Role of Treatment Supporters on Adherence to Clinic Appointment and Treatment of HIV Patients at University of Port Harcourt Teaching Hospital, Rivers State

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Introduction

Adherence to prescribed HIV drugs is necessary to improve clinical outcomes and achieve treatment success. [1,2] Use of treatment supporters is one of the strategies for optimizing adherence to clinic appointments and treatment before anti-retroviral therapy enrolment and care. HIV disease progression, chronicity, its attendant sequelae and life-long treatment necessitates the incorporation of some sort of social support in patient care, enabling patients and their families cope better and make informed health decisions. [1,2]

Studies report those with social support are more likely to keep clinic appointments, adhere to treatment regimens, achieve viral suppression [3,4] Although, treatment-supporter involvement is one of the requirements in ART enrolment according to WHO guidelines, its acceptability by clients is yet to be fully embraced in real practice.[4]

A treatment supporter is a person (usually a family member, friend or neighbor) nominated by the patient based on trust, whose main responsibility is to ensure that the patient takes his or her drugs as prescribed throughout the course of the treatment. [3, 4, 5, 6]

Clinic appointment adherence as stated by WHO is defined as two consecutive scheduled clinic visit, after a baseline appointment[7] An adherence rate of 95% is needed to attain maximum ART benefits.[8]

Despite availability of HIV efficacious drugs, some patients still default on their clinic appointments and treatment. [9]

Studies have shown that absence of treatment supporters may stall clinic appointment adherence and treatment which subsequently may adversely affect ART outcomes in resource-limited settings. [10,11,12]

Conflicting findings on relationship between having a treatment supporter and clinic appointment, and ART adherence exist [13, 14, 15] These disparities highlight the need for more research in this area to corroborate the findings and also depict the true situation in our local setting. Documented adherence rates among HIV patients ranged from 25% in Enugu by Uzochukwu et al, to 54.5% in Kano by Illiyasu et al. [16, 17] Also, Agu et al in Benin City stated an adherence rate of 84.7% [18] However, there are limited published literature on the association between having a treatment supporter and adherence to HAART medications.

This study compared adherence to clinic appointments and treatment among HIV patients who had treatment supporters and those who did not have treatment supporters in University of Port Harcourt Teaching Hospital, Port Harcourt.

Methods

This study was a comparative cross-sectional study involving eligible HIV-infected adult clients who had a treatment supporter and those who did not have at the ARV clinic of University of Port Harcourt Teaching Hospital. The formula for calculating the minimum sample size for 2 proportions was used.[19] $n = \frac{2(Z\alpha + Z\beta)^2 p(1-p)}{(P1 - P0)^2}$

Non-response rate of 10%=$\frac{n}{1-10\%}$ =$\frac{86}{1-0.1}$ = 96 ~ 100 patients per group. A sample size of 200 eligible patients (100 in each group) were recruited using simple random sampling. Clinic appointment was categorized as adherent (kept scheduled appointment in the last 2 visits and non-adherent (misses last two clinic appointments) [7] HAART adherence was classified as adherent (if ≥ 95%) and non-adherent (if < 95%). [8] Data analysis was done using Statistical Package for Social Sciences (SPSS version 21)[21]. Chi-square (^{2}) test was employed to compare differences in adherence to clinic appointment and treatment. The level of statistical significance was set at $p<0.05$. Ethical clearance was obtained from the Ethics Committee, University of Port Harcourt Teaching Hospital.

Results

The minimum and maximum ages of the patients in the study was 19 years and 80 years respectively. The mean ages of patients were 41.50±10.19 years and 40.63±11.16 years among those with and without treatment supporter respectively. Majority of the respondents were in the age category of 40-49 years. (35.0%) in the treatment supporter group and (38.0%) in the group without treatment supporters respectively. There was a female preponderance among the study participants; 62% of patients with treatment supporters and 74% of those without treatment supporters were females. The highest proportion (65%) of those who had a treatment supporter were the married while the divorced/separated made up the least proportion. The study noted that patients who had secondary level of education, were permanently employed, Christian and live-in rural residence constituted the highest proportion in both groups.

Table 5: Comparison of Clinic appointment and HAART adherence status by treatment supporter status

Variables	Treatment supporter status		Total n (%)	χ p-value	OR(C.I)
	With treatment supporter n (%)	Without treatment supporter n (%)			
Clinic appointment adherence					
Yes	81 (81.0)	75 (75.0)	156 (78.0)	*1.0*	1.42(0.72-2.79)
No	19 (19.0)	25 (25.0)	44 (22.0)	*0.31*	
HAART adherence					
Adherent	89 (89.0)	70 (70.0)	159 (79.5)	*11.1* *0.001**	3.47(1.62-7.40)
Non-adherent	11 (11.0)	30 (30.0)	41 (20.5)		

*Statistically significant

Clinic appointment adherence rates were 81% for those who had treatment supporters and 75% for those who did not have, respectively. However, the difference in clinic appointment adherence rates was not statistically significant (p=0.31). For treatment adherence rates, those who had treatment supporters was 89% and 70% for those who did not have; the difference in these rates was statistically significant (2 =11.1; p=0.001)

Discussion

The high proportion of clinic appointment adherence observed among those who had treatment supporters corroborates with studies [22, 23, 24.] citing the use of patient-selected treatment supporters as an effective intervention to improve ARV treatment outcomes in resource-constrained settings. In contrast with the index study, a Kenyan study reported low HAART adherence among those with treatment supporters. However, the authors stated that details of treatment supporter status were available for only 48% of HIV patients who were commenced on HAART during the study period 3 Supporting the findings of the index study are studies that reported high adherence rates among those who had some form of treatment support 19 compared to those who were not in support groups. [25,26]

Conclusion

A higher proportion of HIV-infected patients who adhered to their clinic appointments had treatment supporters compared to those who had no treatment supporter. However, there was no association between having a treatment supporter and adherence to clinic appointments. There was a difference in HAART adherence rate among HIV patients who had treatment supporters in comparison to those who did not have treatment supporters.

Key-words: HIV, treatment adherence, clinic appointment, treatment supporters

Disclosure: None