

Research Article

A Study to Assess Life Style Modification among Hiv/Aids Affected Patients Visiting at Anti-Retroviral Therapy Centre Sms Hospital Jaipur

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ABSTRACT

The present study was conducted to assess lifestyle modification among HIV/AIDS affected patients visiting the Antiretroviral Therapy Centre, SMS Hospital, Jaipur, Rajasthan. HIV/AIDS is a chronic health condition that requires continuous medical management along with appropriate lifestyle modification for improving treatment outcomes, quality of life, and prevention of complications. The main objectives of the study were to assess lifestyle modification among HIV/AIDS affected patients and to find out the association between lifestyle modification and selected socio-demographic variables.

A quantitative research approach with descriptive research design was adopted for the study. The research variable was lifestyle modification among HIV/AIDS affected patients, and the selected demographic variables included age, gender, type of family, marital status, educational status, occupation, and monthly income. A total of 60 HIV/AIDS affected patients were selected by using convenient sampling technique from the ART Centre, SMS Hospital, Jaipur. The inclusion criteria included HIV/AIDS affected patients attending the ART Centre and having a history of taking antiretroviral treatment for 6 months to 1 year. Data were collected by using a structured questionnaire on lifestyle modification. The reliability of the tool was established by KR-20 method, and the reliability coefficient was found to be 0.75, indicating that the tool was reliable.

The findings showed that the majority of patients, 41 (68.33%), had moderate lifestyle modification, 18 (30%) had mild lifestyle modification, and only 1 (1.66%) had strong lifestyle modification. The mean lifestyle modification score was 12.58 out of 30, with a mean percentage of 41.94%. The median score was 12, mode was 9, and standard deviation was 4.23.

The study concluded that most HIV/AIDS affected patients had moderate lifestyle modification, while strong lifestyle modification was very low. Therefore, regular counselling, health education, follow-up, and patient-centred lifestyle guidance are required at ART centres to improve lifestyle practices among HIV/AIDS affected patients.

Keywords: HIV/AIDS, Lifestyle Modification, ART Centre, Antiretroviral Therapy, Health Education.

INTRODUCTION

Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) continues to be a major global public health problem despite significant advancement in prevention, diagnosis, and antiretroviral therapy. Globally, approximately 40.8 million people were living with HIV in 2024, and nearly 31.6 million people were receiving antiretroviral therapy, indicating that HIV infection is now increasingly managed as a chronic condition rather than an immediately fatal disease [1]. The World Health Organization has also reported that HIV-related deaths have declined substantially over the last decade; however, HIV still contributes to considerable morbidity, mortality, stigma,

and long-term treatment burden among affected individuals [2].

In India, HIV remains an important public health concern. According to the India HIV Estimates 2023, the national adult HIV prevalence was approximately 0.20%, and about 25.44 lakh people were living with HIV in the country [3]. These statistics show that although India has achieved progress in HIV control, continuous care, adherence support, and lifestyle-related counselling remain essential components of HIV management.

Lifestyle modification among HIV/AIDS affected patients includes regular ART adherence, adequate nutrition, safe sexual practices, avoidance of alcohol and tobacco, maintenance of personal hygiene, regular physical activity, prevention of opportunistic

infections, stress management, and periodic clinical follow-up. Scientific evidence suggests that nutrition assessment, education, counselling, and supplementation should form an integral part of HIV treatment programmes because nutritional status influences immunity, body weight, treatment tolerance, and quality of life [4]. Similarly, physical activity interventions among people living with HIV have been reported to improve walking capacity, functional ability, and selected health outcomes [5].

With improved survival due to ART, HIV/AIDS affected patients are now increasingly exposed to long-term lifestyle-related health problems such as cardiovascular risk, metabolic changes, fatigue, psychological distress, and reduced quality of life [6]. Therefore, assessment of lifestyle modification among HIV/AIDS affected patients visiting the ART Centre, SMS Hospital, Jaipur, is scientifically significant. The findings may help identify behavioural gaps and provide statistical evidence for strengthening patient-centred counselling, lifestyle education, and follow-up care [7].

Need of the Study

The need for the present study arises from the fact that HIV/AIDS affected patients require continuous lifestyle modification along with regular antiretroviral therapy. Although ART improves survival and reduces viral replication, treatment success depends strongly on patient behaviour, including adherence to medication, balanced dietary intake, physical activity, avoidance of harmful habits, psychological adjustment, and prevention of infections. Inadequate lifestyle modification may increase the risk of poor immunity, reduced treatment tolerance, opportunistic infections, metabolic complications, and decreased quality of life.

Recent Indian evidence indicates that people living with HIV/AIDS are exposed to a high burden of lifestyle-related risk factors. Sakthivel et al. (2024) conducted a study among 316 adults living with HIV in India and reported that dyslipidaemia was present in 82.7%, inadequate physical activity in 74.4%, hypertension in 15.8%, and diabetes in 12.3% of participants [8]. These findings statistically justify the need to assess lifestyle modification among patients attending ART centres.

