



**ORIGINAL RESEARCH PAPER**

**Education**

**EFFECTIVENESS OF VIDEO ASSISTED TEACHING V/S LECTURE METHOD ON ADHERENCE TO ANTI RETROVIRAL THERAPY AMONG HIV POSITIVE CLIENTS IN SELECTED ART CENTERS**

**KEY WORDS:**

**Dr. Mrs. Bharati Batra**

PhD Guide

**Mrs. Neha Titus\***

Research Scholar \*Corresponding Author

**INTRODUCTION AND BACKGROUND OF THE RESEARCH**

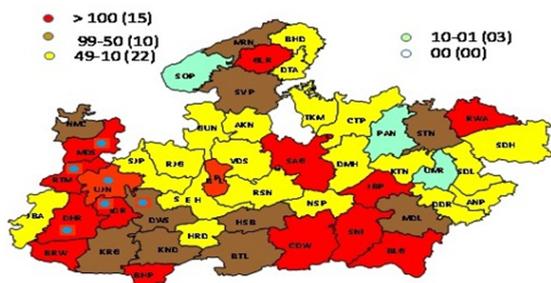
Human Immunodeficiency Virus (HIV) was first recognized in India in 1986. In the early long stretches of its discovery, the plague was believed to be less negative for the nation as it was then accepted to be spread fundamentally through sex between men, infusing drug utilize and multi-accomplice hetero sex. It was generally trusted that HIV won't spread as much in India as the act of hazard conduct was low in the populace. Nonetheless, by 1990, it was understood that the contamination has effectively settled in a few gatherings like proficient blood benefactors, female sex labourers and infusing drug clients. The contamination was across the board in the nation however up 'til now constrained to those with high hazard conduct or to beneficiaries of tainted blood. The fundamental method of transmission was hetero in spite of the fact that infusing drug utilize was prevalently in charge of the scourge in the northeast.

**NEED AND SCOPE FOR THE RESEARCH**

In poor nations adherence can be an issue for various completely characterized reasons recorded in the exploration writing, i.e., absence of transportation, absence of sustenance, and co-morbidities. Nonetheless, as later involvement with anti-microbial illustrates, low adherence isn't confined to certain social classes however is boundless and eccentric. Research in the HIV field bolsters this viewpoint. In addition adherence rates change between people as well as inside a similar individual after some time. Adherence is in this way best idea of as a variable conduct as opposed to as a steady normal for a person. A great many people will show low adherence a portion of the time.

So the present study is devoted to a description of a practical drug adherence programme, modeled on the protocol developed and implementing in different method of teaching, in order to find the effective way to improve knowledge on adherence to ART therapy on HIV positive clients visiting selected ART centers in M.P.

I have selected districts of western Madhya Pradesh for investigation of my study topic. These districts are Dewas, Dhar, Indore, Mandasaur, Ratlam and Ujjain. In this map of Madhya Pradesh 15 districts those are indicated by red color are highly prevalence of HIV cases reported more than hundred. These belts are having more HIV and AIDS prevalence.



**Figure - 1 The figure showing prevalence of HIV in different districts Madhya Pradesh.**

**PROBLEM STATEMENT**

“A comparative study to assess the effectiveness of video assisted teaching v/s lecture method on adherence to anti retroviral therapy among HIV positive clients in selected ART centers in M.P.”

**OBJECTIVES OF THE STUDY**

1. To assess the pre interventional level score of video assisted teaching and lecture method on adherence to anti retroviral therapy among HIV positive clients.
2. To assess the effectiveness of video assisted teaching and lecture method on adherence to anti retroviral therapy among HIV positive clients.
3. To compare the effectiveness of video assisted teaching v/s lecture method on adherence to anti retroviral therapy among HIV positive clients.
4. To find out the association between pre interventional level score of video assisted teaching and lecture method on adherence to anti retroviral therapy among HIV positive clients with their selected demographic variables of HIV positive clients.

