



Perceived Social Support And Associated Factors Among Adult HIV Patients At Bowen University Teaching Hospital (BUTH), Ogbomoso

¹ Adepeju Olatayo Adegoke • ¹ Stephen Adesope Adesina • ¹ Isaac Olusayo Amole • ⁴ Olumide Thomas Adeleke •
² Adeola Ebenezer Idowu • ³ Akinsola Idowu Akinwumi • ¹ Adewumi Ojeniyi Durodola •
¹ Olufemi Timothy Awotunde • ¹ Akintayo David OlaOlorun

¹ Bowen University Iwo and Consultant Family Physician, Bowen University Teaching Hospital, Ogbomoso, Nigeria

² Department of Family Medicine, Bowen University Teaching Hospital, Ogbomoso, Nigeria

³ Department of Public Health, Adeleke University, Ede, Osun State, Nigeria

⁴ Bowen University Iwo, Osun State, Nigeria

adepeju.adegoke@bowen.edu.ng

ABSTRACT

Introduction: Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome (HIV)/ (AIDS) is the world's second most common infectious disease and the sixth leading cause of mortality. People with HIV and AIDS have been shown to benefit more positively and experience fewer negative effects when they have higher levels of social support. Some factors have been identified to be associated with social support among HIV patients. This study aims to determine the level of social support and the factors associated with perceived social support among adult patients attending the antiretroviral clinic in BUTH, Ogbomoso.

Methods: A descriptive study design was used to recruit 91 participants over a period of 3 months from the adult antiretroviral (ARV) Clinic. Socio-demographic characteristics of study participants, history of duration on treatment, the status of the partner and disclosure of status to the partner were also obtained from the participants. Social support was assessed using the multidimensional scale of perceived social support. Data collected were analyzed using Statistical Package for Social Sciences (SPSS) version 26. Percentages were calculated with simple frequency tables; Fisher's exact test was done to determine the association with the variables.

Result: a total of 91 participants were recruited for this study. The mean age was 41.85±11.50. The level of social support was high (44.0%). Below half (45.1%) had a partner with a negative HIV test result and over two-thirds (70.3%) had disclosed their status to their partners. Over one-third (37.4%) had been on medication for 4-6 years. A significant association was found between the gender of the participants and social support.

Conclusion: The level of social support was high in this study and of the sociodemographic factors, only gender was found to have a significant association with social support with females reporting high social support.

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1. Introduction

One of the chronic diseases affecting millions of people worldwide is acquired immunodeficiency syndrome (AIDS), which is caused by the human immunodeficiency virus (HIV) (Basha, Derseh, Wubetu, Engidaw, & Gizachew, 2021). It is the world's second most common infectious disease and the sixth leading cause of mortality (Wani, 2020). The patient's biological, psychological, and physical systems are all affected by this chronic disease. Whether at home, at work, or in society,

people with AIDS deal with a variety of problems every day. They experience stress, generalized anxiety disorders, loneliness, and hopelessness (Wani, 2020). This implies that, social support is necessary when living with a chronic illness (Rao, Asad, & Latif, 2022).

Social support is crucial for human health, without it, it is difficult to lead a socially and psychologically healthy life (Riaz, Abid, Ullah, & Khalid, 2016). It is described as a relationship between a provider and a recipient where resources are exchanged in order to



improve the recipient's well-being (Damulira et al., 2019). It helps people in reducing their stress levels and coping more effectively with difficult circumstances (Talwar & Mohd Fadzil, 2013). Social support can come from a variety of sources, including family, friends, neighbors, coworkers, and different program directors (Riaz et al., 2016). People with HIV and AIDS have been shown to benefit more positively and experience fewer negative effects when they have higher levels of social support (Asante, 2012).

Perceived social support among PLWHA has been associated with reductions in depression, an improvement in quality of life, an increase in medication adherence, better weight gain, and a recovery of CD4 count (Lifson et al., 2015). Therefore, social support is a critical issue to people living with HIV/AIDS. Some factors have been found to be associated with social support among HIV patients including age, gender, marital status, educational level, status of partner, disclosure of status to partner, and duration on highly active antiretroviral therapy (HAART) (Lifson et al., 2015; Adimora, Ogba, Omeje, Amaeze, & Adene, 2021)

In view of HIV being a chronic disease, there is a need to assess level of social support available to patients in order to improve on the available support and prevent complications of low social support from ensuing. Also, none of the studies reviewed was done in Ogbomoso and we feel it is important to investigate the relationship between certain factors and social support among our own patients.

This study aims to determine the level of social support and the factors associated with perceived social support among adult patients attending the Antiretroviral clinic in BUTH, Ogbomoso.