A research article by Dixit, Nigam and Midha (2023) assessed quality of life among 407 people living with HIV/AIDS attending an ART Plus Centre in Kanpur Nagar and found that quality of life was influenced by socio-

demographic factors such as gender, marital status, and socioeconomic class [9]. This supports the present study objective of finding the association between lifestyle modification and selected socio-demographic variables.

Dietary behaviour is another important area of concern. Abdulai et al. (2024) reported that diet quality among people living with HIV/AIDS is associated with immune health and overall disease management [10]. SantaBarbara et al. (2022) highlighted the role of exercise in relation to ART adherence among adults living with HIV [11]. Similarly, Sun et al. (2023) found that mHealth-based interventions improved adherence-related behaviours among patients living with HIV [12]. Therefore, the present study is needed to generate local statistical evidence regarding lifestyle modification among HIV/AIDS affected patients visiting the ART Centre, SMS Hospital, Jaipur.

Objectives of the Study

1. To assess life style modification among HIV/AIDS affected patients.
2. To find the association between life style modification and their selected socio-demographic variables.

Hypotheses

1. H01- There will be no significant association between life style modification and their selected demographic variables among HIV/AIDS affected patients at 0.05 the level of significance.
2. H1-There will be a significant association between life style modification and their selected demographic variables among HIV/AIDS affected patients at 0.05 the level of significance.

METHODOLOGY

The present study adopted a quantitative research approach with a descriptive research design to assess lifestyle modification among HIV/AIDS affected patients visiting the Antiretroviral Therapy (ART) Centre, SMS Hospital, Jaipur, Rajasthan. The quantitative approach was considered appropriate because the study aimed to measure lifestyle modification in numerical terms and examine its association with selected socio-demographic variables.

The main research variable of the study was lifestyle modification among HIV/AIDS affected patients. The selected socio-demographic variables included age, gender, type of family,

marital status, occupation, educational status, and monthly income.

A total of 60 HIV/AIDS affected patients were selected as the sample for the study. The samples were chosen by using a convenient sampling technique from patients attending the ART Centre of SMS Hospital, Jaipur. The inclusion criteria were limited to HIV/AIDS affected patients who were visiting the ART Centre, SMS Hospital, Jaipur, Rajasthan, and who had a history of taking antiretroviral treatment for 6 months to 1 year.

Data were collected by using a structured questionnaire prepared to assess lifestyle modification among HIV/AIDS affected patients. The tool was developed to obtain information regarding lifestyle-related practices and selected demographic characteristics of the participants.

The reliability of the structured questionnaire on lifestyle modification was established by using the KR-20 method. The obtained reliability coefficient was 0.75, which indicates that the tool had acceptable reliability and was suitable for data collection. The collected data were planned to be analyzed by using descriptive and inferential statistics according to the objectives and hypotheses of the study.

RESULTS

Table No.: 1: Frequency and Percentage Distribution of Life Style Modification among HIV/AIDS Affected Patients N=60

S. No	Life Style Modifications (Physical, Psychological, Socioeconomic Dimensions)	Frequency	Percentage
1	Mildly modifications(1-10)	18	30%
2	Moderately modification (11-20)	41	68.33%
3	Strong modification (21-30)	1	1.66%

Table No. 1 presents the frequency and percentage distribution of lifestyle modification among HIV/AIDS affected patients in physical, psychological, and socioeconomic dimensions. The findings show that the majority of HIV/AIDS affected patients, 41 (68.33%), had moderate lifestyle modification, indicating that most participants were following lifestyle-related practices to a moderate extent. This may include partial improvement in physical care, psychological adjustment, social behaviour, economic management, treatment-related discipline, and health-seeking practices. A total of 18 (30%) participants had mild lifestyle modification, which shows that nearly one-third of the patients had limited lifestyle changes. This group may require more

Distribution of Sample Characteristics

The distribution of sample characteristics shows that the highest number of HIV/AIDS affected patients, 21 (35%), were in the age group of 36–45 years, whereas 10 (16.67%) were below 25 years of age.

With regard to gender, the majority of participants were male, 36 (60%), while 24 (40%) were female. In relation to type of family, most of the participants, 32 (53.33%), belonged to a joint family, whereas 3 (5%) belonged to a single-parent family.

Regarding marital status, the majority of HIV/AIDS affected patients, 40 (66.67%), were married, while 2 (3.33%) belonged to the divorced/divorcee category.

In terms of educational status, most of the participants, 27 (45%), had completed secondary education, whereas 6 (10%) were illiterate.

With regard to occupation, the highest number of participants, 19 (31.67%), were unemployed, while 6 (10%) were employed in the government sector.

According to monthly income, the majority of participants, 51 (85%), belonged to the income group of ₹10,001–₹20,000, whereas 9 (15%) belonged to the income group of ₹20,001–₹50,000.

counselling, motivation, and follow-up support regarding diet, hygiene, ART adherence, safe practices, stress management, and prevention of opportunistic infections.

