

A Study on Different Life Style of Retrovirus Positive Patients Among LGBTQ Community

Dipjyoti Das

Dietician (Former)

Narayana Super Speciality Hospital, Guwahati, Assam, India

Abstract: Present study focused on the life style of HIV patient from LGBTQ community, from their occupation, exercise, their intake of multivitamins to their intake of alcohol and smoking habits. It study was carried through a semi-structure questionnaire with interviewed method through face-to-face contact. Data showed 43% showed underweight category while rest showed Normal BMI due to less calorie consumption as per need, which is assessed during interview method by asking a brief food frequency and They are counselled for Better Nutrition Intake. Study showed complication like tiredness in majority of them followed by White tongue and cold, a few also showed multiple Complication like kidney stone & Anemia; hair fall & back pain; hair fall & Mouth ulcer which are either answered or observed via Visual clinical Assessment. Study showed 24% have habit of Occasional Smoking while 29% have habit of occasional Drinking Alcohol and on contrary 14% daily smokers and 9% daily drinker of Alcohol; 19% of them are Consumer of both (Alcohol & Smoking). It also seen in data that only 14% are taking Multivitamin after Prescription while rest didn't. Weight loss seen in 80% of study subjects for only smoking group while 75% of study subjects for Both consuming group (Alcohol & Smoking) followed by only 60% of them lost weight in Alcohol only consumers group. On contrary, 40% of study subjects showed weight gain belong to only Alcohol consumers group and only 20% showed weight gain belong to Only Smoking group. Study showed average weight loss was 2.6 kgs among only alcohol consumer, 2.5 kgs among only smoking and 2.3 kgs among both consumer (alcohol & smoking); Average weight gain was 4 kg among only smoking group, followed by 3.5kgs among only Alcohol consuming group and lastly 1kg among consuming both group. At last Few Brief Nutritional Assessment was done and Nutritional Counselling with diet chart was provided.

Keywords: HIV lifestyle, LGBTQ Health, Nutrition Status, Smoking and Alcohol use, Body weight changes, ART, Strength Exercise

1. Introduction

Retro virus is a RNA virus that Attacks directly one's immune cells and cause Immune related complications. The only treatment of this chronic infection is the effectiveness of antiretroviral therapy that stops the progression to AIDS. HIV imposes high costs on both patients and the healthcare system as it increases the risk of chronic diseases. Although ART delays disease progress, treatment does not cure HIV, causes adverse effects, and requires consistent, prolonged connection to the healthcare system. LGBTQ community is a modern thinking community that is beyond gender difference based on sexes, rather it is more of self-expression of an individual with different / special sexual desires than an ordinary individual. This desires sometimes put on risk of development many sexual health problems like STDS, HIV, AIDS etc as they forgot to use protection during intimacy, least bothered for frequent testing for HIV and other STDs. Due to its nature of attack on immune system many complications like oral thrush, mouth sore, bad taste, chronic body pain, bleeding, frequent cough and cold, fever, eye infection occurs. Ocular manifestations are seen in 50 – 75% of HIV patients even in HAART. HIV is chronic life infection hence proper medication at proper time is important but poor diet, lack of exercise and psychological problem like anxiety, stress cause more decrease in immunity and hence also quality of life gets effected. Some people decline more into smoking and drinking habits just to get mental relaxation even after they know it is harmful to them. Smoking causes progression of HIV infection to Neuro AIDS as oxidative damage and inflammation stress is more and hence more susceptible to viral and bacterial inflammatory neuropathology. Similarly, Alcohol consumption also negative affects on health of HIV patients, it increases the risk for comorbidities. Hence it becomes important to study on the

different life style followed by this group of people specially among LGBTQ community. Objective of This study was

- To find out the degree of wellness by means of Body Mass Index
- To find out exercise regime if any
- To find complications faced by them that affects quality of life
- To rule out habits of smoking and drinking alcohol if any
- To find out any weight change among smoking and drinking alcohol group if any
- To give Nutrition Education after Nutrition Assessment.

