A Cross Sectional Study On Quality Of Life And Coping Skills Of People Living With HIV And AIDS In Meerut, UP

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Abstract: Background: HIV is one of the worst pandemic in today's world that has a devastating physical and psychological effect. Due to early detection and availability of antiretroviral treatment, HIV has become a chronic disease rather than a fatal illness. Consequently, quality of life is a paramount component in the evaluation of patient's salubrity following HIV infection. The role of quality of life and coping strategy with the Human immunodeficiency virus /AIDS disease cannot be overemphasized. There are very few studies in India which explored the quality of life of patients with HIV and AIDS and Coping skills. Materials and Methodology: A cross-sectional study was conducted at antiretroviral therapy (ART) clinic of LLRM Medical College, Meerut. The sample comprised 200 people living with HIV/AIDS (PLWHA) who were 18 years and above. The tools used were BREF COPE and WHO QOL-HIV BREF. Data was entered in Microsoft Excel and analyzed in SPSS version 24. Descriptive statistics and Chi-square test were used. Results : The lowest quality of life is seen in social relations, followed Environment.The most commonly used coping styles were active coping, self distraction and religion. Conclusion: The results denote that illness perception has direct and indirect effects in QOL, mediated by coping strategies. The more HIV is perceived as threatening, the worse is the perception of QOL of PLWHA; however, the incremented utilization of active coping, self distraction and coping strategies and spirituality and personal belief and less utilization of substance use and denial could mitigate this negative effect. [shivam K Natl J Integr Res Med, 2019; 10(2):1-5]

Key Words: HIV ,COPING, ART, QOL, PLWHA,ANNOVA, WHOQOL–HIV BREF, Coping.

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Introduction: HIV as an illness affects the person at the biological level in the form of an aggressive virus that compromises immunity. Every illness experience represents a unique and dramatic negative experience for the patient; it is associated with a profound and authentic psychological engagement of patients themselves and the significant people in their lives[1]. Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) is a global epidemic, a major challenge as a health care problem of modern times. As the survival of life increases from the time of an HIV-positive diagnosis, growing concern for the quality of the life has been extended.[2]

India is home to the world's third largest HIV population (2.1million) after South Africa (7.1 million) and Nigeria (3.2 million)[3]. Evidence suggests that in addition to the underlying infection, social circumstances, relationship issues, comorbidities and stigma may impact on Quality of Life (QoL) in people living with HIV(PLHIV)[4].Quality of life (QOL) is a term that is popularly used to convey an overall sense of well-being and includes aspects such as happiness and satisfaction with life as a whole[5]. World Health Organization has defined QOL as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, standards, expectations and concerns[6].

Another factor that influences quality of life and medication adherence among people living with HIV/AIDS is coping style[7-8]Coping refers to "the cognitive and behavioral effort made by a person to alter or manage the quandaries caused by concrete stressful situation."[9] Coping replications are the actions that an individual employ to manage stress events.There have been tremendous efforts by government and stakeholders to contain the spread of HIV, prolong longevity and improve quality of care of people living with HIV/ADS in India. There are very few studies in India which explored the quality of life of patients with HIV and AIDS and Coping skills.

This study will, document the quality of life and coping of patients living with HIV/AIDS in India using the World Health Organization Quality of Life, HIV specific instrument (WHOQOL–HIV BREF) and Carver Brief Cope Scale & thus contribute a Indian perspective.

Materials and Methods: Study design : Cross-sectional. Study population : The study population conveniently selected 200 PLWHA

consenting to be a part of the study who met the inclusion criteria (Patients who are HIV positive for more than six months and willing to participate in the study, who are above 18 years of age, attending ART clinics LLRM Medial College Meerut and can speak and understand Hindi/English).

Instruments : WHO QOL-HIV BREF : version was used to investigate the QOL of PLHIV receiving ART. The scale produces six domain scores namely physical, psychological, level of independence, social relationships, environmental, and spirituality, religion, personal beliefs (SRPB). Individual items are rated on a 5-point Likert scale where 1 indicates low, negative perceptions and 5 indicatehigh perceptions about quality of life. Higher score indicates better QOL.

The Brief COPE scale: (Carver, 1997), a 28-item self-report measure of both adaptive and maladaptive coping skills was used. . For the purpose of the present discussion, we grouped the 14 subscales under adaptive coping and maladaptive coping strategies. Adaptive coping strategies tend to be associated with desirable outcomes and maladaptive coping strategies tend to be associated with undesirable outcomes. The Adaptive coping strategies include Acceptance, Planning, Positive reframing, Religion, Social support, active coping and Humor. Maladaptive includes coping strategies such as Denial, Substance use, Emotional venting, Self-blame, Distraction, Behavioral disengagement.

