Research Paper

Some psychological issues of HIV/AIDS patients: a core analysis of adherence

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ABSTRACT

This study was conducted to investigate the difference in adherence among HIV positive people. The researcher has been personally visiting by the hospital with the permission of the hospitals' authority. After the collected CD4 Cells from 1200 HIV positive patients. The researcher has to select 320 patients into 1200 total samples. After selected 320 HIV positive patients with PSM from the final blood test, all 320 patients divided into 3 groups. As A Group = Male, Female patients, B Group = Married and Single HIV patients, and C Group = CD4 Cells count. According to the results score of adherences plainly make seen that CD4 cells significant pretend in HIV people life. An ordinary CD4 check is from 500 to 1,400 cells for each cubic millimeter of blood. CD4 includes decline after some time in people who are not accepting ART. At levels underneath 200 cells for each cubic millimeter, patients become vulnerable to a wide assortment of OIs, a significant number of which can be lethal.

Keywords: HIV, AIDS, Adherence, CD4 Cells, T-Cells, Blood, ARV, ART

AIDS is the propelled phase of HIV disease. It is an incapacitating and hopeless disease brought about by HIV. As HIV dynamically devastates the invulnerable framework, a great many people, particularly in asset compelled settings, pass on inside a couple of long periods of the presence of the principal indications of AIDS. Just a blood test can build up an individual's HIV status. In any case, this doesn't imply that each individual who experiences the test has AIDS.

In solid people, contaminations are warded off by an assortment of protectors in the body. These protectors establish the insusceptible arrangement of our body. Obscure to us, the safe framework is grinding away consistently, perceiving remote bodies, similar to microscopic organisms, infection, and so forth and battling them by creating explicit synthetic compounds called antibodies which kill outside bodies. Every malady animates the creation of antibodies explicit to it. The recognition of these antibodies in the blood tests is thusly used to decide past or present disease. Since HIV makes harm the invulnerable framework, the body can't be ensured against different contaminations, some of which at that point become the immediate reason for death. (NACO, 2006)

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WHAT IS THE IMMUNE SYSTEM?

The insusceptible framework is a system of cells, tissues, and organs that cooperate to shield the body from disease. In vindictiveness of the detail that researchers have found out much about the insusceptible framework, they keep on contemplating how the body targets attacking microorganisms, contaminated cells, and tumors while overlooking solid tissues. The mix of new innovation and extended hereditary data vows to uncover progressively about how the body shields itself from the sickness. Thusly, researchers can utilize this data to grow new procedures for the avoidance and treatment of irresistible and resistant interceded ailments.

- **Immune system defends the body**
- **White blood cells (WBCs) are the most important part of this immune system**
- **WBCs fight and destroy bacteria, fungi and viruses that enter the body**
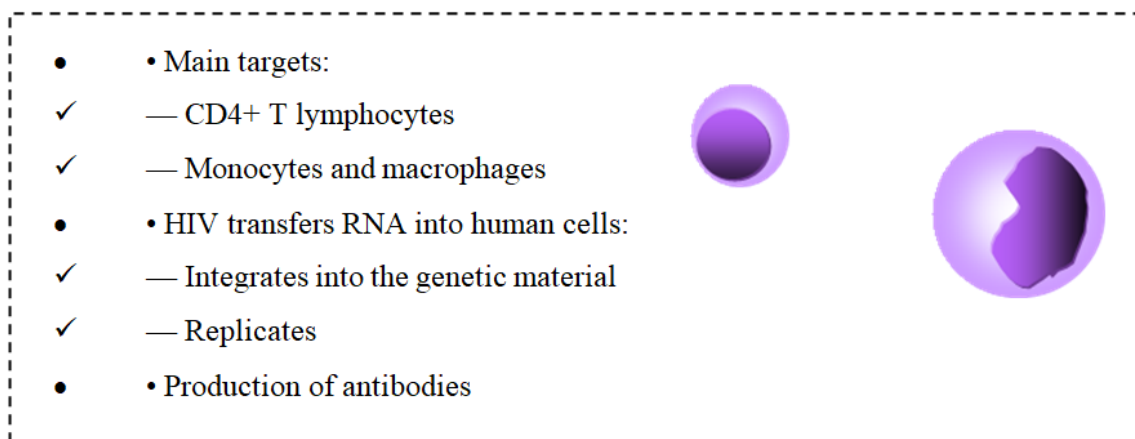
HOW DOES HIV WEAKEN THE IMMUNE SYSTEM?

HIV assaults and executes urgent safe framework cells, known as T-aide cells. Without T-assistant cells (which murder cells that have been contaminated with germs) numerous other insusceptible framework cells can't work appropriately, including B-cells that make antibodies. An individual contaminated with HIV may not show any indications for quite a long time.