Inclusion criteria –

- Only HIV patients
- From LGBTQ community
- Below 40 age
- Who came to Camp for HIV of LGBTQ
- HIV People Are on ART

Exclusion Criteria

- Non HIV patients
- Above 40 years
- Non- Belong to LGBTQ community
- Who didn't come to the camp for HIV of LGBTQ
- HIV People not on ART

Sample Method

Random sampling

Sample Size

21

Study period

2 Months (Feb - March, 2025)

Study Tools

Semi structure questionnaires were asked

Study Site

Guwahati, Assam

Study Design

A cross-Sectional Study

Study Methods

Face to face interaction with semi structured questionnaires and visual clinical examination was done. Verbal Food frequency questions and portion sized was asked and hence assessed. At last Final diet education was done individually with personalized diet charts.

Financial state and Need of high calorie, high protein diet. As study done by Stack. J (1996) shows high calorie high protein diet helped the weight gain among HIV patients.

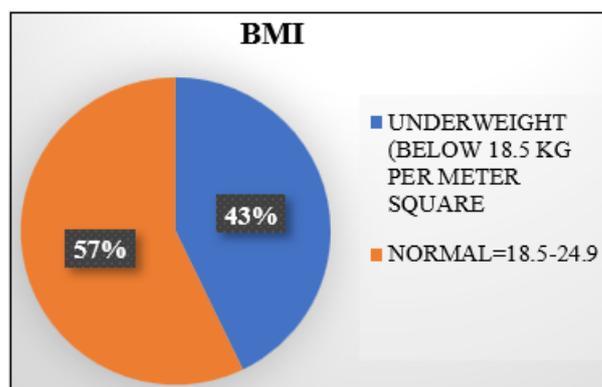


Plate 2: BMI among Subjects

2. Results and Findings

1) **Age group:** Study shows age groups of participants of 18-40 years.

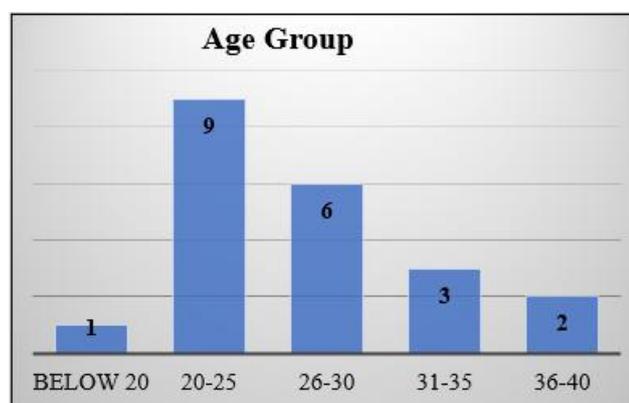


Plate 1: Different Age Group

4) **Year since Diagnosis:** Out 21 subjects 13 people were recently diagnosed like 2-3 years back since study period, while 4 for them are diagnosed just 1 year before diagnosis.

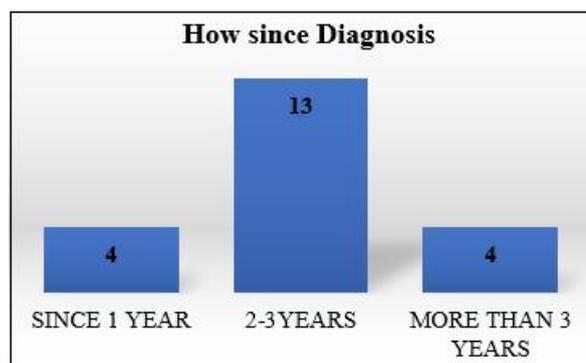


Plate 3: Diagnosis to Study Period among Subjects

2) **Gender:** No Gender related question asked as it is special Community, some male identified them as Female while some Female identified them as male.