2. Materials and Methods

The study was conducted at the Adult Antiretroviral (ARV) clinic of the Bowen University Teaching Hospital Ogbomoso. Approval for the study was obtained from the BUTH Research Ethics Committee. A written informed consent was obtained from the study participants.

A descriptive study design was used to recruit 91 participants over a period of 3 months between August and October, 2017.

The sample size was determined using the Fischer's statistical formula for estimating minimum sample size in health studies (Araoye, 2004), with p set at 5.6% which was the prevalence of HIV in Oyo State (NACA, 2018).

Inclusion criteria included consenting adults aged 18 years and above who had been on antiretroviral therapy for at least 6 months and gave informed consent to participate in the study. Patients who were pregnant or on admission for any other illness were excluded from the study. The antiretroviral clinic was run once a week with an average daily clinic attendance of 40 patients.

Ninety- one patients who satisfied the inclusion criteria were selected at an average of 8 patients per clinic day using systematic random sampling technique. On each clinic day, patients who fulfilled the inclusion criteria folders were serially assigned a number code from 01-40 based on the order of their arrival at the clinic. One random number, χ , was selected by picking one out of squeezed piece of papers numbered 1 to 5. The patient whose folder number corresponded to χ was then recruited as the first subject. Subsequently, the owners of folders with serial number $\chi+5$, $\chi+10$, $\chi+15$ and so on were recruited for the study until the required sample size was obtained for the day. In the instance that the selected patient did not meet the inclusion criteria, the next patient was selected. This procedure was repeated on every clinic day until the required total sample size was obtained. The recruited patients' folders were tagged after each interview to avoid multiple recruitments.

Socio-demographic characteristics of study participants, history of duration on treatment, information on the status of the partner and disclosure of status to partner were obtained from the participants.

Social support was assessed using Multidimensional Scale of Perceived Social Support (MSPSS). This instrument had been used in a previous study in Ibadan, Nigeria by Folasire et al (Folasire, Akinyemi, & Owoaje, 2014). in a study on perceived social support among HIV positive and negative people. MSPSS assesses the supports from three sub-scales (that is, significant others, the family and friends). There are four questions for each sub-scale and each question was scored on a scale of 1 to 7 ranging from 'very strongly disagree' (with a score of 1) to 'very strongly agree' (which has a score of 7). The mean score was calculated for the significant others sub-scale by finding the mean of scores across items 1, 2, 5 and 10. The mean score for the family subscale was the means of scores across item 3, 4, 8 and 11, while that of the friends' sub-scale was the mean of scores across items 6, 7, 9 and 12. The mean of all the 12 items was the total score. The MSPSS questionnaire was used to group respondents as follows: those with mean score ranging from 1.0 to 2.9 were regarded as having a low social support, those with scores between 3.0 and 5.0 had a moderate social support while those with scores ranging from 5.1 to 7 had a high social support.

Data collected were analyzed using Statistical Package for Social Sciences (SPSS) version 26. Percentages were calculated with simple frequency tables; Fishers exact test was done and level of significance was set at $p=0.05$.

Table 1 shows the socio-demographic characteristics of respondents. Almost one-third (33.3%) of the respondents were between the ages of 31 and 40 years. There were more female respondents (72.5%) than males and most of the respondents were married (61.5%) and



Christians (68.1%). Only 40.7% had secondary level of education and majority (89.0%) were from Yoruba ethnic group.

3. Results

Table 1. Socio-Demographic Characteristics of Respondents

Variables (N=91)	Frequency	Percentage	
Age group(years)	21-30	17	18.7
	31-40	30	33.0
	41-50	28	30.8
	51-60	9	9.9
	61-70	7	7.6
Mean age=41.85 ±11.50	Total	91	100.0
Gender	Male	25	27.5
	Female	66	72.5
	Total	91	100.0
Marital status	Single	5	5.5
	Married	56	61.5
	Separated	9	9.9
	Widowed	21	23.1
	Total	91	100.0
Religion	Christianity	62	68.1
	Islam	29	31.9
	Total	91	100.0
Education level	No Formal Education	19	20.9
	Primary	17	18.6
	Secondary	37	40.7
	Tertiary	18	19.8
	Total	91	100.0
	Ethnicity	Yoruba	81
Hausa		1	1.1
Igbo		3	3.3
Others		6	6.6
Total		91	100.0

N=Total number of respondents.

Table 2: Treatment History of Study Participants

Variable	Frequency (%)	
Status of partner	Positive	29(31.8)
	Negative	41(45.1)
	Unknown	21(23.1)
	Total	91(100.0)
Disclosure of Status to partner	Yes	64(70.3)
	No	27(29.7)
	Total	91(100.0)
Duration on Treatment	≤ 3years	28(30.7)
	4-6years	34(37.4)
	7-9years	25(27.5)
	≥ 10 years	4(4.4)
	Total	91(100.0)

Table 2 shows that majority (45.1%) of the study participants had a partner who tested negative to HIV test. Above two third (70.3%) had disclosed their status to their partner and more than one third (37.4%) had been on treatment for about 4-6 years.