- **HIV enters the body**
- **WBCs are attacked by HIV**
- **HIV multiplies inside WBCs and infects other WBCs**
- **Infected WBCs are eventually destroyed**
- **Leads to a reduction in the number of WBCs**
- **Ultimately leads to greatly reduced immunity**

CELLULAR TARGETS OF HIV INFECTION

Numerous cell types from the normal host provision lentiviral replication. For the no primate lentiviruses, these unite fibroblasts and macrophages. HIV has been accounted for to taint a wide scope of cells in vitro, including fringe blood dendritic cells and follicular dendritic cells, B cells, common executioner cells, eosinophils, forerunner CD4+ bone marrow cells, juvenile thymic antecedent cells, CD8+ T cells, Langerhans cells, megakaryocytes, astrocytes, oligodendroglia, renal epithelial cells, cervical cells, rectal and inside mucosal cells, for example, enterochromaffin, flagon, and columnar epithelial cells, trophoblastic cells, just as cells and tissues from organs, for example, liver, lungs, salivary organs, eyes, prostate, testicles, and adrenals. Since the main cell types in vivo that are reliably seen as contaminated with HIV are CD4+ T lymphocytes and macrophage-heredity cells, the pertinence of in vitro viral replication in other cell types to HIV illness is vague at present. (Casket JM, Hughes SH, Varmus HE, 1997)

- • Main targets:
  - ✓ — CD4+ T lymphocytes
  - ✓ — Monocytes and macrophages
- • HIV transfers RNA into human cells:
  - ✓ — Integrates into the genetic material
  - ✓ — Replicates
- • Production of antibodies

[Figure 1: Introduction of CD4 Cells (NACO, 2006)]

THE STRUCTURE OF HIV

HIV is an separate from the session Lentivirus, part of the domestic Retrofired (International Committee on Taxonomy of Viruses, 2002). Lentiviruses share numerous morphologies and natural properties for all intents and purpose. Numerous species are tainted by lentiviruses, which are naturally liable for long-span ailments with a long brooding period (Levy JA, 1993). Lentiviruses are communicated as single-stranded, positive-sense, wrapped RNA contagions. Upon passage into the objective cell, the viral RNA genome is changed over (turn around interpreted) into twofold stranded DNA by a virally encoded switch transcriptase that is shipped alongside the viral genome in the infection particle. The subsequent viral DNA is then brought into the cell core and incorporated into the cell DNA by a virally encoded integrase and have co-factors (Smith JA, Daniel R, 2006). When coordinated, the infection may get dormant, permitting the infection and its host cell to stay away from location by the invulnerable framework. On the other hand, the infection might be interpreted, delivering new RNA genomes and viral proteins that are bundled and discharged from the phone as new infection particles that start the replication cycle once more.
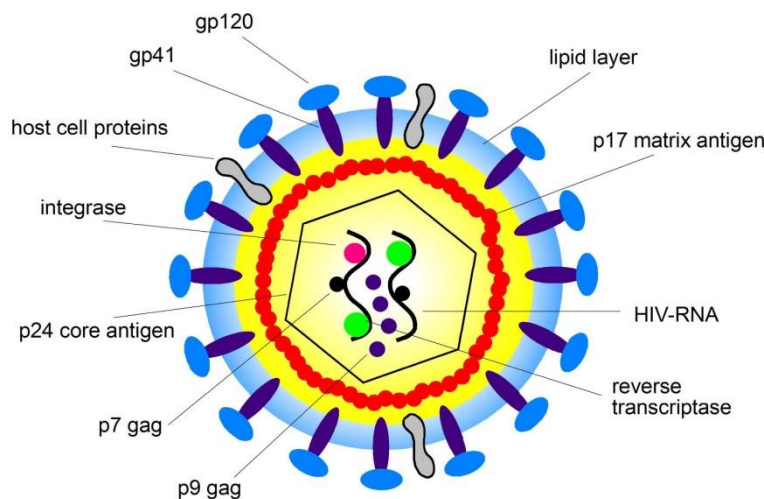
Two sorts of HIV have been portrayed: HIV-1 and HIV-2. HIV-1 is the contagion that was at first originates and called both LAV and HTLV-III. It is progressively damaging, increasingly infective, (Gilbert PB, MKeague IW, Eisen G, Mllins C, Guéye-NDiaye A, Mboup S, Kaki PJ, 2003) and is the reason for most of HIV contaminations all inclusive. The inferior infection of HIV-2 contrasted with HIV-1 proposes that less of those presented to HIV-2 will be dirtied per presentation. As a result of its generally poor limit with regards to transmission, HIV-2 is to a great extent restricted to West Africa (Reeves JD, Doms RW, 2002).

A HIV atom is everywhere 100-150 billionths of a meter in breadth. That is near equivalent to:

- 0.1 microns
- 4 millionths of an inch
- One twentieth of the length of an E. coli bacterium
- One seventieth of the diameter of a human CD4+ white blood cell

In contrast to most microorganisms, HIV particles are excessively little to be seen through a customary magnifying lens. In any case, they can be seen obviously with an electron magnifying instrument. The viral center (or capsid) is normally projectile molded and is produced using the protein p24. Confidential the midpoint are three mixes required for HIV replication called invert transcriptase, integrase, and protease. Additionally held inside the center is HIV's hereditary material, which comprises of two indistinguishable strands of RNA (NACO, 2006).

[Figure: 2: Autonomy of HIV Virus (HIV.BOOK, 2015)]

HIV-RNA

In contrast to most microorganisms, HIV particles are excessively little to be seen through a customary magnifying lens. In any case, they can be seen obviously with an electron magnifying instrument. The viral center (or capsid) is normally projectile molded and is produced using the protein p24. Confidential the midpoint are three compounds compulsory for HIV replication called invert transcriptase, integrase, and protease. Additionally held inside the center is HIV's hereditary material, which comprises of two indistinguishable strands of RNA (NACO, 2006).

ADHERENCE:

In medication, consistency (likewise adherence, capacitance) depicts how much a patient effectively follows clinical exhortation. Most regularly, it alludes to medicine or medication consistency; however, it can likewise apply to different circumstances, for example, clinical gadget use, self-care, self-coordinated activities, or treatment sessions. Both the patient and the medicinal services supplier influence consistency, and a positive doctor understanding relationship is the most significant factor in improving consistency, in spite of the fact that the significant expense of professionally prescribed prescription additionally assumes a significant job.

