Section: Miscellaneous

Original Research Article

A STUDY OF THE QUALITY OF LIFE OF PEOPLE LIVING WITH HIV(PLHIV) ON MNIMUM 10 YEARS OF ANTIRETROVIRAL THERAPY(cART)

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ABSTRACT

Background: WHO defines QOL as individuals perception of their position in life in the context of culture in which they live and interaction to their goal, expectation, standard and concerns. Numerous variables separated from physical and mental wellbeing like business status, age, sexual orientation, wage, education, HIV stage, seriousness of HIV disease, etc. are found to encroach on the QOL of PLHIV. Quality of life (QOL) of HIV/AIDS patients is becoming an important component of overall assessment of health care and management in health care settings. It is one of the indicators effectiveness of management of PLHIV.

Materials and Methods: This is a Descriptive and Cross sectional study. Data was collected from patient file available in ART centre as mentioned in annexure 1 and Quality of Life was assessed by WHO questionnaire as mentioned in annexure 2. Study was initiated after approval was obtained from the institutional ethics committee. Study related procedures and enrolment of eligible subjects was done only after obtaining an informed consent from the patient. Confidentiality of patient's details was maintained at all levels using appropriate coding.

Results: Domain 1 is 16.93 indicating good QOL Domain 2 is 13.428 indicating good QOL Domain 3 is 13.20 indicating good QOL Domain 4 is 8.39 indicating poor QOL. Domain 5 is 14.349 indicating good QOL Domain 6 is 11.93 indicating average QOL. p-value is 0.474 indicates no statistical significance of smoking with quality of life. P-value is 0.027 is significant statistically; indicates statistically significant association of number of years on ART with quality of life. This implies that increased number of years on ART is associated with better quality of life. Range of deviation of Domains 1, 2,3,4,5, 6 was between 11-20, 8-17, 9-16, 7-11, 13-16.5 and 8-16 respectively.

Conclusion: In our study Major age group affected are between age 31-40 years. Overall quality of life assessed by WHO in QOL bref scale is 13.04 which indicates good overall quality of life. Except sexual activity & social inclusion in domain 4 is low otherwise remaining domain (1, 2, 3, 5 & 6) carry good QOL.

Keywords: Quality of life, HIV/AIDS, Antiretroviral Therapy.

INTRODUCTION

WHO defines Quality of life (QOL) as individuals perception of their position in life in the context of culture in which they live and interaction to their goal, expectation, standard and concerns.[1]

Numerous variables separated from physical and mental wellbeing like business status, age, sexual orientation, wage, education, HIV stage, seriousness of HIV disease, etc. are found to encroach on the QOL of PLHIV. Moreover QOL is distinguished as a imperative medium to measure or decide the adequacy of treatment or investigations. So the

present study examines the QOL of Indian PLHIV receiving ART and examines the variables that will influence it.[2]

As per worldwide HIV/AIDS gauges, total of 33 million people were living with HIV in 2007. The world's second most crowded nation, India, is encountering a exceedingly shifted HIV epidemic, which shows up to be stable or diminishing in a few parts whereas growing at a modest rate in others.[3]

Quality of life (QOL) of HIV/AIDS patients is becoming an important component of overall assessment of health care and management in health care settings. It is one of the indicators effectiveness of management of PLHIV.[4]

Reported adult HIV prevalence in six states included in the recent national individual based survey (the National Family Health Survey 3, conducted in 2005 to2006) varied from 0.07% in UP(Uttar Pradesh), to 0.34% in TN(Tamil Nadu), 0.62% in Maharashtra, 0.69% in Karnataka, 0.97% in AP(Andhra Pradesh), & 1.13% in Manipur.[5]

The term QOL is connected in ordinary dialect and in a few diverse zone of information work. QOL has recently been logically characterized & it has been utilized as synonymous of wellbeing status, useful status, mental wellbeing, life joy, require fulfilment & appraisal of one's own life.[6]

Studies on PLHIV/AIDS have utilized the term wellbeing related quality of life to survey the effect of wellbeing on social exercises and portability cantering whether there are signs and side effects and impacts of new drugs or wellbeing interventions.[7]

QOL was evaluated utilizing the WHO QOL-brief survey connected by prepared questioners. The WHO QOL-brief is easy to utilize instrument created by the WHO and approved in Brazilian Portuguese.[8]

Aim

"To study the Quality of Life of people living with HIV (PLHIV) on minimum 10 years of Combination ARV therapy (c ART)".