Statistical analysis: Data were analyzed with SPSS 24 for Windows. The baseline variables were assessed using descriptive statistics of mean and frequency percentages. The variables were correlated by using Pearson's correlation. was used for comparing the variables. The association between multivariate variables and coping and QOL was done by one-way ANOVA.

Ethical consideration : The permission for collecting data was obtained from the Ethics Committee, Subharti Medical College. A written informed consent from each study subject to participate in the study was obtained before the start of work with assurance of confidentiality of the data.

Result: The majority of PLWHA were males 62%. Total 60% of PLWHA were educated up to till class 10. In all, 72% of PLWHA were married and regarding the socio-economic status classification (27.5%) were from upper class group.(Table 1)

Table 1 : Socio-demographic characteristics of PLWHA

Characteristics	Range/Variables	No.	%
AGE GROUPS (IN YEARS)	18-25	26	13
	26-35	98	49
	36-45	44	22
	46-55	28	14
	56-65	3	1.5
	66-75	1	0.5
GENDER	Males	125	62.5
	Females	75	37.5
MARITAL STATUS	Divorced/ Widowed	16	8
	Married	144	72
	Unmarried	40	20
TYPE OF FAMILY	Joint	111	55.5
	Nuclear	89	44.5
EDUCATION STATUS	Illetrate,	42	21
	Primary, Middle& Secondary	121	60.5
	Senior Secondary	16	8
	Graduate &Post Graduate	21	10.5
OCCUPATION	Govt. Jobs/Service	10	5
	Farmer/ Land Holder	14	7
	House Wife	72	36
	Unemployed	13	6.5
	Driver	53	26.5
	All Others	25	12.5
SOCIO ECONOMIC STATUS (B.G.PRASAD CLASSIFICATION)	Upper Class (≥ 6254)	55	27.5
	Upper Middle Class (3127-6253)	73	36.5
	Middle Class (1876-3126)	55	27.5
	Lower Middle Class (938-1875)	14	7
	Lower Class(< 938)	3	.1.5

The table 2 below depicts the mean score of quality of life domain score of HIV patients. The

spirituality religion and personal belief (SRPB) domain displayed maximum quality of life score (16.26± 2.79), whereas social relationship domain displayed minimum quality of life score(10.01±3.24).

Table 2: Quality Of Life Of PLWHA Assessed As Per Who QQL-HIV BREF

S. No.	Domains Of Qol	MEAN± S.D.
1.	Physical	15.35±2.91
2.	Psychological	13.93±2.67
3.	Levelof Independence	15.04±3.11
4.	Social Relation	10.01±3.24
5.	Environment	12.95±2.44
6.	Spirituality Religion And Personal Belief (Srpb)	16.26±2.79

The table 3 depicts the mean coping level score of study subjects. The study subjects displayed maximum coping in self-distraction (6.56±1.54) followed by religion (6.3±2.05) andactive coping (5.90±1.38) and the study subjects displayed minimum score in substance use (2.4±1.15),followed by humor (2.46±1.03), and venting (2.87±1.27).

Table 3 : Coping Skills Of PLWHA Assessed As Per BREIF Cope Scale

No.	Coping levels	MEAN±S.D.
1	Self Distraction	6.56±1.54
2	Active Coping	5.90±1.38
3	Denial	3±1.06
4	Substance Use	2.4±1.15
5	Use Of Emotional Support	3.35±1.58
6	Use Of Instrumental Support	3.29±1.49
7	Behavioral –Disengagement	4.89±1.64
8	Venting	2.87±1.27
9	Positive Reframing	5.09±1.21
10	Planning	5.06±1.28
11	Humor	2.46±1.03
12	Acceptance	5.74±1.45
13	Religion	6.3±2.05
14	Self Blame	3.11±1.65

The table 4 depicts that Self distraction coping has a positive & significant correlation with psychological, environment & SRPB. Active coping has positive significant relation was seen in psychological domain. Use of emotional support coping had a positive and significant relation in social relationship domain.

Table 4: Corelation Between Quality Of Life Domain And Coping Level Of Study Participants