Medicine adherence is sketched out by the World Health Organization as "the degree to that the individual's conduct compares with the in understanding proposals from a human services provider." Poor adherence to endorsed regimens may bring about genuine wellbeing results. For instance, an ongoing report found that the risk of hospitalization was over twofold in patients with diabetes, side effect, hypertension, or side effects heart sickness UN organization were non-disciple to recommended treatments contrasted and the last populace.

Paces of non-adherence broadly inside the writing and might be horribly high, even inside the firmly controlled environmental factors of a run. Numerous variables add to non-adherence for instance, patients with interminable conditions territory unit less conceivable to follow remedy orders than those with intense conditions.

REVIEW OF LITERATURE

A writing audit is more than the quest for data and goes past being an illustrative explained book index. All works remembered for the survey must be perused, assessed and broke down. Connections between the sorts of writing must likewise be recognized and explained, comparable to your field of research.

Lipodystrophy-related appearances remain a test for people contaminated with HIV ailment and their consideration suppliers. Symptomatic HIV sickness and reactions of medications are embroiled in antiretroviral drug nonadherence. According to Inge B. Corless, Kenn M. Kirksey, Jeanne Kemppainen, Patrice K. Nicholas, Chris McGibbon, Sheila M. Davis, Sara Dolan (2005), the connection between time since beginning determination with HIV, nearness and kind of lipodystrophy indications, and adherence to drug regimens in people with HIV/AIDS. Utilizing a cross-sectional, clear plan, the example was made out of 165 people from three outpatient HIV settings in Boston, Massachusetts; Fresno, California; and Victoria, Texas. Members finished a poll contained sociodemographic questions, adherence scales, personal satisfaction scales, and open-finished inquiries with respect to nearness and kinds of lipodystrophy-related manifestations, and how these physical changes made them feel. Adherence was moderate with a mean score of 1.44 (standard deviation [SD] ± 1.33) on the Morisky Medication Adherence Scale (MMAS). The MMAS is a Likert-type scale extending from 0– 4, with "0" demonstrating adherent. This finding showed that the members took their medications reasonably well in spite of self-reports of huge quantities of HIV infection and treatment-related muscle versus fat changes. Time since introductory conclusion was 8.86 ± 5.55 years and was not identified with adherence. Nor did the sort of lipodystrophic side effects influence adherence. Personal satisfaction be that as it may, was fundamentally identified with adherence recommending a methodology that may be taken to improve adherence.

Jeffrey S. Gonzalez, Abigail W. Batchelder, Christina Psaros and Steven A. Safren (2013), meta-analyzed the relationship between melancholy and HIV medication nonadherence to calculate the general impact length and study ability moderators. Universal, throughout 95 unbiased samples, despair became substantially ($p < zero.0001$) associated with nonadherence ($r = 0.19$; 95% confidence interval $= 0.14$ to 0.25). Research comparing remedy adherence through interview located drastically large consequences than those the usage of self-administered questionnaires. Research measuring adherence along a continuum observed considerably more potent consequences than studies comparing dichotomies. Impact length turned into now not appreciably associated with different aspects of adherence or depression dimension, evaluation c program languageperiod (ie, pass-sectional vs. longitudinal), intercourse, iv drug use, sexual orientation, or examine vicinity. The relationship among despair and HIV remedy nonadherence is steady throughout samples and over the years, isn't always limited to those with clinical depression, and is not inflated by using self-report bias. Our outcomes recommend that interventions geared toward lowering depressive symptom severity, even at subclinical degrees, must be a behavioral studies priority. Effects of this meta-evaluation, primarily based on ninety five independent samples totaling more than 35,000 patients, recommend that depression is continuously associated with nonadherence to HIV remedy with an effect of small to mild power. The size of this

typical effect (r = 0.19) is similar to the impact (r = zero.21) obtained by way of a meta-evaluation of depression and remedy nonadherence based totally on 12 studies of sufferers with different continual illnesses. Forty six it's also comparable in magnitude to the effect (r = 0.21) acquired by a latest meta-evaluation inspecting the relationship among despair and diabetes remedy adherence.

Suboptimal treatment adherence remains a hindrance to the manipulate of many infectious illnesses, which includes Tuberculosis and HIV/AIDS, which make contributions considerably to the overall disease trouble. Be that as it may, not many of the various interventions created to deal with this trouble unequivocally draw on theories of fitness conduct. Such theories should make contributions to the format of greater amazing interventions to promote remedy adherence and to improving tests of the transferability of these interventions across exclusive health issues and settings. Salla Munro, Simon Lewin, Tanya Swart, and Jimmy Volmink. (2007) found those conduct change theories important to long-term remedy adherence; assess the proof for their effectiveness in predicting conduct change, and examines the implications of those findings for growth strategies to improve TB and HIV/AIDS medicinal drug adherence. Salla Munro and his team had searched a number of electronic databases for theories of conduct exchange. 11 theories were tested for this study. Their result says that little empirical proof becomes set at the effectiveness of those theories in promoting adherence. In any case, numerous models have the ability to each improves the information on adherence behaviors and makes contributions to the format of greater ground-breaking interventions to sell adherence to TB and HIV/AIDS medicine.

