remaining 11 (22%) were having nuclear family. With regard to religion most 30 (60%) of the samples were Hindu, 8 (16%) were belongs to other religion, 11 (22%) samples were Muslim and remaining 1 (2%) was Christian. Mostly 25 (50%) study samples were working in private sector and remaining 25 (50%) were unemployed.

Considering the family economic status 25 (50%) of samples were belongs to monthly income of Rs below 2500, 22 (44%) of them having belong the family income of Rs 2501-5000 and remaining 3 (6%) were having above Rs 5001. Majorities 39 (78%) of the samples were residing in urban area and remaining 11(22%) were in rural area. Regarding the duration of illness most 21 (42%) of the samples were reported that they are suffering with HIV for 10 – 12 months, 12 (24%) of them were suffering for 4 – 6 months duration, 9 (18%) samples were said 7 – 9 months were there suffering period and remaining 8 (16%) samples suffering with less than 3 months.

While considering the previous knowledge on HIV / AIDS 41 (82%) of the samples was not known regarding HIV/AIDS and remaining 9 (18%) samples were known about the disease. Regarding the habits most 27 (54%) of the samples were not having any habits, 9 (18%) of them were having habit of tobacco chewing, 8 (16%) of the study samples were alcoholics and remaining 6 (12%) were smokers.

**Pre-test on different aspects of level of anxiety among HIV positive patients. (N=50)**

**Table 4**

S.N	Anxiety aspects on HIV	Statements	Min – Max score	Respondents level of anxiety		
				Mean	SD	Mean (%)
1	Physiological arousal	8	0 - 32	19.28	5.12	60.25
2	Fear of AIDS	4	0 - 16	9.9	3.28	61.88
3	Sexual inhibition	4	0 - 16	9.64	2.99	60.25
4	Cognitive worry	4	0 - 16	9.9	3.20	61.88
5	Discussion inhibition	2	0 - 8	4.5	1.77	37.5
6	Anxiety about AIDS exposure	3	0 - 12	7.52	1.96	62.67

**Overall Pre-test level of anxiety among HIV positive patients. (N = 50)**

**Table 5**

Statistics	Score
Mean	60.74
Mean %	60.74
SD	16.31

**Pre-test level of anxiety among HIV positive patients. (N = 50)**

**Table 6**

Level of Anxiety	Category	Respondents	
		Number	Percentage (%)
Normal	< 20	0	0 %
Mild	21 – 40	4	8 %
Moderate	41 – 60	14	28 %
Severe	61 – 80	21	42 %
Extreme severe	81 – 100	11	22 %
Total			100 %

**Post-test on different aspects of level of anxiety among HIV positive patients. (N = 50)**

**Table 7**

S.N	Anxiety aspects on HIV	Statements	Min – Max score	Respondents level of anxiety		
				Mean	SD	Mean (%)
1	Physiological arousal	8	0 - 32	8.16	4.6	25.5
2	Fear of AIDS	4	0 - 16	4.32	2.17	27
3	Sexual inhibition	4	0 - 16	4.14	2.18	25.88
4	Cognitive worry	4	0 - 16	4.1	2.18	25.63
5	Discussion inhibition	2	0 - 8	2.16	1.18	18
6	Anxiety about AIDS exposure	3	0 - 12	2.54	1.45	21.67

**Overall Post-test level of anxiety among HIV positive patients. (N = 50)**

**Table 8**

Statistics	Score
Mean	25.32
Mean %	25.32
SD	12.44

**Post-test level of anxiety among HIV positive patients. (N = 50)**

**Table 9**

Level of Anxiety	Category	Respondents	
		Number	Percentage (%)
Normal	< 20	20	40 %
Mild	21 – 40	18	36 %
Moderate	41 – 60	12	24 %
Severe	61 – 80	0	0 %
Extreme severe	81 – 100	0	0 %
Total			100 %

**To assess the level of anxiety among HIV positive patients on different aspects of anxiety before and after psycho education. (N = 50)**

