

## LIFESTYLE PATTERN AMONG THE PEOPLE LIVING WITH AIDS IN EASTERN NEPAL

Mehta RS, Karki P

B. P. Koirala Institute of Health Sciences, Dharan, Sunsari, Nepal

### ABSTRACT

**Introduction:** In world more than 40 million people are living with HIV/AIDS, 2.3 million are under 15 yrs and 14000 new infections occur daily. The objectives of this study was to assess the lifestyle pattern among the people living with AIDS (PLWA) receiving anti-retroviral therapy at B. P. Koirala Institute of Health Sciences and find out the association between lifestyle pattern and the selected demographic variables.

**Methodology:** A descriptive cross-sectional research design was used to assess lifestyle pattern of the PLWA receiving anti-retroviral therapy at the ART clinic of Tropical ward at B.P Koirala Institute of Health Sciences (BPKIHS). The PLWA receiving ART at BPKIHS for more than or equal to three months at the ART clinic who met the selection criteria constituted the sample of the study. Using purposive sampling technique total 113 PLWA were selected. The patients who themselves were physically present during the data collection period were included in the study, after their consent for the purpose.

**Results:** It was found that most of the PLWA were of age less than 40 years, male (61.1%), residing in urban area (74.3%), married (75.2%) and Hindu (74.3%). It was found that 83.2% PLWA never do exercise, whereas 8.8% perform regularly. Most of the (91.2%) people living with AIDS reported feeling pressure and stress in daily life. About 57% PLWA only sleep less than 6 hours per day. About half (52.2%) of the PLWA never take food outside home, where as 34.5% take food outside regularly. The habit of using tobacco is present among 28.3% people living with ADIS, where the past history of using was 39.8%. Similarly only 0.9% PLWA had habit of taking alcohol at present and 63.7% in past; and 28.3% had habit of taking substances in past. The association calculated between selected demographic variables (age, sex, marital status, residence and religion) with lifestyle pattern (exercise, tobacco chewing, alcohol consumption, and food habit) found significant association between marital status and exercise ( $p < 0.001$ ), Tobacco consumption and age ( $p < 0.001$ ) only.

**Conclusion:** The positive life style practices among the PLWA found high at present in comparison to past especially in relation to Tobacco, Alcohol and Substance use. Individual counseling and support is vital for improving the condition.

**Key words:** Life-style, People Living with AIDS, Counseling, ART

### INTRODUCTION

HIV/AIDS is a global epidemic which first emerged in 1981 in the USA. Since then, the epidemic has

claimed lives of nearly 30 million people worldwide, the worst conditions being in the Sub-Saharan countries.<sup>1</sup>

South Africa is reported to have the largest population living with the disease. In terms of prevalence, countries such as Afghanistan, Saudi Arabia, and Cape Verde are reported to have the lowest prevalence of the disease among reported nations, at less than 0.1% of their population.<sup>2</sup> According to UNAIDS/WHO, 47% of the established 14.2 million people eligible for the treatment in low

### Correspondence:

Prof. Dr. Ram Sharan Mehta  
Medical-Surgical Nursing Department  
B. P. Koirala Institute of Health Sciences  
Dharan, Sunsari, Nepal.  
E-mail: ramsharanmehta@gmail.com

and middle income countries were accessing ART (Anti Retro Viral) therapy in 2010.<sup>3</sup>

The AIDS picture in South East Asia is dominated by the epidemic in India. Migrants in particular are vulnerable and 67% of the infected in Bangladesh and 41% in Nepal are migrants returning from India.<sup>4</sup>

In a study done by the Department of Foods, Nutrition and Dietetics, Kenyatta University, among the HIV/AIDS infected two districts of South Africa, it was found out that majority of PLWHA consume foods that are low in nutrients to build up the immune system and help maintain adequate weight, and there is little variety in the foods they consume.<sup>5</sup> In fact, the linkages between HIV/AIDS and food security are bi-directional: HIV/AIDS is a determining factor of food insecurity as well as a consequence of food and nutrition insecurity.<sup>6</sup>

## METHODOLOGY

A descriptive cross sectional research design was used to assess lifestyle pattern of the people living with AIDS receiving anti-retroviral therapy at the ART clinic of Tropical ward at BPKIHS. The PLWA receiving ART at BPKIHS for more than or equal to three months at the ART clinic who met the selection criteria constituted the sample of the study. Total 113 PLWA were selected using purposive sampling technique. The patients who themselves were physically present during the data collection period were only included in the study, with their consent for the purpose.