Adherence to noticeably energetic antiretroviral treatment (HAART) is usually suboptimal, limiting the efficiency of HAART. This meta-analytic appraisal tested whether behavioral interferences talking HAART adherence are successful in raising the likelihood of a patient attainment 95% adherence or an undetectable HIV-1 RNA viral load. Simoni, J. M., Pearson, C. R., Pantalone, D. W., Marks, G., & Crepaz, N. (2006), searched electronic databases from January 1996 to September 2005, consulted with specialists within the subject, and hand searched reference sections from relevant articles. 19 researches (with a complete of 1839 individuals) met the choice criteria of describing a randomized managed trial among adults evaluating a behavioral intervention with HAART adherence or VL as an outcome. Random-outcomes fashions indicated that across research, individuals within the intervention arm were much more likely than those in the manipulate arm to reap ninety 5% adherence (odds ratio [OR] = 1.50, 95% confidence interval [CI]: 1.16 to 1.94); the effect become almost good sized for undetectable VL (or = 1.25; 95% CI: 0.99 to 1.59). The intervention impact for 95% adherence became notably more potent in research that used take into account intervals of 2 weeks or 1 month (vs. ≤7 days). no other stratification variables (ie, observe, sample, measurement, methodologic first-rate, intervention characteristics) moderated the intervention impact, however a few potentially essential elements have been discovered. In sum, various HAART adherence intervention techniques have been proven to be successful, but more studies is wanted to pick out the maximum efficacious intervention additives and the 9 methods for enforcing them in real-world settings with constrained resources.

METHODOLOGY
Objectives
1.   To investigate Adherence among Male and Female, Married and Single, CD4 Cells group of HIV positive people.
2.   To describe Adherence among Male and Female HIV positive people.
3.   To describe Adherence among Married and Single HIV positive people.

4.   To describe Adherence among CD4 Cells group of HIV positive people.

Hypotheses

H_{o1}:   There shall be no significant difference between the score of Adherence among Male and Female HIV positive patients.

H_{02}:   There shall be no significant difference between the score of Adherence among Married and Single HIV positive patients.

H_{o3}:   There shall be no significant difference between the score of Adherence among HIV positive patients' CD4 Cells 100<250 Group and CD4 Cells 251<500 Group.

Variables:

Following Distribution of Dependents & Independent Variables of the Study:

Table 3.1 The Nature of Variables

Sr. No.	Name of the Variables	Nature of Variable	Number of Levels	Name of the Level
01	Types of Gender	Independent	02	A1: Male A2: Female
02	Marital Status	Independent	02	B1: Married B2: Single
03	Levels of CD4 cells	Independent	02	C1: 100 < 250 C2: 251 < 500
06	MOS	Dependent	08	Health and daily activities, Physical Health, Pain, Daily Activities, Your Feelings, Social Activities, Your Health, and Your sleep

Criteria

The following inclusion /exclusion criteria were followed in the present study:

Inclusion Criteria

    A.   Selected patients depended to the hospital.

    B.   Only patients include who able understand Gujarati language.

Exclusion Criteria

    A.   The patient should not have any Mood Disorders due to Bipolar disorder, Mood disorder and Substance-induced mood disorder.

    B.   The patients should not have any other acute / chronic illness.

Research Design:

The present study was not possible experimentally because of nature of investigation. The researcher has adopted the quantitative descriptive research to gain the objectives of the present study. Quantitative Descriptive research includes data collection through questionnaire quantification of the responses of the respondents and fact findings. Quantitative Descriptive research involves collecting data in order to test hypothesis or to answer questions concerning the current status of the subjects of the study.

This research will be adopted 2x2x2 research design as well as first is Gender type (A Group), like Male, Female patients, second is category of (B Group) Marital Status like, married and single HIV patients, and last category (C Category) is CD4 Cells count, Like

above set in sample section. This research design adopted a 2x2x2 factorial design with Gender, Marital Status, and Levels of CD4 Cells.

Table 3.2 Total Sampling Designing

Groups	A1 Male		A2 Female		Total
	C1 Low CD4 Level 100<250	**C2 High CD4 Level 251<500**	**C1 Low CD4 Level 100<250**	**C2 High CD4 Level 251<500**	
B1 Married	40	40	40	40	160
B2 Single	40	40	40	40	160
Total	80	80	80	80	320

Population & Location

Santrampur, which used to be known as Brahampuri, is a town in Mahisagar District, Gujarat, India. It fills in as the regulatory central command for Santrampur tehsil and is situated on the banks of the Suki waterway in the lap of the Aravalli slopes. It is 155 km (96 mi) from the state capital at Gandhinagar.

Research Tools:

1   PERSONAL DATA SHEET:

A personal data sheet developed by the investigator was used to collect information about types of Gender, Marital Status, and Levels of CD4 Cells.

2   ADHERENCE

THE MEDICAL OUTCOME STUDY (MOS) by R. D. Hays in 1993 (revised 2001). This scale divided into general and specific adherence to a medical regimen. The five general adherence items were well distributed- At the items are assigned on a 6-points scale ranging from none of the time to all of the time. The score range from dynamics.

Table 3.3: The Fact of MOS Scale

Facts of the Scale	
Items	62
Age	Adult
Duration	30 to 45 minutes
Original Language	English (US)
Reading Level	6th-8th grade
Response Format	Likert scale format
Dimension	*8 Dimension*, like Health and daily activities, Physical Health, Pain, Daily Activities, Your Feelings, Social Activities, Your Health, and Your sleep
Reliability	0.82 (Gujarati Translate)
Validity	0.58 (Gujarati Translate)
Translator	Dr. Hitesh Patel, *DGO, MBBS* & Dr. Vaishali H. Patel, *MBBS*
Year	2018

Procedure Of Work:
PHASE 1 (Laboratory Analysis)

As you know, this research is divided into three phases. In which the first is to check the patient's blood. Because researcher has needed to know the volume of CD4 cells in the blood, Firstly, the researcher has to check the HIV patient's blood in the lab. From which investigator will know how much the CD4 volume in their blood. For this phase, Researcher has contacted the hospital authority. And after their permissions, a total of 1,200 HIV positive patients were tested for blood in the lab.