**Table 10**

Anxiety aspects on HIV	Respondents level of Anxiety (%)									Paired “t” Test
	Pre Test			Post Test			Effectiveness			
	Mean	Mean %	SD	Mean	Mean %	SD	Mean	Mean %	SD	
Physiological arousal	19.28	60.25	5.12	8.16	25.5	4.6	11.12	34.75	0.52	16.35
Fear of AIDS	9.9	61.88	3.28	4.32	27	2.17	5.58	34.88	1.11	15.08
Sexual inhibition	9.64	60.25	2.99	4.14	25.88	2.18	5.5	34.37	0.81	15.71
Cognitive worry	9.9	61.88	3.20	4.1	25.63	2.18	5.8	36.25	1.02	12.89
Discussion inhibition	4.5	37.5	1.77	2.16	18	1.18	2.34	19.5	0.59	10.17
Anxiety about AIDS exposure	7.52	62.67	1.96	2.54	21.67	1.45	4.98	41	0.51	18.44

Significance at 0.001 % level t (0.001, 49 df) = 3.5

**Assessment of overall level of anxiety among HIV positive patients before and after psycho education programme. (N = 50)**

**Table 11**

Anxiety aspects on HIV	Respondents level of Anxiety (%)									Paired “t” Test
	Pre Test			Post Test			Effectiveness			
	Mean	Mean %	SD	Mean	Mean %	SD	Mean	Mean %	SD	
	60.74	60.74	16.31	25.32	25.32	12.44	35.42	35.42	3.87	

**Comparison of pre – test and post – test level of anxiety among HIV positive patients. (N = 50)**

**Table 12**

S.N	Level of Anxiety	Range of Percentage	Classification of respondents			
			Pre Test		Post Test	
			F	%	F	%
1	Normal	< 20	-	-	20	40
2	Mild	21 – 40	4	8	18	36
3	Moderate	41 – 60	14	28	12	24
4	Severe	61 – 80	21	42	-	-
5	Extreme severe	81 – 100	11	22	-	-
Total			50	100	50	100

Significant at 0.05 % level

**Association between demographic variables and pre-test level of anxiety among HIV positive patients**

There is significant association between level of anxiety among HIV positive patients with demographic variables such as educational status and there is no significant association with age, sex, marital status, type of family, religion, employment status, monthly income in Rs, residence, duration of illness in months, any information, any habits.

**Association between demographic variables and post-test level of anxiety among HIV positive patients.**

There is no significant association between level of anxiety among HIV positive patients with demographic variables such as age, sex, educational status, marital status, type of family, religion, employment status, monthly income in Rs, residence, duration of illness in months, any information and any habits.

**Summary**

It is evident from the findings that majority of respondents 21 (42%) were having severe level of anxiety compared to 14 (28%), 11 (22%) and 4 (8%) respondents who had moderate, extreme severe and mild level of anxiety respectively on HIV / AIDS. However, present study showed that none of the respondents were normal in pre-test. It is evident from the findings that majority of respondents 20 (40 %) were normal compared to 18 (36 %) and 12 (24%) respondents who had mild and moderate level of anxiety respectively on HIV / AIDS. However, present study showed that none of the respondents who have severe and extreme level of anxiety in post-test.

**Conclusion**

The assessment of the level of anxiety among HIV positive patients revealed that, majority 21 (42%) were having severe level of anxiety compared to 14 (28%), 11(22%) and 4 (8%) respondents who had moderate, extreme severe and mild level of anxiety respectively on HIV / AIDS. However, present study showed that none of the respondents were normal in pre-test. The mean score was 60.74 ± 16.31.

The assessment of the level of anxiety among HIV positive patients revealed that, majority 20 (40%) were normal compared to 18 (36 %) and 12 (24%) respondents who had mild and moderate level of anxiety respectively on HIV / AIDS. However, present study showed that none of the respondents who have severe and extreme level of anxiety in post-test. The mean score was 25.32 ± 12.44.

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