MATERIALS AND METHODS

This is a Descriptive and Cross sectional study. Data was collected from patient file available in ART centre as mentioned in annexure 1 and Quality of Life was assessed by WHO questionnaire as mentioned in annexure 2.

Study Design

Study Setting

Out/inpatient patients of hospitals affiliated to Kasturba medical college, Mangalore i.e.

- "KMC hospital, Attavar"
- Govt. Wenlock Hospital, Mangalore

Inclusion Criteria

1. HIV/AIDS Positive Regardless of language, age, sex, nationality, religion and race for a period of ten years
2. On cART
3. Infection Confirmed by ELISA OR WESTERN BLOTTING
4. Age >18yrs
5. Willing to give informed consent

Exclusion Criteria

1. Age <18

Data Collection Methodology

Study was initiated after approval was obtained from the institutional ethics committee. Study related procedures and enrolment of eligible subjects was done only after obtaining an informed consent from the patient. Confidentiality of patient's details was maintained at all levels using appropriate coding.

Subjects fulfilling inclusion & exclusion criteria were enrolled in to the study. 300 records were collected from ART centre KMC Attavar ID clinic ART centre who are on ART for A minimum of ten years.

RESULTS

Table 1: Shows age distribution in PL HIV

Age in years	Frequency	percentage
18-20	6	2.0
21-30	45	15.0
31-40	151	50.3
41-50	73	24.3
51-60	20	6.7
61-70	4	1.3
71-80	1	0.3
Total	300	100

In age distribution 18 to 20 years are 2%, 21 to 30 are 15%, 31 to 40 50.3%, 41 to 50 are 24.3%, 51 to 60 are 6.7%, 61 to 70 are 1.3% and 71 to 80 are 1%. This indicates main age group affected is between 31 to 40 years indicating young age group is mainly affected.

Table 2: Shows frequency of HIV cases in association with sex of the individuals

SEX			
		Frequency	Percentage
	Male	210	70.0

	Female	90	30.0
	Total	300	100.0

70% were male patients and 30% were female indicating more number of HIV cases in male population.

Table 3: Shows statistics of quality of life

N	**300**
Mean	78.2490
Median	78.6000
Std. Deviation	6.25111
Range	26.50
Minimum	64.20
Maximum	90.70

Median s 78.6

Range is between 64.2 to 90.70

Domain 1 is 16.93 indicating good QOL Domain 2 is 13.428 indicating good QOL Domain 3 is 13.20 indicating good QOL Domain 4 is 8.39 indicating poor QOL

Domain 5 is 14.349 indicating good QOL Domain 6 is 11.93 indicatind average QOL

Table 4: Shows statistics of quality of life in association with gender of the patient

	SEX	N	Mean	Std. Deviation	t
	Male	**210**	**78.388**	**6.243**	**.58800**
QOL					
	Female	90	77.924	6.292	p=0.557 ns

Mean is 78.388 for males, and 77.924 for females

p-value is 0.557 indicating no statistical difference with the gender and quality of life in HIV +ve patients

Table 5: Shows association of smoking with quality of life in individuals with HIV on ART QOL VS Smoking

	N[a]	Mean	Std. Deviation	Minimum	Maximum
Non smoker	265	78.263	6.233	64.200	90.700
Current smoker	3	73.933	.764	73.100	74.600
Previous smoker	32	78.534	6.645	67.400	88.400

a. F=0.748, p=0.474 ns

p-value is 0.474 indicates no statistical significance of smoking with quality of life.