## RESULTS

It was found that most of the PLWA were of age less than 40 years, male (61.1%), residing in urban area (74.3%), married (75.2%) and Hindu (74.3%). It was found that 83.2% PLWA never perform the exercise, whereas 8.8% perform regularly. Majority (91.2%) of the PLWA expressed the feeling of pressure and stress in daily life. About 57% PLWA only sleep less than 6 hours per day. About half (52.2%) of the PLWA never take food outside home whereas 34.5% take regularly. PLWA residing in eastern Nepal receiving ART at BPKIHS had habit of taking tobacco more in past (39.8%) in comparison to present (28.3%). Similarly only 0.9% PLWA had habit of taking alcohol at present

and 63.7% in past; and 28.3% had habit of taking substances in past. The association calculated between selected demographic variables (age, sex, marital status, residence and religion) with lifestyle pattern (exercise, tobacco chewing, alcohol consumption, and food habit) found significant association between marital status and exercise ( $p < 0.001$ ), and Tobacco consumption and age ( $p < 0.001$ ) only. The details of the results are depicted in the table 1 to 4.

<b>Table 1. Socio-demographic Characteristics of the People Living with AIDS (n=113)</b>			
SN	Socio-demographic Characteristics	Responses	
		Number	%
1	<b>Age group (in years)</b>		
	≤ 25	15	04.4
	26- 30	19	16.8
	31- 35	35	31.0
	36- 40	30	26.5
	41- 45	12	10.6
	≥ 46	12	10.6
	<b>Mean = 36.3</b>		<b>SD= 8.268</b>
2	<b>sex</b>		
	Male	69	61.1
	Female	44	38.9
3	<b>Residence</b>		
	a. Rural	29	25.7
	b. Urban	84	74.3
4	<b>Marital Status</b>		
	a. Unmarried	85	75.2
	b. Married	15	13.3
	c. Divorced	12	10.6
	d. Widow	01	0.9
5	<b>Religion</b>		
	a. Hindu	84	74.3
	b. Buddhist	17	15.0
	c. Muslim	1	0.9
	d. Christian	5	4.4
	e. Kirata	6	5.3
7	<b>Family Income / Month ( in Rupees)</b>		
	4000- 14000	26	23.01
	15000- 25000	26	23.01
	26000- 36000	21	18.58
	37000- 47000	23	20.35
	≥48000	17	15.04
<b>Mean = 29,982.30</b>		<b>SD= 18, 968.010</b>	
<b>Range = 4000- 80,000</b>			

**Table 2.** Distribution MI of the Respondents according to HIV Status, Assessed Dietary Pattern & B (n= 113)

SN	Characters	Categories (in months)	ART consumption Frequency (%)	
1	Duration of ART consumption	3 – 12	30 (26.55)	
		13 – 36	42 (37.17)	
		37- 60	35 (30.97)	
		> 60	6 (5.31)	
Mean = 33.13, SD = 23.735, Range = 3-142				
2	CD4 count At the Start of Therapy	≤ 50	10 (8.85)	
		51 – 250	79 (69.9)	
		251- 500	23 (20.35)	
		≥ 501	1 (0.9)	
Mean = 184.24, SD = 101.692, Range = 2- 524				
3	Diet Habit	Non-Vegetarian	112 (99.1)	
		Vegetarian	1 (0.9)	
4	Frequency of Eating/ day	3times	6 (5.31)	
		4 times	17 (15.04)	
		5 times	74 (65.49)	
		≥6times	16 (14.16)	
5	Composition of Major Meals is mostly	Carbohydrates	111 (98.23)	
		Proteins	2 (1.77)	
6	Nutritional Supplement Consumption (NCASC)	Positive response	29 (25.66)	
7	Body Mass Index (BMI)	Frequency	Percentage	
		< 18.5 (malnourished)	28	24.79
		18.5 – 24.9 (normal)	73	64.60
		25- 29.9 (overweight)	12	10.62
	≥30	0	0	
Mean = 20.85, SD = 3.13, Range = 14.17- 29.56				

**Table 3.** Lifestyle Pattern, Tobacco Chewing, Smoking Habit, Alcohol & Drug Consumption Habit among the PLWA (n=113)

SN	Lifestyle Pattern	No.	%
1	Exercise habit:		
	a. Daily	10	8.8
	b. Alternate day	2	1.6
	c. 1-2/week	7	6.2
	d. Never	94	83.2
2	Feeling under pressure and stress:		
	a. Often	103	91.2
	b. Occasionally	2	1.8
	c. Never	8	7.1
3	Hours of sleep per day:		
	a. < 6 hrs	48	42.5
	b. 6-8 hrs	64	56.6
	c. >8 hrs	1	0.9
4	Taking food outside the home:		
	a. Daily	39	34.5
	b. Alternate day	11	9.7
	c. 1-2/week	4	3.5
	d. Never	59	52.2
5	Smoking/Tobacco Chewing habits:		
	Present history:		
	a. Yes	32	28.3
	b. No	81	71.7
	Past history:		
	a. Yes	45	39.8
	b. No	68	60.0
	Present consuming habits of different:		
	a. Chewing tobacco	19	11.8
	b. Cigarette smoking	13	11.5
c. Betal chewing	0	0	
d. Hooka/Chilim	0	0	
e. Bidi smoking	0	0	
6	Present habit of Alcohol consumption		
	a. Yes	1	0.9
	b. No	112	99.1
7	Past habit of alcohol consumption		
	a. Yes	41	36.3
	b. No	72	63.7
8	Current habit of consumption of different types of alcohol		
	a. Beer	0	0
	b. Wine	0	0
	c. Rakshi/Jand	1	0.9
	d. Tongba	0	0
	e. Whiskey/Rum	0	0
9	Drug abuse habit:		
	a. Habit in present	0	0
	b. Habit in past	32	28.3