3) **BMI Range:** 43% of subjects fall under underweight category, which may be due to physiological stress,

5) **Range of Symptoms / Complications:** This varies from cold, cough to eye infection, kidney stone, Anemia among the subjects. 4 of 21 Suffered from Tiredness while 3 of 21 had no such symptoms / complication which may due to good diet, Proper medication in time.

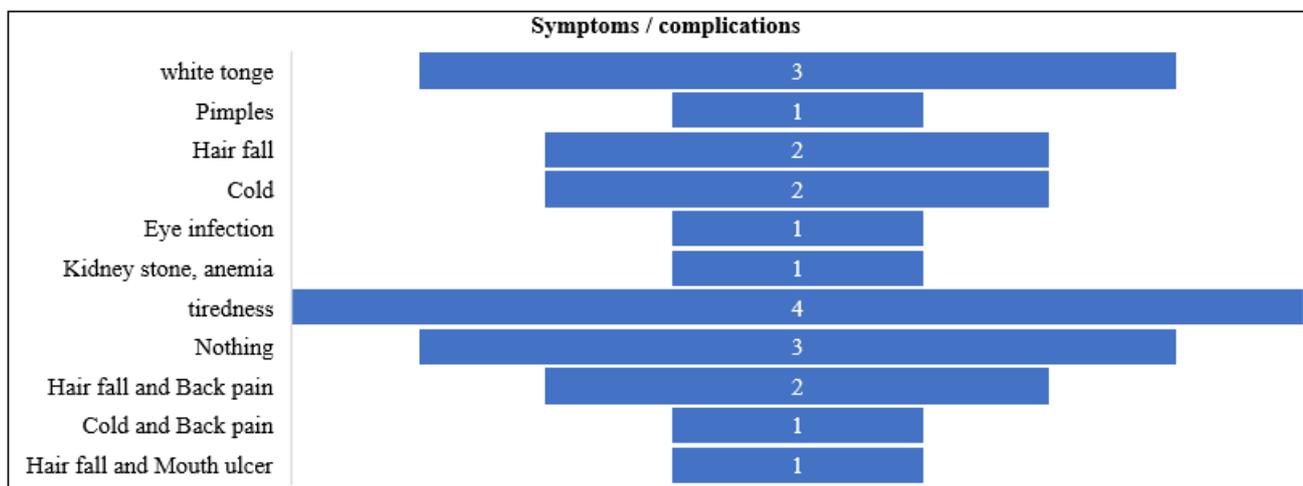


Plate 4: Symptoms/ Complication among Subjects

6) **Habit of Smoking:** Out of 21 subjects, 62 % don't smoke while 14% were daily Smokers.

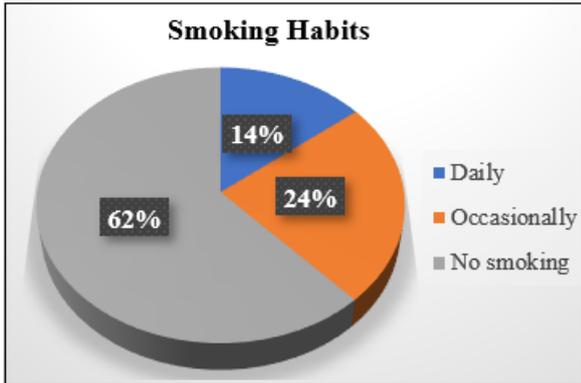


Plate 5: Smoking Habit among Subjects

7) **Drinking Alcohol Habits:** Study showed 57% don't drink Alcohol at all while 9% daily did Alcohol consumption.

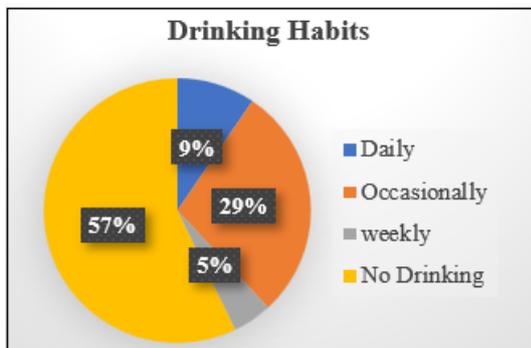


Plate 6: Drinking Alcohol Habits among Subjects

8) **Habit of smoking and Drink:** As it is clear from Studies, HIV Progresses among Smoker and Alcohol consumers (Wiss. Z, 2021) but in current study still showed 19 % took both alcohol and smokes Tabacco while 24 % took only alcohol followed by another 24 % only are Smokers.