PHASE 2 (Inventory Analysis)

After successfully finished Phase 1, Researcher starts the Phase 2 of the research process. The researcher has been personally visiting by the hospital with the permission of the hospitals' authority. After the collected CD4 Cells from 1200 HIV positive patients. The researcher has to select 320 patients into 1200 total samples. After selected 320 HIV positive patients with PSM from the final blood test, all 320 patients divided into 3 groups. As A Group = Male, Female patients, B Group = Married and Single HIV patients, and C Group = CD4 Cells count.

CD4, also known as T4 Count T-helper Cells. CD4 cells are WHITE BLOOD CELLS (WBC) that assumes a significant job in the immune system. Human CD4 cell tally gives a sign of the strength of immune system –body's regular barrier system against pathogens, contaminations and ailments. CD4 cell check is the quantity of blood cells in a cubic millimeter of blood (a little blood test). It's anything but a check of all the CD4 cells in body. A higher number shows a more grounded immune system.

- The CD4 cell count of a person who does not have HIV can be anything between 500 - 1500.
- People living with HIV who have a CD4 count over 500 are usually in pretty good health.
- People living with HIV who have a CD4 cell count below 100 are at high risk of developing serious illnesses. HIV treatment is recommended for all people living with HIV. It is especially important for people with low CD4 counts.

PHASE 3 (Statistical Analysis)

After given all questionnaires to 320 selected HIV positive patients, the researcher has the start of evaluated of response sheets that has fill-up information from selected sample. All response sheet data evaluated as per Manuals of Questionnaires. The researcher has been stickily followed term and conditions, methods and rules of Questionnaires' Manuals.

Statistical Formulas:

Descriptive statistical measures like mean and standard deviation were used to see the level of Psychological well-being, Coping Strategies, Self-efficacy, Adherence among HIV positive patients of according to Gender, Marital Status, and level of CD4 cells. ANOVA (Analysis of variance) factorial design 2 x 2 x 2 were computed to determine whether there is a significant mean difference between various pairs of HIV patients. Pearson's correlation coefficient was computed to provide information whether the dependent variables correlate with each other and to measure the degree of relationship between variables.

RESULT AND DISCUSSION

Adherence with reference to gender, relation status and CD4 cells group of HIV positive people:

The objectives were to find out whether Gender, relation status and CD4 cell group differ of psychological well-bring in HIV positive people. In this research study, 3 null hypotheses (no.1 to 3) were put up with the framing of 2x2x2 factorial design. All null hypotheses were tested by the statistical techniques of two-way ANOVA. The find analyses are obtainable in table 1 to 3.

The result according to 2x2x2 factorial design, n, SDs and Mean of gender, relation status and CD4 cell group with reference to adherence of HIV positive people is present in table No.1.

Table No. 1 (N=320), Mean and SD score of the Adherence with mention to gender group, relation status and CD4 cell group of the HIV Patients.

Variable	(A) Male patients				(B) Female patients			
	(C) Married		(D) Single		(C) Married		(D) Single	
	(E) CD4 Cells Count 100<250	(F) CD4 Cells Count 251<500	(E) CD4 Cells Count 100<250	(F) CD4 Cells Count 251<500	(E) CD4 Cells Count 100<250	(F) CD4 Cells Count 251<500	(E) CD4 Cells Count 100<250	(F) CD4 Cells Count 251<500
Mean	271.42	295.15	330.75	362.92	270.32	335.10	349.67	354.35
SD	85.0	84.10	132.78	138.94	92.69	91.03	134.91	143.18
n	40	40	40	40	40	40	40	40

The result according to 2x2x2 factorial design, ANOVA of gender, relation status and CD4 cell group with reference to adherence of HIV positive people is present in table No.2.

Table No.2 (N=320) ANOVA summary of Adherence with mention to gender group, relation status and CD4 cell group of the HIV Patients

Source of Variance	Sum of Squares	df	Mean Square	F
Gender	12103.20	1	12103.20	0.90 (NS)
MS	254702.45	1	254702.45	19.04**
CD4	78563.11	1	78563.11	5.87*
Gender * MS	4061.25	1	4061.25	0.30 (NS)
Gender * CD4	918.01	1	918.01	0.06 (NS)
MS * CD4	13338.61	1	13338.61	0.99 (NS)
Gender * MS * CD4	23495.51	1	23495.51	1.75(NS)
Error	4172359.40	312	13372.95	
Total	4559541.55	319		
Significant: P>0.05 *, 0.01**, NS=Not significant				

The result according to 2x2x2 factorial design, mean difference of gender, relation status and CD4 cell group with reference to adherence of HIV positive people is present in table No.3.

Table No. 3 (N=320) Difference between mean score of Adherence with mention to gender group, relation status and CD4 cell group of the HIV Patients

IV	N	Mean	Difference between mean
Male	160	315.06	12.30
Female	160	327.36	
Married	160	293.00	56.42
Single	160	349.42	
CD4CellsCount100<250	160	305.54	31.34
CD4CellsCount251<500	160	336.88	

Adherence with reference to male and female HIV positive patients.
The 1st number aim of the research study was to there shall be no significant difference between the score of adherences among Male and Female HIV positive people.