Table 3: Level of Multidimensional Scale of Perceived Social Support

Level of social support	Frequency (%)
Low	18 (19.8%)
Moderate	33 (36.2%)
High	40 (44.0%)
Total	91 (100%)

Table 3 shows that 19.8%, 36.2% and 44.0% of study participants had low, moderate and high social support respectively.

Variables	Level of Social Support				Fisher's Exact test
	Low	Moderate	High	Total	
Age Group	21-30	1(1.1)	6(6.6)	10(11.0)	0.426
	31-40	7(7.7)	14(15.4)	9(9.9)	
	41-50	8(8.8)	7(7.7)	13(14.3)	
	51-60	1(1.1)	4(4.4)	4(4.4)	
	61-70	1(1.1)	2(2.2)	4(4.4)	
	Total	18(19.8)	33(36.3)	40(44.0)	
Gender	Male	6(6.6)	2(2.2)	17(18.7)	0.001
	Female	12(13.2)	31(34.1)	23(25.3)	
	Total	18(19.8)	33(36.3)	40(44.4)	
Marital Status	Single	0(0.0)	2(2.2)	3(3.3)	0.256
	Married	10(11.0)	17(18.7)	29(31.9)	
	Separated	3(3.3)	3(3.3)	3(3.3)	
	Widow	5(5.5)	11(12.1)	5(5.5)	
	Total	18(19.8)	33(36.3)	40(44.0)	
Educational Level	Not Educated	3(3.3)	9(9.9)	7(7.7)	0.351
	Primary	5(5.5)	7(7.7)	5(5.5)	
	Secondary	9(9.9)	11(12.1)	17(18.7)	
	Tertiary	1(1.1)	6(6.6)	11(12.1)	
	Total	18(19.8)	33(36.3)	40(44.0)	
Status of Partner	Positive	8(8.8)	8(8.8)	13(14.3)	0.601
	Negative	7(7.7)	15(16.5)	19(20.9)	
	Unknown	3(3.3)	10(11.0)	8(8.8)	
	Total	18(19.8)	33(36.3)	40(44.0)	
Disclosure of Status	Yes	14(15.4)	21(23.1)	29(31.9)	0.550
	No	4(4.4)	12(13.2)	11(12.1)	
	Total	18(19.8)	33(36.3)	40(44.0)	
Duration on HAART in years	1-3	5(5.5)	11(12.1)	12(13.2)	0.326
	4-6	4(4.4)	16(17.6)	14(15.4)	
	7-9	8(8.8)	5(5.5)	12(13.2)	
	≥9	1(1.1)	1(1.1)	2(2.2)	
	Total	18(19.8)	33(36.3)	40(44.0)	

Table 4: Association Between Social Support and Sociodemographic Factors and Treatment History.

Table 4 shows the association between social support and sociodemographic factors and treatment history of



the study participants. Only the gender of the participants had a significant association with social support.

3. Discussion

This study aimed to determine the level of social support and the factors associated with it among adult patients attending care at BUTH in Ogbomosho. The level of social support was found to be 19.8%, 36.2% and 44.0% for low, moderate and high social support respectively. The high social support observed in this study may be because the majority of the respondents belong to the sexually active age group, they were females, married and their status had been disclosed to their partners. This implies that they may derive some forms of support from their partners. A similar study done in Dublin (Okonkwo, Larkan, & Galligan, 2016) with participants who were 50 years and above using the same instrument among forty-six participants reported only 13% had high social support. However, Berhe et al (Berhe et al., 2022) in Gamo Zone of South Ethiopia used another instrument to assess their participants and found that 22.1% had high social support. A significantly higher proportion (70.9%) reported a high social support in a study on social support and stress among married women school teachers in Pakistan (Riaz et al., 2016). Contrary to this findings, a study done in India among HIV patients by Wani (Wani, 2020) using another tool reported that majority of the participants (84.57%) had low social support. However, Ajiboye et al (Ajiboye, Olorunfemi, & Aina, 2020) reported that social support was on the average or moderate level as perceived by the participant. This implies that the level of social support could vary due to difference in study area, study participants, duration and tools used.