Only 1 (1.66%) participant had strong lifestyle modification, suggesting that very few patients were practicing lifestyle modification at a high level.

Overall, the table indicates that most HIV/AIDS affected patients had moderate lifestyle modification, while strong lifestyle modification was very low. Therefore, there is a need to strengthen health education, counselling, behavioural support, and regular reinforcement at the ART centre to improve lifestyle practices among HIV/AIDS affected patients.

Table No. 2: Mean, Mode, Median and Standard Deviation of Life Style Modification among HIV/AIDS Affected Patients N=60

S. NO.	Maximum Score	Mean	Mean Percentage	Median	Mode	Standard Deviation
1	30	12.58	41.94	12	9	4.23

Table No. 2 presents the mean, mode, median, mean percentage, and standard deviation of lifestyle modification among HIV/AIDS affected patients.

The maximum possible score for lifestyle modification was 30. The obtained mean score was 12.58, with a mean percentage of 41.94%. This indicates that the overall level of lifestyle modification among HIV/AIDS affected patients was moderate, but towards the lower side of the moderate range.

The median score was 12, which shows that half of the participants scored below 12 and half scored above 12. The mode score was 9, indicating that the most frequently occurring score among the participants was 9. This suggests that many patients had relatively low to moderate lifestyle modification practices.

The standard deviation was 4.23, showing moderate variation in lifestyle modification scores among the participants. This means that while many patients had similar lifestyle modification levels, some variation existed in their physical, psychological, and socioeconomic practices.

Overall, the findings reveal that HIV/AIDS affected patients had only moderate lifestyle modification, and the mean percentage of 41.94% indicates the need for regular health education, counselling, follow-up, and reinforcement of lifestyle-related practices at the ART centre.

DISCUSSION

The present study assessed lifestyle modification among 60 HIV/AIDS affected patients visiting the ART Centre, SMS Hospital, Jaipur. The findings revealed that the majority of patients, 41 (68.33%), had moderate lifestyle modification, followed by 18 (30%) with mild lifestyle modification, while only 1 (1.66%) had strong lifestyle modification. The mean lifestyle modification score was 12.58 ± 4.23 out of 30, with a mean percentage of 41.94%, indicating that lifestyle modification was present but not at an optimum level. This shows that although patients were making some changes in physical, psychological, and socioeconomic dimensions, strong health-promoting behaviour was very limited.

The findings are supported by Zanganeh et al. (2023), who conducted a cross-sectional study

among 321 people living with HIV in Iran and reported that lifestyle practices varied across different domains. Their study found that the lowest mean score was observed in stress management, while health responsibility showed the highest mean score. They concluded that simple lifestyle changes related to nutrition, physical activity, and stress management can improve health-promoting behaviour among people living with HIV [13]. Similarly, Qin et al. (2024) conducted a randomized controlled trial among people living with HIV/AIDS and found that combined exercise training and dietary intervention produced significant improvements in physical fitness, quality of life-related physical satisfaction, stress burnout, and exercise motivation. This supports the present finding that moderate lifestyle modification among patients should be strengthened through structured counselling and planned lifestyle education [14].

The study findings are also consistent with Lai et al. (2024), who studied 831 people with HIV and found that poor ART adherence was associated with younger age, depressive disorder, substance use, and detectable viral load. This indicates that lifestyle modification is closely connected with psychological status, treatment adherence, and risk behaviour [15]. In addition, Song et al. (2024) reported that physical activity among people living with HIV is influenced by barriers and facilitators, highlighting the need for patient-specific support [16].

Thus, the present study confirms that HIV/AIDS affected patients require continuous health education, counselling, motivation, and follow-up at ART centres to improve lifestyle modification from moderate to strong levels.

CONCLUSION

The present study assessed lifestyle modification among HIV/AIDS affected patients visiting the Antiretroviral Therapy Centre, SMS Hospital, Jaipur. The study was conducted among 60 HIV/AIDS affected patients using a quantitative descriptive research design. The findings revealed that most of the participants had a moderate level of lifestyle modification. Out of 60 patients, 41 (68.33%) had moderate lifestyle modification,

18 (30%) had mild lifestyle modification, and only 1 (1.66%) had strong lifestyle modification. The mean lifestyle modification score was 12.58 out of 30, with a mean percentage of 41.94%, which indicates that the overall lifestyle modification among HIV/AIDS affected patients was moderate but not highly satisfactory.

The study concluded that although most patients had adopted some lifestyle changes, strong lifestyle modification practices were very limited. This shows the need for continuous health education, counselling, motivation, and follow-up at ART centres. Patients should be guided regarding ART adherence, balanced diet, personal hygiene, physical activity, stress management, avoidance of alcohol and smoking, safe sexual practices, and prevention of opportunistic infections.

Overall, the study emphasizes that lifestyle modification is an important component of HIV/AIDS care and should be strengthened through regular patient-centred educational interventions.

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