The upper panel Table 1 shows the results of ANOVA on adherence of two genders of HIV positive people. We obtain an F-ratio of gender on adherence is 0.90 which is not significant at any level. That is why Ho1 is accepted. It means statistically not significant difference is existed between male HIV positive patients and female HIV positive patients on adherence. It can be seen from mean Table, 2 indicated that the mean scores of male HIV positive patients is 315.06 (N=160) and the mean scores of female HIV positive patients is 327.36 (N=160), there is a mean difference of male and female HIV positivepeople is 12.30. It means female HIV positive patients not more high levels of adherencethan male HIV positivepatients.

Due to the intrinsic motivation of women and the low levels of difficult circumstances in life, they have to follow others. There is a high level of adherence among women due to gender roles, care and finances and other support as well as the male dependence of women in Indian society.

This difference can be seen from graph No.1 designed on the basis of mean result.

Graph No. 1
Graph showing mean scores of adherencewith mention to male and female HIV positive people.

X = Gender (Male and Female)
Y= 1.00 Sem. =05Average Score
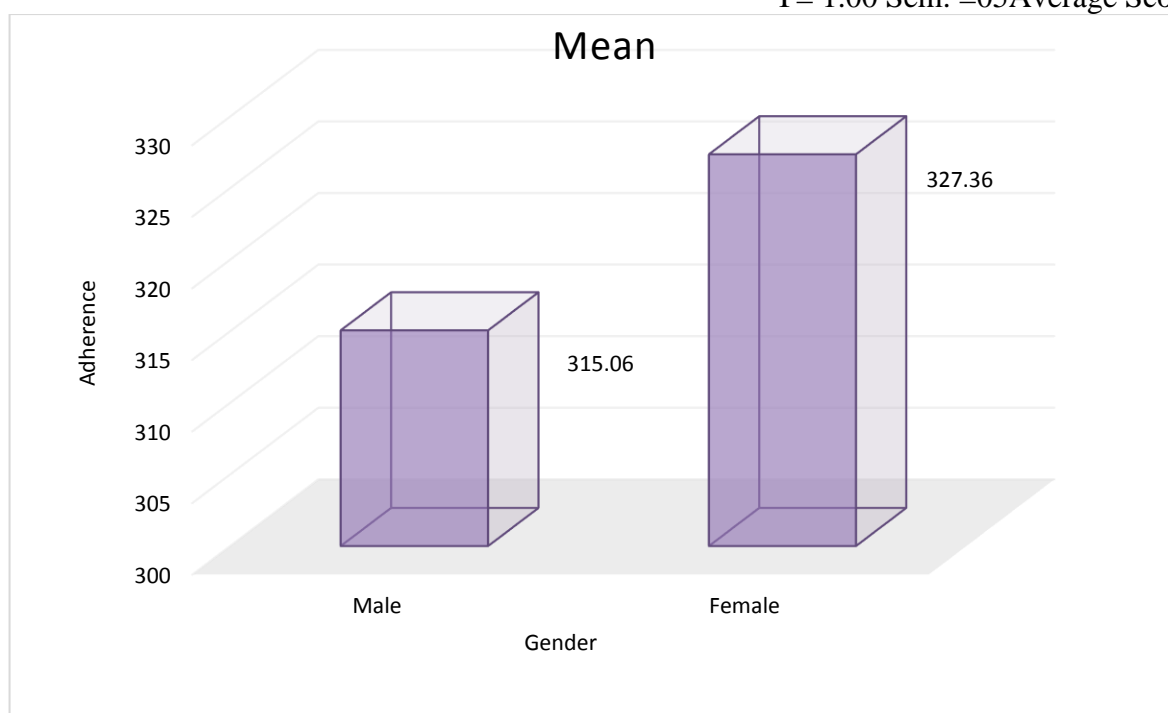
Adherence with reference to married and single HIV positive people.
The 2nd number hypothesis of the research was to describe adherenceof married and single HIV positive people.