Age group 31-40 years contributed the highest proportion in this study and was followed closely by age group 41-50 years. The mean age was 41.85 years. Both age groups reported moderate and high social support respectively. This may be because of the small sample size that was used in the study. Studies by other researchers found a mean age which were closely related to this finding. For instance, Folasire et al (Folasire et al., 2014) in Ibadan, Nigeria reported mean age of 38.10 while Berhe et al (Berhe et al., 2022) in Southern Ethiopia and Li et al (Li et al., 2021) in China reported a mean age of 39.20 and 40.4 respectively. There was no significant association between age and social support in this study. A contrary report was observed by Hou et al (Hou et al., 2014) who found that age was negatively associated with social support in a study on mediating effect of social support on depression and quality of life among patients with HIV infected patients in Taiwan.

Also, it was observed in this study that female gender had a high representation with 72.5% participants when compared with the male counterpart. This agrees with previous studies with high female preponderance (Basha et al., 2021; Lifson et al., 2015; Berhe et al., 2022).

This may be because our study is a hospital-based study and females tend to visit the hospital more than their male counterparts. Contrary to this findings, highest proportion of males were reported by Li et al (Li et al., 2021) among patients living with HIV in Kunming City, China and Sargolzaei et al (Sargolzaei, Mohebi, Hosaini, & Farzad, 2018) in South East Iran. Our study found that females reported higher social support than their male counterpart. This agrees with findings by Rani in India who studied perceived social support and psychological well-being among young working adults where females reported high social support than males. However, other researchers reported higher social support among men (Wani, 2020; Sargolzaei et al., 2018; Wani & Sankar, 2017; Eisapareh et al., 2022) which disagrees with our findings. The high proportion may be because there were more female respondent and females seems to have more time to take care of themselves than male patients and present early for care as compared with the male gender. A statistically significant association was observed in this study between gender and social support. This agrees with findings from previous studies (Wani & Sankar, 2017; Uba, Owoseni, & JOB, 2020; Eisapareh et al., 2022).

Majority of the participants in this study were married and this agrees with findings by Berhe et al (Berhe et al., 2022) who found that a higher proportion of respondents in their study were married. They also reported a high social support which agrees with other researchers' findings (Rao et al., 2022; Wani & Sankar, 2017). This may be because a similar instrument was used for data collection. The current study reported no association between marital status and social support as also established by Ajiboye et al. (Ajiboye et al., 2020) However, Lifson et al (Lifson et al., 2015) in univariate analysis found that low social support was associated with marital status and Wani and Shanker (Wani & Sankar, 2017) found that marital status was negatively significantly correlated with social support.

The highest proportion (40.7%) reported secondary level of education and social support was found to be high among them. This may be because majority of the study participants were young adults and had access to at least secondary level of education. This contradicts the finding by Rao et al (Rao et al., 2022) where majority with high social support were uneducated. However, there was no significant association between level of education and social support. This disagrees with Lifson et al (Lifson et al., 2015) who found that low social support is associated with low level of education in univariate analysis.

This study shows that 70.3% of participants had disclosed their status to their partners with majority of them reporting high social support. This proportion was slightly lower (72.3%) than what was found by Adimora et al (Adimora et al., 2021) and higher (62.1%) than what Berhe et al (Berhe et al., 2022) found. However, there was no



significant association between status disclosure to partner and social support.

Also, only about a third (31.8%) of the study participants had a partner who tested positive for HIV screening. This is lower when compared with more than half (53.5%) found to have a positive partner as reported by Berhe et al (Berhe et al., 2022). There was no significant association between the status of partner and social support.

The number of participants with HAART duration of 4-6 years was high and they reported high social support. Other researchers too had reported varying duration on HAART to have a high social support. For instance, Wani (Wani, 2020) report high social support among people on HAART for 2-4 years while Adimora et al (Adimora et al., 2021) and Okonkwo et al (Okonkwo et al., 2016), reported > 5 years and >10 years respectively to have a high social support.

3.1. Strength of The Study

The instrument used in this study was easy to understand and suitable for young population with limited literacy level.

3.2. Study Limitation

The small sample size and hospital-based nature of the study limits its generalization to the general population.

4. Conclusion and Recommendation

The present study showed that the level of social support was high. Only gender was associated with perceived social support with females reporting higher level of social support than their male counterparts. Sero-discordant couples and participants who had disclosed their status to their partners reported high social support. Therefore, a network should be put in place to determine status of partners and disclosure of status should be encouraged. This is essential for people living with HIV in other access and maximize available social support.

Conflicts of Interest

Nil, this manuscript has been read and approved by all the authors, and the requirements for authorship as stated earlier in this document have been met, and each author believes that the manuscript represents honest work.

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Corresponding Author:

Adegoke Adepeju Olatayo
Bowen University Iwo and Consultant Family Physician,
Bowen University Teaching Hospital, Ogbomoso,
Nigeria

E-mail: adepeju.adegoke@bowen.edu.ng

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