**Table 4.** Association between Selected Demographic Variables and lifestyle Patterns (n = 113)

Demographic Characteristics	Characteristics	Categories	Lifestyle Pattern														
			Exercise			Feeling Pressure			Sleep			Tobacco Consumption			Alcohol Consumption		
			Others	Daily	P-value	Occasionally / never	Often	P-value	Others	6-8 hrs	P-value	No	yes	P-value	No	yes	P-value
Age	>41	21	71	0.983	0	8	0.128	1	48	<0.001	14	67	0.102	24	88	0.602	
	<41	3	16		24	81		23	41		10	22		0	1		
sex	Female	36	56	0.471	3	5	0.931	16	33	0.231	30	51	0.510	43	69	0.208	
	Male	6	13		41	64		28	36		14	18		1	0		
Residence	Urban	72	2	0.072	6	2	0.964	39	10	0.263	61	20	0.707	83	29	0.555	
	Rural	12	7		78	27		45	19		23	9		1	0		
Marital Status	UM/D/W	11	3	<0.001	0	8	0.092	13	36	0.706	21	60	0.663	28	84	0.569	
	Married	17	2		28	77		15	49		7	25		0	1		
Religion	B/C/M/K	21	73	0.072	0	8	0.085	13	36	0.854	22	59	0.562	28	84	0.087	
	Hindu	8	11		29	76		16	48		7	25		1	0		

**DISCUSSION**

It was found that most of the (31%) PLWA were of age group of 31-35 years, male (61.1%), residing in urban area (74.3%), married (75.2%) and Hindu (74.3%). Study conducted by Sharma<sup>7</sup> reported that out of 150 patients 66.7% were male, 33.3% were females. Most of them (41.3%) were illiterate, married (49.3%), and farmer (35.3%). The age group 21-30 years was predominant followed by 31-40 years (42%); which is similar to this study. Similar findings were also reported by Budhachandra and Dhungana.<sup>8,9</sup>

It was found that 83.2% PLWA never perform the exercise, whereas 8.8% perform regularly. About 57% PLWA only sleep less than 6 hours per day. About half (52.2%) of the PLWA never take food outside home whereas 34.5% take regularly.

PLWA residing in eastern Nepal receiving ART at BPKIHS had habit of taking tobacco more in past

(39.8%) in comparison of present (28.3%). Similarly only 0.9% PLWA had habit of taking alcohol at present and 63.7% in past; and 28.3% had habit of taking substances in past. Similar study conducted by Dhungana<sup>9</sup> reported, 41% PLWHA were smoker, 34% Alcoholics and 54% had weight loss, which is similar to this study.

The association calculated between selected demographic variables (age, sex, marital status, residence and religion) with lifestyle pattern (exercise, tobacco chewing, alcohol consumption, and food habit) only found significant association between marital status and exercise (p <0.001), and Tobacco consumption and age (p <0.001).

**CONCLUSION**

The positive life style practices among the PLWA found higher at present in comparison to before illness. Individual counselling and support is vital for improving the condition.

**Limitations:** Due to the proxy visits by the relatives instead of the patient, the sample collection was difficult as anthropometric measurements could not be taken. There was difficulty in obtaining data about the dietary patterns and lifestyle. The setting of the clinic could not ensure proper privacy. Patients who came in a hurry couldn't be assessed in detailed related to their short stay at clinic.

**Recommendations:** The supplementation of the nutrition provided by WHO and distributed by the ART clinic can be improved and the target group can be encouraged to consume it. Similar study can be conducted at other ART centers and results can be compared. This study can be done on a larger sample and the association with diet patterns and lifestyle can be observed, which also affect the nutritional status in one way or the other. The BMI at the start of the therapy can be assessed and used to compare the improvement after the initiation of ART.

**Implications of the study:** This study gives an overview of the nutritional status of the PLWHA receiving ART at BPKIHS. For patients at the risk of being malnourished, ART initiation can be an important step in attempt to increase their nutritional status.

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