Table 6: Shows association of number of years on ART with quality of life

	N	Mean[a]	Std. Deviation	Minimum	Maximum
10	28	77.418	5.599	67.40	85.50
11	88	79.558	5.821	67.40	90.70
12	122	77.125	6.374	64.20	88.40
13	62	78.979	6.548	64.20	90.70

a. F=3.113 p=0.027 sig

P-value is 0.027 is significant statistically; indicates statistically significant association of number of years on ART with quality of life. This implies that increased number of years on ART is associated with better quality of life.

Table 7: Shows statistics of Domains 1,2, 3, 4, 5,6

STATISTICS							
		DOMAIN 1	**DOMAIN 2**	**DOMAIN 3**	**DOMAIN 4**	**DOMAIN 5**	**DOMAIN 6**
N	Valid	300	300	300	300	300	300
Mean		16.93	13.428	13.20	8.39	14.349	11.93
Median		18.00	13.600	14.00	8.00	14.000	12.00
Std. Deviation		3.078	1.5281	2.010	.900	.8679	1.702
Range		9	9.0	7	4	3.5	8
Minimum		11	8.0	9	7	13.0	8
Maximum		20	17.0	16	11	16.5	16

Median of Domains 1, 2, 3, 4, 5, 6 was 18. 13.6, 14, 8, 14, and 12 respectively

Range of deviation of Domains 1, 2,3,4,5, 6 was between 11-20, 8-17, 9-16, 7-11, 13-16.5 and 8-16 respectively

DISCUSSION

In our study, no significant association was found between education status and quality of life. Mostly because all our patients were educated up to primary or secondary school and all patients received similar treatment in the same hospital. All the patients belonged to a similar socio-economic status. However in a study done by Oluwafemi OOguntibeju in 2012 showed that Education, being an indicator of socioeconomic status, also influences QOL of people living with HIV and AIDS. Patients with higher education had better socio-economic status. Patients with higher education had better

QOL, probably due to better knowledge regarding their treatment and disease, accessibility to health services, or functional status.[9] This suggests that ART works in combination with education and0socioeconomic status to bring about the desired0improvement in the QOL of people living with HIV and AIDS.

p-value is 0.557 indicating no statistical difference with the gender and quality of life in HIV +ve patients . In a study done by Tran BX et al in 2012 in Vietnam showed,[10] that men had higher scores or less morbidity and better psychological domains (p=0.02) and women had higher scores in performance.

In our study, P- values 0.31: is statically not significant implying mode of transmission does not influence quality of life. Sexual route accounted for infection in 63% cases while in 22% cases mode of transmission could not be elicited. Less common routes were injecting drug use (9%) and blood transfusion (6%). Heterosexual route was more common (70%). According to our study, P-value is 0.633 implying area of residence does not affect quality of life.

In a study by Jennifer A Pellowski in United states in 2013, patients living in rural areas were at risk for inadequate access to healthcare. cART has been proven to reduce viral loads, increasing CD4 counts and decreasing mortality.

However, Cohn and colleagues,[11] (2001) found out that few adults in rural areas of the United States received HIV care, and also rural patients were less likely to be taking ART regularly. Additionally, rural individuals started new and advanced HIV therapies later than their urban counterparts.[12]

Individuals living in rural areas are especially at risk for not having adequate access to health care. Antiretroviral therapy (ART) has-been proven effective in reducing viral loads, increasing CD4+ T cell counts, and decreasing mortality.[13,14]

Lack of access to services and poor retention in medical care has been shown to predict poor health outcomes for PLWH, most notably in lower CD4+ T cell counts and more rapid disease progression.[15]

In our study, P-value is 0.027 indicates statically significant association of number of years on ART with quality of life. This implies that increased number of years on ART is associated with better quality of life.

According a study, if a patient is not started with ART, mortality occurs within 2 years. We have patients on ART for more than 10 years itself indicating that ART is associated with increased life expectancy.

CONCLUSION

In our study Major age group affected are between age 31-40 years. Overall quality of life assessed by WHO in QOL bref scale is 13.04 which indicates good overall quality of life. Except sexual activity & social inclusion in domain 4 is low otherwise remaining domain (1, 2, 3, 5 & 6) carry good QOL.

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