**HYPOTHESIS**

The null hypotheses of the present study are listed below;

- **RH<sub>0</sub>**, There will be no significant difference between pre test mean knowledge score and post test mean knowledge score on the effectiveness of video assisted teaching on adherence to anti retroviral therapy among HIV positive clients at  $p \leq 0.05$  level of significance.
- **RH<sub>0</sub>**, There will be no significant difference between pre test mean knowledge score and post test mean knowledge score on the effectiveness of lecture method on adherence to anti retroviral therapy among HIV positive clients at  $p \leq 0.05$  level of significance.
- **RH<sub>0</sub>**, There will be no significant difference when comparing the effectiveness of video assisted teaching v/s lecture method on adherence to anti retroviral therapy among HIV positive clients at  $p \leq 0.05$  level of significance.
- **RH<sub>0</sub>**, There will be no significant association between pre interventional level score of video assisted teaching on adherence to anti retroviral therapy among HIV positive clients with their selected demographic variables.
- **RH<sub>0</sub>**, There will be no significant association between pre interventional level score of lecture method of teaching on adherence to anti retroviral therapy among HIV positive clients with their selected demographic variables.

**ASSUMPTIONS**

The study assumed that:-

- HIV positive clients are having some knowledge regarding adherence to anti retroviral therapy.
- Teaching methods influence the HIV positive client's behaviour regarding adherence to anti retroviral therapy.
- Video assisted teaching programme is better to comprehend and to retain than verbal information.

**REVIEW OF LITERATURE**

The present chapter deals with the reviews of literature related to adherence to ART therapy among HIV positive clients under the following headings;

1. Prevalence of HIV/ AIDS.
2. Adherence to ART therapy among HIV positive clients in India and abroad.
3. Non adherence to ART therapy among HIV positive clients in India and abroad.

### 1. Prevalence of HIV/ AIDS.

**Tahziba Hussain, et al. (2016)** the point of this multi year (2005-2011) observational investigation was to decide the predominance, pattern and hazard factors related with HIV contaminations among pregnant ladies displaying to ICTC at Agra. 433 pregnant ladies were screened for HIV and VDRL diseases. 5.7% were HIV-positive and 14.3% were VDRL-responsive. HIV-energy went between 2-5% while that of VDRL extended from 8-12%. Amid 2011, there was a flood in HIV-inspiration (11%) and VDRL reactivity (24%). Cost-viable treatment regimens and HIV aversion programs for generally safe gathering customers are direly required in many parts of the nation.

### 2. Adherence to ART therapy among HIV positive clients in India and abroad.

**Tessa Heestermans, et al. (2016)** conducted a survey to distinguish and outline determinants of adherence to ART among HIV-positive grown-ups. Of the 4052 articles screened, 146 were incorporated for conclusive investigation, giving an account of determinants of 161 922 HIV patients with a normal adherence score of 72.9%. Advertisers of adherence included directing and instruction mediations, memory helps, and dynamic exposure among individuals living with HIV. Determinants of wellbeing status had clashing impact on adherence.

### 3. Non adherence to ART therapy among HIV positive clients in India and abroad.

**Horne R, et al. (2013)** Studies utilizing the Beliefs about Medicines Questionnaire (BMQ) to look at view of individual need for prescription and worries about potential antagonistic impacts, in connection to a proportion of adherence to drug. Result recognized 3777 investigations, of which 94 (N = 25,072) satisfied the incorporation criteria. Crosswise over examinations, higher adherence was related with more grounded view of need of treatment, OR = 1.742, 95% CI [1.569, 1.934], p<0.0001, and less Concerns about treatment, OR = 0.504, 95% CI: [0.450, 0.564], p<0.0001. These connections stayed huge when information was stratified by concentrate estimate, the nation in which the examination was led and the kind of adherence measure used.

## RESEARCH METHODOLOGY

### RESEARCH APPROACH & RESEARCH DESIGN

The research approach used for the study was quantitative comparative method. The research design used in the study was pre experimental two group pre test post test design.