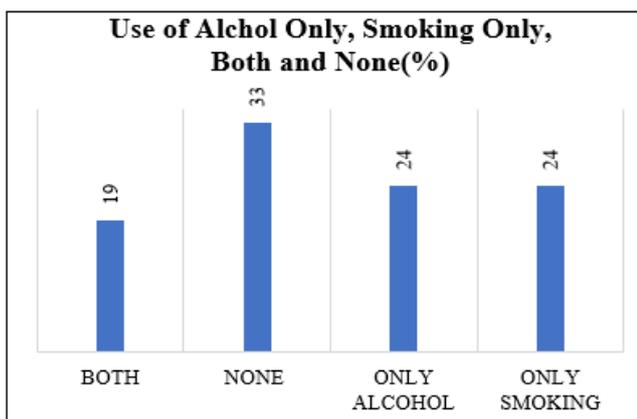


Plate 7: Habit of smoking and Drinking Alcohol

9) **Occupation:** 29% of subjects belong to still studying group means they are dependent on their parents for Food, Lodging and Medicine expenses etc. A study also done by Upadhyay. P et. al (2019) revealed 92% of HIV patients were above 15 years (adult)

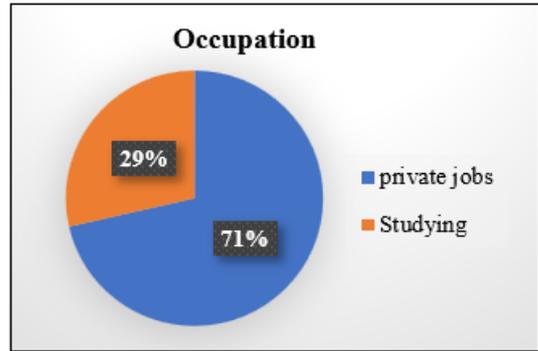


Plate 8: Occupation Among Subjects

10) **Doing Exercise:** As doing exercise is very important as it boasts the immunity as HIV infection depletes the immunity. Study showed only 10% were engaged into doing exercise which may be due to feeling tiredness, lack of time due to job pressure as 71% were in private jobs. Hand. J et. al (2008) showed that subjects doing Moderate exercise got benefited like Increase Functional Aerobic Capacity (FAC) compared to those who don't. Increase the FAC really improve quality of life and life expectancy.

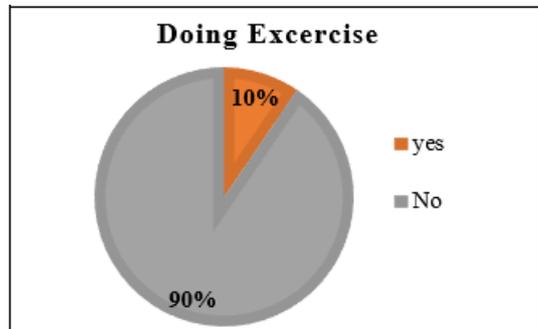


Plate 9: Doing Exercise

11) **Bodyweight gain After ART:** Only 19% gain weight after ART (Anti-Retroviral Therapy) while 71% loss weight since ART followed by 10% of them didn't see change weight hence remained Same since ART.