Table 2 indicates that the mean score of the married HIV positive people = 293.00 (N=160) and mean score of single HIV positive people was = 349.42 (N=160), the variation between the 56.42. The HO2 tested this analysis. It was found in table no 2 that the 'F' rate was 19.04. This was significant at 0.01 levels. For that reason the above, HO23 was refused and it was considered that the married and single HIV positive people have shown high difference in adherence. It means in this research study it is seen that there is significant different between married and single HIV positive people regard with adherence. The condition funds single HIV positive people high level of adherencethan married HIV positive people.
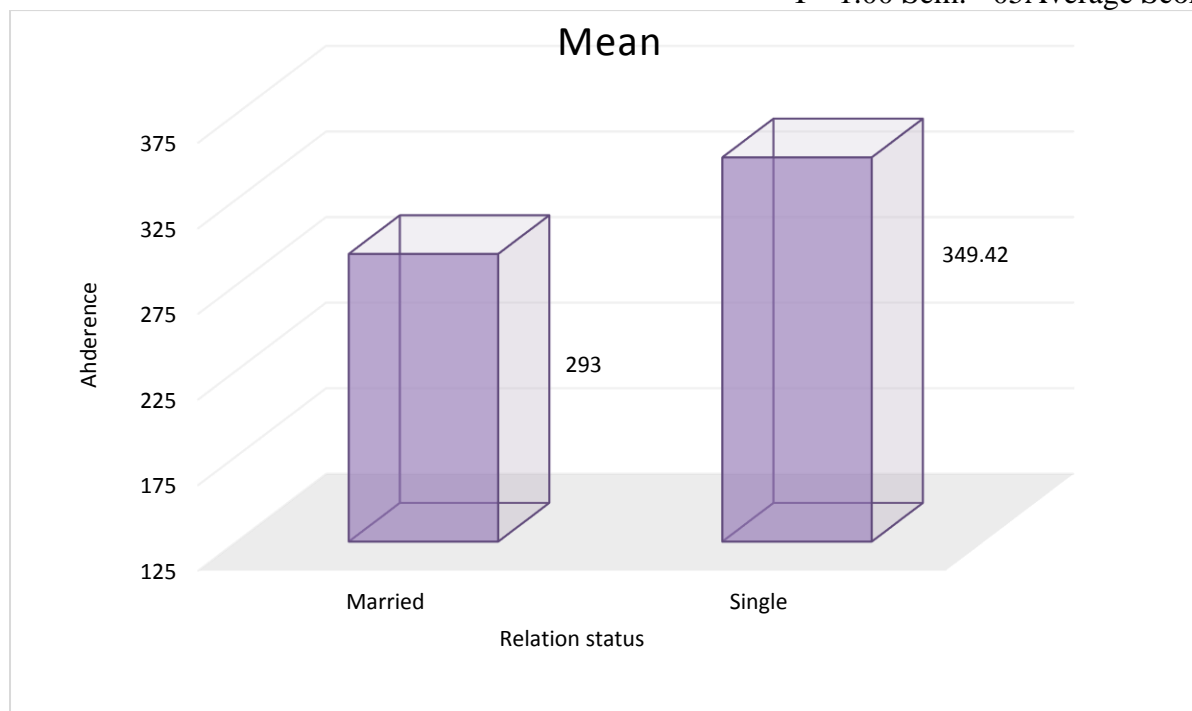
This difference can be seen from graph No.2 designed on the basis of signify result.

Graph No.2
Graph showing mean scores of adherencewith point out to married and single HIV positive people.

X = Relation status (Married and Single)
Y= 1.00 Sem. =05Average Score

Mean

(graph: bar chart with y-axis "Ahderence" labeled 125, 175, 225, 275, 325, 375; x-axis "Relation status" with Married = 293 and Single = 349.42)

Adherence with reference to CD4 Cells count 100<250 and CD4 count Cells 251<500 of HIV positive people.

The hypothesis of the research study was to there shall be no significant difference between the score of adherenceamong CD4 Cells count 100<250 Group and CD4 Cells count 251<500 Group of HIV positive people.

Table 2 shows the results of ANOVA on adherence of different CD4 cells group of HIV positive people. We obtain an F-ratio of CD4 cells group on adherence is 5.87 which is significant at 0.05 levels. That is why Ho24 is refused. It means significant dissimilarity is existed between CD4 Cells 100<250 Group and CD4 Cells 251<500 Group of HIV positive people on adherence.   It can be seen from mean Table, 2 indicated that the mean scores of CD4 Cells 100<250 Group of HIV positive patients is 305.54 (N=160) and the mean scores of CD4 Cells 251<500 Group of HIVpositive patients is 336.88 (N=160), there is a mean difference of CD4 Cells 100<250 Group and CD4 Cells 251<500 Group of HIV positivepeople is 31.34. It means CD4 Cells 251<500 Group HIV positive people high level of adherencethan CD4 Cells 100<250 Group HIV positive people. This difference can be seen from graph No.3designed on the basis of mean outcome.

Graph No. 3
Graph showing mean scores of adherencewith mention to CD4 Cells 100<250 Group and CD4 Cells 251<500 Group of HIV positive people

X = CD4 Cells counts (100<250 and 251<500)

Y= 1.00 Sem. =05Average Score
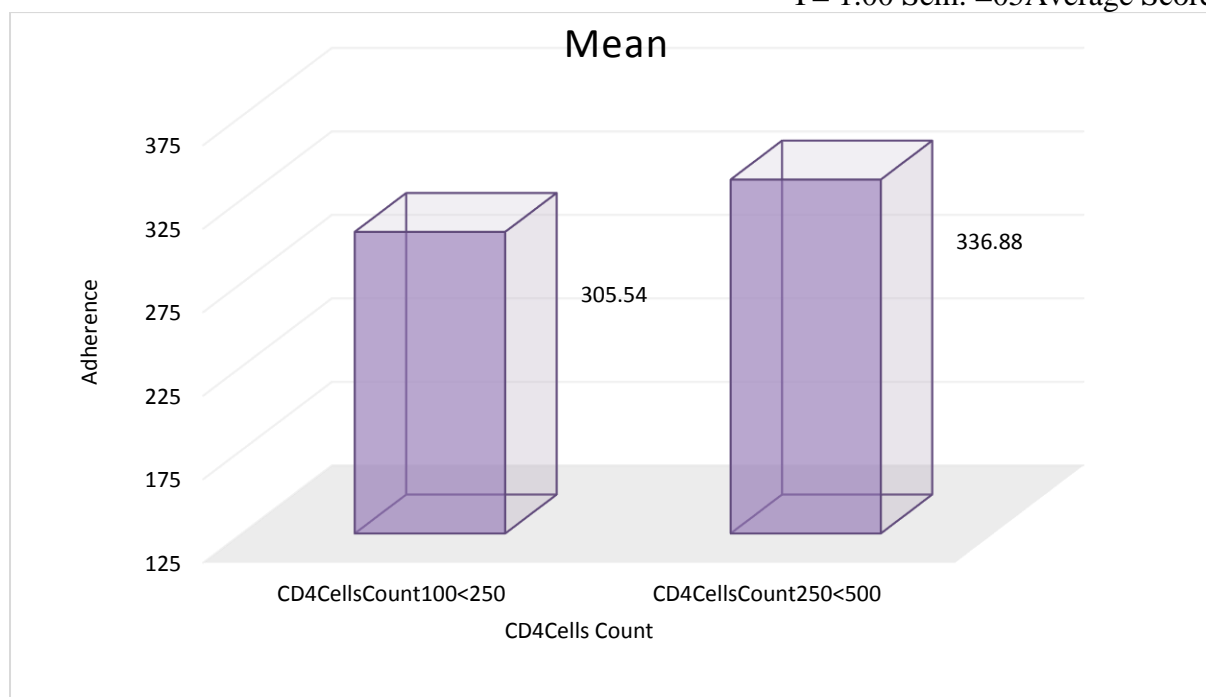
CONCLUSION