### VARIABLES

#### Independent Variable:

1. Video assisted method of teaching
2. Lecture method of teaching

#### Dependent Variable:

The knowledge of the HIV positive clients regarding adherence to anti-retroviral therapy

### SETTINGS OF THE STUDY

The study had conducted at various selected anti-retroviral therapy centers of M.P. (Ujjain, Indore, Ratlam, Mandasaur, Dewas, Dhar)

### POPULATION

In this study the population consists of the HIV positive clients who are more than 18 years of age and are receiving anti-

retroviral therapy in selected ART centers in M.P.

### SAMPLE, SAMPLING TECHNIQUE AND SAMPLE SIZE

A non probability sampling (Purposive sampling) techniques were used for this study. In this study sample consist of 500 HIV positive clients visiting selected ART centers in M.P. Among these 5 centers researcher selected 100 samples for each center and again divided in 50-50 for two groups that was: 50 for Video Assisted Teaching and 50 for lecture method.

### CRITERIA FOR SAMPLE SELECTION

#### Inclusive Criteria

1. Those who diagnosed seropositive and willing to participate in the study.
2. Those who are available at the time of data collection.
3. Those who can read and understand Hindi and English.
4. Those who are belonged to age group of more than or equal to 18 years.

#### Exclusive Criteria

1. Those who are not willing to participate.
2. Those who are not available at the time of data collection.
3. Those who are under the age group of 18 years.

### DEVELOPMENT AND DESCRIPTION OF THE TOOL

The tool consisted of two sections:

**Section A** (Socio-Demographic Variables) – It consists Age, Sex Educational Status, Occupation, Family Status, Type of Family, Marital Status, Area of Residence and Previous Knowledge

**Section B** (Self Structured Knowledge Questionnaire) – It consist of 36 knowledge questionnaire which deeply covers the entire aspects of adherence therapy and important aspects of HIV and AIDS. Each multiple choice question comprise with four choices in each item, out of which HIV positive client's needs to tick stamp on which he/she supposes is most appropriate. Each correct answer conveys 1 mark each and wrong one conveys 0 check and there was no negative marking. Maximum mark is 36 and minimum is 0. Knowledge score grades as follows;

### VALIDATION OF THE TOOL

To ensure the content validity, the tools were submitted to 13 experts including Doctors, professors and statisticians from medical and nursing field along with the criteria list. Expert of Hindi language translated this tool from English to Hindi.

### RELIABILITY OF THE TOOL

The tool was utilized in 10 HIV positive clients in ART center, District Hospital Ratlam, M.P. to estimate the reliability of the instrument. The researcher controlled the survey over and over on the customers at an interim of 7 days. The technique used was test- retest strategy. Three test outcomes were gathered to acquire unwavering reliability of the tool. The reliability of the tool was determined utilizing Karl Pearson's correlation coefficient. After the figuring of acquired information, the reliability of the tool found as  $r = 0.764$ , which observed to be significant for the investigation.

### PILOT STUDY

A pilot study (round-1) was undertaken in 2 rounds. Round -1 for video assisted teaching and Round -2 for lecture method. After detailed examination of obtained value it was found that video assisted teaching was slightly effective than lecture method at the level of  $P < 0.05$  to improve the knowledge level of HIV positive clients on adherence of anti-retroviral therapy in selected ART centers in M.P.

### RESULTS

Outcomes of two modalities on adherence indicated the effectiveness of both, video assisted teaching and lecture method among HIV positive clients on adherence to anti-

retroviral therapy.

After administration of video assisted teaching on adherence among HIV positive clients of group 1, the average (Mean ± Standard Deviation) adherence score (29.17±3.12 points) found to be significantly greater and improved as compared to average adherence score (10.34±2.07 points) at baseline (pre-test) stage. However, the difference of 18.83 points in mean adherence score between baseline and post intervention was large among HIV positive clients of group 1 and found to be statistically strongly significant (p<0.001).