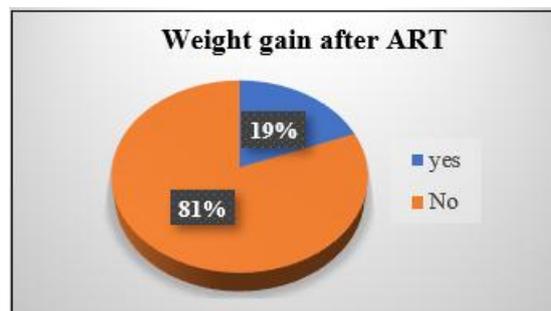


Plate 10.1: Weight Gain After ART

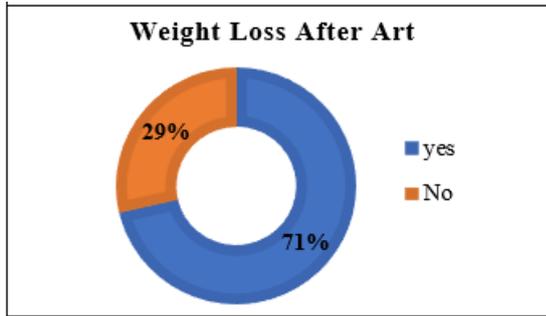


Plate 10.2: Weight gain After ART

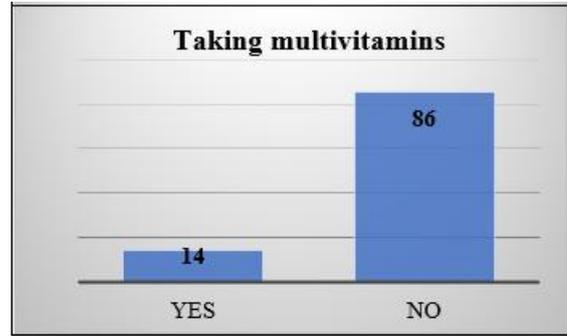


Plate 11: Consumption of Multivitamins

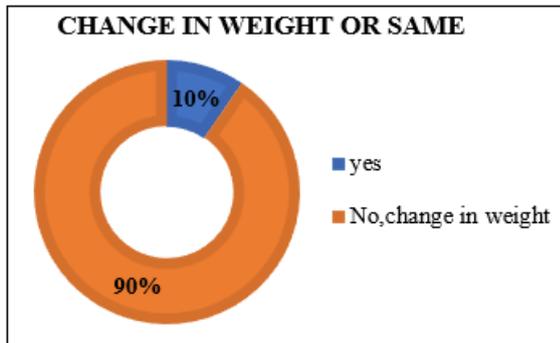


Plate 10.3: Change in weight or Same

13) **Bodyweight change with the use of smoking and alcohol:** 80% of weight loss was observed in smoking habit people followed taken both (alcohol & smoking) which is 75%

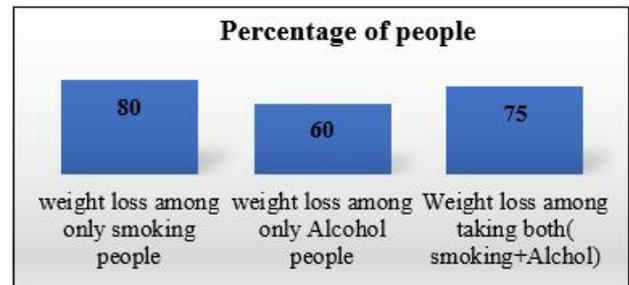


Plate 12.1: Weight Loss among only Alcohol, only Tabacco and both Consumption

12) **Consumption of Multivitamins:** Use of Multivitamin supplementation are very important during ART due to reduce the further side effects like hair fall, mouth ulcer etc. Only 14% were taking it.