As far as the role of Gender, Marital Status and CD4 cells are concerned with the level of *Adherence* among HIV positive patients, it has been noticed that all the three dependent variables by independent variable gender and marital status, whereas second independent variable CD4 cells has influence on only *Adherence*. The interactions of gender and marital status as well as marital status and CD4 cells were also found significant for *Adherence*; similarly, interactions of gender and CD4 cells as well as gender, marital status and CD4 cells were also reported significant for *Adherence*. All the four dependent variables show positive association among the 320 HIV positive patients as well as male and female groups of HIV positive patients.

1. There was a significant mean difference not reported between Male and Female HIV/AIDS Patients. Both Male and Female HIV/AIDS Patients have a similar level of adherence.
2. The significant mean difference existed between Married and Single HIV/AIDS Patients. HIV/AIDS Patients with single status have batter adherence in comparison of married HIV/AIDS Patients.
3. The significant mean difference was disclosed between high CD4 (500-251) and low CD4 (250-100) HIV/AIDS Patients. HIV/AIDS Patients with high CD4 (500-251) have greater adherence in comparison of low CD4 (250-100) of HIV/AIDS Patients.

SUGGESTIONS

The following suggestions are given by the research for further research, considering limitations and implications:

For Researchers

1.   Patients of areas of SANTRAMPUR district of Gujarat state were selected in the present study. The researcher can select a sample from different districts and areas of India with religious, education, involve in the samples.
2.   In future study can be followed on educated, illiterate, serving, non-serving patients.
3.   Only HIV patients were selected in the present study. Comparison of HIV patients with other diseases can be done or a comparison of HIV patients with healthy persons can also be done.

For HIV Patients

Many challenges faced by people living with HIV, one of the most difficult is keeping up to date with important information about the treatment and day-to-day management of HIV. New information about the treatment and science of HIV becomes available on a daily basis. Staying current with information sometimes seems overwhelming.

1.   Recreational or party medications can hurt a patient's wellbeing. The impacts can be unsafe to both the short and longer term. Gem/Ice use can harm their mind. A few medications interface with HIV medicines, prompting medications that don't fill in also or have more awful symptoms. The utilization of Ecstasy, Crystal/Ice and different kinds of methamphetamines may cause hazardous, even deadly communications with certain sorts of HIV meds, as the HIV medicates hinder the body's end of recreational medications. Utilizing Ecstasy, Crystal/Ice and different sorts of methamphetamines and other gathering drugs are probably going to additionally stifle the patient's insusceptible framework, making it progressively hard for your body to fend off ailment. Notwithstanding the medications, the celebrating way of life itself can debilitate your invulnerable framework. Keeping awake for significant stretches of time, not eating enough, or not eating the correct nourishments can harm the resistant arrangement of any individual, regardless of whether they are in incredible wellbeing. Methamphetamines and rapture can likewise make eating troublesome, which can be an issue for people who need to take medicines with nourishment. In the event that the patient is on HIV medications and utilizations recreational medications, they could attempt to abstain from taking HIV medicines and different medications at the very same time and hold up in any event a few hours between dosages. Drink a lot of water, and start with a littler measure of any illegal medication and screen any surprising reactions. Look for crisis clinical assistance on the off chance that they experience any serious or surprising impact.
2.   Use condoms with a water-put together oil to abstain from going with respect to HIV and shield sex accomplices from some STIs. There is an okay of going on HIV through oral sex, yet utilizing a condom or dental dams will likewise shield sex accomplices from different STIs.
3.   HIV brings changes and difficulties, yet it's an infection, not a way of life. There are numerous things a patient can do to assist them with dealing with these difficulties. Conversing with a psychological advocate can help, or there are associations that offer courses to help HIV patients create coping aptitudes, including on the web courses. The specialist or Body Positive can help patients to locate the most ideal path for them. A decent social encouraging group of people can likewise be useful. Misery and nervousness are experienced all the more usually by people with HIV, and regularly side effects are not self-evident.
4.   Support from family, companions and others in almost the same situation can truly help. Construct an encouraging group of people and keep in contact.

IMPLICATIONS

The study has been done with reference Adherence of HIV/ AIDS patients. It is implied that HIV/ AIDS patients are mentally and physically struggling against society. They are ever disregarded in society. Factors of fair development of their treatment are not yet happened in India. Patient of HIV/AIDS experiences shyness and hesitation during purchasing of medicine for him. Adherence of HIV patient is damaged with these factors. They are seen ever experiencing mental confusion.

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