Average (Mean ± Standard Deviation) adherence score (27.34±4.77 points) after administration of lecture method among HIV positive clients of group 2 found to be significantly increased and improved as compared to average adherence score (10.06±1.98 points) at baseline (pre-test) stage. However, the difference of 17.28 points in mean adherence score between baseline and post intervention stages was large among HIV positive clients of group 2 whichever found to be statistically strongly significant (p<0.001).

The differences in mean adherence to anti-retroviral therapy scoring among HIV positive clients of group 1 (18.83 points) between pre and post-administration found to be higher as compared to HIV positive clients of group 2 (17.28 points).

#### INTERPRETATION AND CONCLUSION

This was inference statistically that HIV positive clients administered video assisted teaching and lecture method had more significantly improved adherence to anti-retroviral therapy among HIV positive clients. Moreover, both, video assisted teaching and lecture method are effective modalities among HIV positive clients improving adherence to anti-retroviral therapy.

#### RECOMMENDATIONS

On the basis of the findings of the study, the following recommendations have been made for further study that:

- i. The study was restricted to western belt of M.P. only; it can be extended to others area of M.P. A comparative study can be conducted to find out the effectiveness between self instructional module and plan teaching programme regarding the same topic.
- ii. A longitudinal study on these clients can be conducted to see the prognosis of the disease.
- iii. A study can be conducted to assess the long-term effects of self instructional module in recently diagnosed HIV positive clients regarding adherence to anti retroviral therapy & prevention of re-infection at home.
- iv. A study can be conducted to assess the long-term effects of video assisted teaching or lecture method teaching in HIV positive clients regarding adherence to anti retroviral therapy & prevention of re-infection at home.
- v. Studies can be conducted to identify the occurrence of opportunistic infections among recently diagnosed HIV positive clients.

#### IMPLICATIONS

##### NURSING PRACTICE

In nursing practice we can provide health education, counselling and comprehensive nursing care by the help of holistic approach, building theories for nursing practice and gain knowledge, interest and motivation for nursing research.

##### NURSING EDUCATION

This study helps to raise awareness among nurses, nursing students and nurse educators about the global epidemic of HIV/ AIDS and to propose that nursing curricula focus more on health promoting activities to raise awareness among healthy people about the risk factors for HIV/ AIDS.

#### COMMUNITY HEALTH NURSING

Health teaching is an essential part of healthcare delivery system. Each member of the health team has the responsibility to educate the general public. Healthcare providers have to be oriented toward this global epidemic and the importance of self-care in recently diagnosed HIV positive clients.

#### NURSING ADMINISTRATION

Nurse administrator are responsible for conducting in-service education programme, workshop, seminars and conferences for the staff and students to create awareness about HIV/ AIDS so that this knowledge can be imparted to the general public and also protect themselves by keeping standard safety precautions in their practice.

#### NURSING RESEARCH

The study throws light on the knowledge and self-care practices of people living with HIV/ AIDS. There is a lot of scope for exploration in this area. Research can be conducted to assess the knowledge and self-care practices of recently diagnosed HIV positive clients in different areas in term of life modification like diet, drugs, exercise, symptoms management and prevention of opportunistic infections.

#### LIMITATIONS

- i. The study was restricted to western belt of M.P. only.
- ii. Limited time was available for data collection.
- iii. Structured knowledge questionnaire was used for data collection which restricted the amount of information that could be obtained from the patient.
- iv. No attempt was made to measure the retention of knowledge regarding self care activities after post test.
- v. The study did not use a control group. The investigator had no control over the events that took place between Pre-test and post test.

#### CONCLUSION

The present study showed a comparison between the effectiveness of method of video assisted teaching Vs lecture method to assess the knowledge on adherence to ART among HIV positive clients. The study found that both the method of teaching was effective to improve the knowledge on adherence on ART therapy among HIV positive clients visited selected ART centers but video assisted method found to be little effective than lecture method.