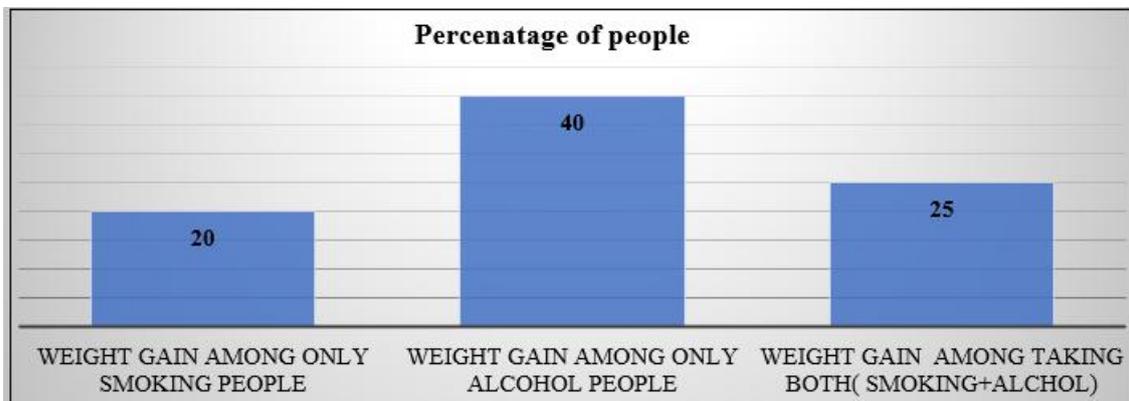


Plate 12.2: Weight Gain among only Alcohol consumer, only Tabacco consumer and both Consumption

While other graph shows weight gain too, 40% weight gain among alcohol consumers which may be due to extra calorie provided by alcohols beyond food intake, 25 % among both consumers followed by only 20% among only smoking subjects.

14) **Amount of Bodyweight change:** Average weight loss was 2.6 kgs from only alcohol consumer, 2.5 kgs among only smoking and 2.3 kgs among both consumer (alcohol& smoking)

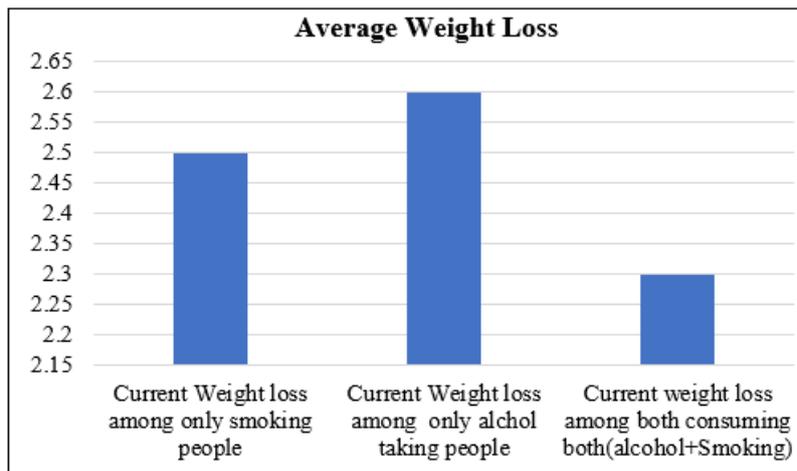


Plate 13.1: Average weight loss

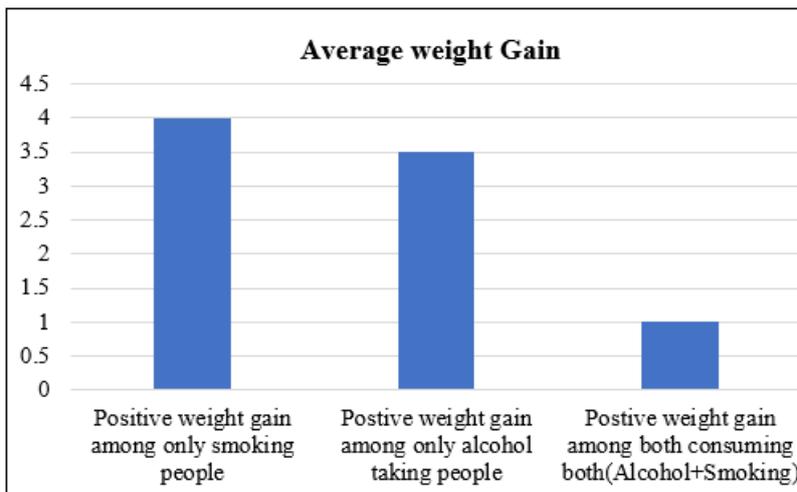


Plate 13.2: Average weight Gain

Other graph shows average weight gain was 4gs among them while 1kg among both consumer s which may be resulted from how long hiv was dignosed and how they are fed well

- 15) **Effective of Exercise Among group:** Out of 10% from exercise group 5% showed steady weight while other 5% showed weight gain as person was also weekly habit of taking alcohol.