Domain / Coping	Physical	Psychological	Level Of Independence	Social Relation Ship	Environment	Srpb
Self Distraction	0.277954**	0.461*	0.29462**	0.223417**	0.333646*	0.313262*
Active Coping	0.21872**	0.386004*	0.211254**	0.070137**	0.285599**	0.175662**
Denial	-0.06369**	0.023381**	0.042264**	0.163008**	0.135993**	-0.10819**
Substance Used	0.02672**	0.120035**	0.034782**	-0.0149**	-0.00326**	-0.03534**
Use Of Emotional Support	-0.1042**	0.068379**	0.062708**	0.323521*	0.198387**	-0.07474**
Use Of Instrumental Support	-0.17218**	-0.0071**	0.013966**	0.398569*	0.123661**	-0.17849**
Behavioral –Disengagement	0.228774**	0.260099**	0.169761**	0.004734**	0.164074**	0.216082**
Venting	-0.19266**	-0.1729**	-0.0635**	0.011042**	-0.03212**	-0.2279**
Postive Reframing	0.101966**	0.188095**	0.187256**	0.207318**	0.295266**	0.110236**
Planning	0.139973**	0.312246**	0.148921**	0.127988**	0.282059**	0.075126**
Humor	-0.0643**	0.0064**	-0.04089**	0.029452**	-0.01612**	-0.0932**
Acceptance	0.222103**	0.191774**	0.181479**	0.12793**	0.28508**	0.19285**
Religion	0.161095**	0.272614**	0.104661**	0.008631**	0.115657**	0.165556**
Self Blame	-0.13828**	-0.1902**	-0.08487**	-0.00717**	-0.10761**	-0.15671**

**Shows A Non Significant Correlation B/W Coping Levels & Domains I.E. P>.05

*Shows A Significant Correlation B/W Coping Levels & Domain I.E P<.05

Discussion : Background information of the study participants showed the mean age of male patients to be37.04±9.35 years and of female patients to be32.57±9.39 years. Most (49%) of the participants were aged between 26-35 years followed by 36-45 years (22%). As per the study conducted by Arjun YA[10], et al,41% participants were aged between 41-50 years and33%between31-40 years,19% were >50 years of age.

In the present study 62.7% patients were male and 37.5% were females, similar findings were reported by Imam MH[11]. et, al 57.3% participants were males and 42.7% females, but Khakha DC[2] et al76% participants were male and 24% females.

Coping of PLWHA : The study subjects showed maximum coping in self-distraction followed by religion and active coping. SimilarlyRzeszutek. M[12]et al, Catunda C[13]et al reportedhigh coping level in active coping. The high coping skill in religion were reported by Catunda C[13]et al, Cherayi S[14]et al.Our study shows minimum coping level in substance use, humour, venting. SimilarlyRzeszutek. M[12]et alreportedlow score in substance abuse and denial.

QOL of PLWHA: The Study subjects showed maximum quality of life score in SRPB domains. which is congruent with the study done by Fatiregun AA[15] et al ,ImamMH[11] et al, Khakha D[2] et al. In our country, people find solace in religion when they are confronted with issues that are beyond their control.In our study the subjects showed minimum scores in social relationship domain, similar findings were reported by Kumar A[16] et alandKhakha D[2]et al. The lowest score of quality of life in social relationship domain might reflect stigmatization and discrimination of HIV patients in India. Issues like personal relationship, sexual activities and social support of PLWHA also had negative effect in social relationship domain of HIV patients.

Association of QOL with coping : Our study shows that a positive correlation between self-distraction coping level and psychological, environmental, and SRPB domain of quality of life. Similar finding were also reported by Steglitz[17]et al. This could be explained on the basis that HIV patient who had positive self-esteem, positive thinking and better financial status could live their life in self-distraction.

The correlation between active coping and psychological domain of quality of life was also found to be statistically significant. This is in concordance with the study done by Steglitz[17]et al, Khakha DC[2]et aland Catunda C[13]et al . These studies explained that psychological factors like stress, tension and depression played very important role in coping of HIV patients.

Our study reported that there is negative correlation between substance use and environment and SRPB domain, this implies that's as substance use increase there is detoriation in environment and spiritual orientation of HIV patient. This is in agreement with study by KhakhaDC[2]et al and Steglitz[17]et al.

Conclusion: The spirituality religion and personal belief (SRPB) domain displayed maximum quality of life score, where as social relationship domain displayed minimum quality of life score. There was a positive correlation between (self-distraction, active coping,behavioral disengagement, positive reframing, planning, acceptance, religion, coping level) and domains of quality of life.There was negative correlationbetween(venting, self blame coping level) and domain of quality of life.

Recommendations: The care giver, physicians, policy makers should pay greater attention on the social relationships of HIV patients. The additional resources are needed to tackle the stigma and discrimination of HIV patients.

The HIV patients should be provided educational support to improve their coping skills like behavioral disengagement and positive reframing etc.

The HIV patients should be provided counseling facilities to ensure coping in venting and denial. The HIV patients should be provided behavior and emotional training to increase their coping levels.

Similar studies can be conducted in different geographical areas with a more immensely colossal sample size. Other outcomes such as level of disease burden, apprehensiveness, despondence, subjective wellness, stress cognate to disease condition can be assessed. The coping strategies to deal with the disease should be available to PLWHA as customary reinforcement and support.

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