#### REFERENCES

1. Sepkowitz KA (June 2001). "AIDS--the first 20 years". *The New England Journal of Medicine*. 344 (23): 1764–72.
2. Kirch W (2008). *Encyclopedia of Public Health*. New York: Springer. pp. 676–677. ISBN 9781402056130.
3. Orsi F, d'almeida C (May 2010). "Soaring antiretroviral prices, TRIPS and TRIPS flexibilities: a burning issue for antiretroviral treatment scale-up in developing countries". *Current Opinion in HIV and AIDS*. 5 (3): 237–41.
4. Nachega JB, Mills EJ, Schechter M (January 2010). "Antiretroviral therapy adherence and retention in care in middle-income and low-income countries: current status of knowledge and research priorities". *Current Opinion in HIV and AIDS*. 5 (1): 70–7.
5. UNAIDS (2018), *AIDSinfo*, <http://aidsinfo.unaids.org/>
6. World AIDS Day: India records sharp drop in number of case. *ndtv.com*. Retrieved 6 April 2018.
7. Spire B, Duran S, Souville M, Lepout C, Raffi F (2002) Adherence to highly active antiretroviral therapies (HAART) in HIVinfected patients: From a predictive to a dynamic approach. *SocSci Med* 54: 1481–1496.
8. Carrieri MP, Chesney MA, Spire B, Loundou A, Sobel A, et al. (2003) Failure to maintain adherence to HAART in a cohort of French HIV-positive injecting drug users. *Int J Behav Med* 10: 1–14
9. Bangsberg D, Moss A, Deeks S (1999) Paradoxes of adherence and drug resistance to HIV antiretroviral therapy. *J Antimicrob Chemother* 53: 696–699
10. Das, Aritra; Babu, Giridhara R.; Ghosh, Puspen; Mahapatra, Tanmay; Malmgren, Roberta; Detels, Roger (1 December 2013). "Epidemiologic correlates of willingness to be tested for HIV and prior testing among married men in India". *International Journal of STD & AIDS*. 24 (12): 957–968. doi:10.1177/0956462413488868
11. SC forces govt to agree to second-line ART to all AIDS patients. *The Times of India*. 11 Dec 2010.
12. Hospitals and doctors specializing in hiv/aids. *cnls.lanl.gov*. Retrieved 6 April 2018.
13. Simona, A et al. (2017), Improving the adherence to ART, a difficult but essential task for a successful HIV treatment-clinical point of view and practical considerations. *Frontiers in pharmacology*,

- doi.org/10.3389/fphar.2017.00831.
14. SantoshKarade, DevidasN.Chaturbhuj, SouravSen, Rajneesh K.Joshi, (2018)HIV drug resistance following a decade of the free antiretroviral therapy programme in India: A review, International Journal of Infectious Diseases. Volume 66, January 2018, Pages 33-41.
  15. Camacho R, Teofilo E, (2011)Antiretroviral therapy in treatment-naive patients with HIV infection, Curr Opin HIV AIDS. 2011;6:S3-S11
  16. Palella FJ Jr, Delaney KM, Moorman AC, Loveless MO, Fuhrer J, Satten GA, et al. (1998) Declining morbidity and mortality among patients with advanced human immunodeficiency virus infection. HIV Outpatient Study Investigators. N Engl J Med; 338: 853-60.
  17. Benson CA, Kaplan JE, Masur H, et al(2004) Treating opportunistic infections among HIV-infected adults and adolescents: recommendations from CDC, the National Institutes of Health, and the HIV Medicine Association/Infectious Diseases Society of America. MMWR Recomm Rep.; 53: 1-112.
  18. Monforte A, Abrams D, Pradier C, et al. (2008) HIV-induced immunodeficiency and mortality from AIDS-defining and non-AIDS-defining malignancies. AIDS; 22: 2143-2153
  19. UNAIDS, Global HIV & AIDS statistics — 2018 fact sheet, available from doi. www.unaids.org/en/resources/fact-sheet.
  20. Adnan Bashir Bhatti, Muhammad Usman and VenkataramanaKandi (2016) Current Scenario of HIV/AIDS, Treatment Options, and Major Challenges with Compliance to Antiretroviral Therapy, Cureus. 2016 Mar; 8(3): e515, doi: 10.7759/cureus.515