Similarly, an article published in Aidsmap (2010) also mentioned that strength exercise not only improve lung and heart health among HIV patients but also helps not to reduce CD4 cells which is very important among hiv patient to live a healthy life.

3. Conclusion

LGBTQ community is more prone to risk of catching infection of HIV and related due to unprotected intimacy, drug abuse, lack of awareness of frequency HIV testing etc. Current Study shows 43% of subjects are falls under low BMI range, it also shows habit of drinking alcohol and smoking among the study group subjects which put them in more risk of developing other complications like body pain, mouth ulcer, white tongue, Anemia, frequent cold. Study subjects are also not aware of exercise benefit and even Verbal diet assessment shows less frequency of vegetables , fruits , high

calorie foods , non veg protein and hence they are counselled for different food groups that to be included in their daily meals with frequency and after few weeks a few of them showed up as in follow up which showed some good result in terms of weight gain, feel good, less lethargic feeling . HIV in LGBTQ community is still untouched area of research In India and LGBTQ people health also matters; hence more research is needed with more participation in health camps.

4. Limitation

Only Small group were Participated; large number Give most accurate Data. Study was based on oral questions, not manually checking body weight changes (gain/ loss). Study period and follow up session were short.

References

- [1] Anonymous (2024); HIV and Gay and Bisexual Men /HIV and Specific Population <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/hiv-and-gay-and-bisexual-men>
- [2] Anonymous (2010); **That feel-good factor: exercise and HIV** <https://www.aidsmap.com/news/feb-2010/feel-good-factor-exercise-and-hiv>

- [3] Daniel yetman (2021) Oral Thrush and HIV: What 's the Connection?
<https://www.healthline.com/health/hiv/oral-thrush-hiv>
- [4] S. Venipriya (2020); A spectrum of Ocular Manifestation in HIV /AIDS patient: A Retrospective analysis at tertiary care centre in South India : *IP International Journal of Ocular Oncology and Oculoplasty*
<https://ijooo.org/archive/volume/6/issue/2/article/6897>
- [5] Burel R Goodin, Romy Parker,Victoria J Madden (2020)Chronic pain in people with HIV : A common Comorbidity and Threat to quality of Life
<https://pmc.ncbi.nlm.nih.gov/articles/PMC7421257/>
- [6] Molina P. E *et.al* (2018); Impact of Alcohol on HIV Disease Pathogenesis doi: 10.1093/alcalc/agy016
- [7] Stack J. A *et. al* (1996); High-energy, high-protein, oral, liquid, nutrition supplementation in patients with HIV infection: effect on weight status in relation to incidence of secondary infection
<https://pubmed.ncbi.nlm.nih.gov/8598433/>
- [8] Swinkles M .H, Nguyen A.D and Gulick P.G.(2024); HIV &AIDS: National Library Of Medicine
<http://nebi.nlm.nih.gov/books/NBK534860/>
- [9] Upadhya. R & Nayak. O (2019); A study of Demographic profile of HIV positive patients attending ART center SGMH Rewa, Madhya Pradesh: International Journal of Medicine Research and Review
<https://ijmrr.medresearch.in/index.php/ijmrr/article/view/1085>
- [10] Z Gesundh Wiss (2021); Impact of Tobacco Smoke in HIV progression: A Major Risk factor for the development of Neuro AIDS and Associated of CNS disorders
<https://pmc.ncbi.nlm.nih.gov/articles/PMC7962499/>