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FOREWORD

I gratefully welcome our readers and scientific community to the volume 4 issue 1 of Federal Polytechnic – Journal of Pure and Applied Sciences (FEPI-JOPAS). This is a peer reviewed and accredited multi-disciplinary Journal of international repute which publishes short communication, full length research work, critical reviews and other review articles. The aim of FEDI-JOPAS is to provide intellectual bedrock for both indigenous and international scholars with impactful research work to express their research findings to a broader populace for better contriPution to knowledge. It is a current and beneficial platform for dissemination of latest research information to 21st Century researchers, professionals, policy makers, manufacturers, production staff, R & D personnel as well as governmental and non-governmental agencies.

In addition, basic and applied research efforts at the post covid-19 era must be resourcefully provided through novel contributions to knowledge to cope with the paradigm shift in our world. In this particular issue, you will find that Gabriel and co-workers assessed the nutritional status, food habits and health related quality of life among people living with HIV/AIDS attending Federal Medical Centre, Abeokuta. Owing to their findings, they recommend that effort should be made to increase social support and enhance the implementation of supporting policy in order to improve the quality of life of people living with HIV/AIDS. Also, Ogunyemi examined the effect of public relation practice on the performance of selected establishments in Abeokuta, Ogun State. Based on his finding, he recommends that hoteliers should accord and give cognizance to public relation practice.

Finally, as new research and experience broaden our understanding, changes in research methods, professional practices, or medical treatment may become necessary. I want to sincerely appreciate our laudable efforts of the esteemed Editorial Board members, the Authors and the reviewers and their contributions towards making the production of this edition a worthwhile adventure. It is imperative to know that authors are solely responsible for the information, date and authenticity of data provided in their articles submitted for publication in the Federal Polytechnic Ilaro – Journal of Pure and Applied Sciences (FEPI-JOPAS).

I am looking forward to receiving your manuscripts for the subsequent publications. You can visit our website (https://www.fepi-jopas.federalpolyilaro.edu.ng) for more information, or contact us via e-mail at fepi.jopas@federalpolyilaro.edu.ng

Thank you and best regards.

Prof. Olayinka O. AJANI

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Nutritional Status, Food Habit and Health-Related Quality of Life among People Living with HIV/AIDS (Plwha) "Attending" Federal Medical Centre, Abeokuta

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Abstract

The study assessed the nutritional status, food habits and health related quality of life among people living with HIV/AIDS attending Federal Medical Centre, Abeokuta. The study was descriptive cross-sectional survey in design involving 168 patients randomly selected from the hospital. A semi-structured questionnaire was utilised to get the socio-demographic information and food habit of the respondents. Nutritional status was determined using BMI and was calculated while results were classified using WHO standard. Data analysis was carried out using Statistical package for social sciences (SPSS v.20.0). Result shows that Meal skipping was common among 38.7% of the respondents and this was attributed to their busy schedule (18.5%). About 48.2% of the respondents had normal nutritional status, while 25.5%, 19.6% and 6.5% were under-weight, over-weight and obese respectively. Also, 63.3% of the respondents had poor quality of life in the general quality of life domain, 50% had good quality of life in the Physical and psychological health domain respectively. Moreso, 54.8% had good quality of life in level of independence domain, while 51.8%, 63.1% and 68.5% had poor quality of life in social relationship domain, environmental and spiritual domains respectively. Effort should be made to increase social support and enhance the implementation of supporting policy in order to improve the quality of life of people living with HIV/AIDS.

Key words: *Nutritional status, Quality of life, food habit, people living with HIV*

INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) is an illness brought about by a retrovirus known as Human Immunodeficiency Virus (HIV) that fights the body immune system cells and predisposes it to infections and diseases (Aishwarya, 2015). HIV epidemic remains a public health challenge of significant importance. Since the inception of the epidemic, about 79.3 million people have been infected, while 36.3 million deaths have been recorded from HIV/AIDS complications, globally (World Health Organization, 2021). Sub-Saharan Africa has been identified to carry a disproportionate burden of the virus, representing 74% of HIV-related deaths in 2013 (Ayesha & Quaraisha, 2016). UNAIDS estimates that in 2020, 20.6 million people and 4.7 million had HIV in Eastern and Southern Africa and Western as well as Central Africa, respectively (Joint United Nations Programme on HIV/AIDS, 2021). Nigeria has the highest population of people living with HIV/AIDS in the Western and Central Africa region, the second highest worldwide HIV epidemic and the largest proportions of fresh infections in Sub-Saharan Africa (AntiVirus Emergency Response Team, 2021). According to Statista (2022), 1.7 million people in Nigeria were living with HIV in 2020. Ogun state has the most noteworthy predominance of HIV among the states in the South Western zone in Nigeria, estimated at 1.6% (Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS), 2019).

Antiretroviral treatment has moved the view of HIV/AIDS from a deadly to a manageable disease and have improved the Quality of Life (QoL) of individuals living with HIV (Oluwafemi, 2012; Getandale and Teshale, 2019). It is believed that PLWHA, when

treated, have comparable life expectancy to healthy individuals (Popping *et al.*, 2021). However, researches have shown that they have inadequate nutrient intake, compromised nutritional status and poor quality of life (Thapa et al., 2015; Akwiwu, 2018). Studies show that a solid relationship exist between health related QoL and socioeconomic status, and health related indicators in low-income settings (Louwagie *et al.*, 2007; Thapa *et al.*, 2015), but the association between nutritional status and health related QoL is not yet clearly defined (Palermo *et al.*, 2013).

Malnutrition has been identified as a serious threat for people living with HIV/AIDS, because it places demand on nutritional status even at early stages when there are no obvious symptoms of HIV (Gabriel and Adepoju, 2021). Although adequate nutrition is not a cure for HIV infection but it is essential to maintain a protective immune system to sustain optimum nutritional status and quality of life (Aishwarya, 2015). Adequate nutrition can help improve QoL of people living with HIV (Anand *et al.*, 2012). The inability to meet nutritional needs could reduce immunity and increase the susceptibility of individuals to opportunistic infections, which can exacerbate malnutrition (Thapa *et al.*, 2015). People living with HIV/AIDS may suffer loss of appetite, difficulty in eating and reduced or compromised absorption of nutrients (Aishwarya, 2015).

Furthermore, food habits play a crucial role in nutrition. What people eat, why they eat, the time they eat and where they eat affect the overall nutrient intake and ultimately nutritional status (Gabriel and Adepoju, 2019). People living with HIV/AIDS have the tendency to engage in unhealthy dieting, meal skipping, as a result of loss of appetite, difficulty in eating and poor absorption of nutrients (FANTA, 2001). Unhealthy lifestyle such as physical inactivity and poor eating habit have been linked with health-related quality of life (HRQoL) and an individual's nutritional status (Adepoju and Gabriel, 2019). This study is therefore aimed at assessing the nutritional status, food habits and quality of life among people living with HIV/AIDS attending Federal Medical Centre, Abeokuta Ogun state.

MATERIALS AND METHODS

The research was conducted at the Federal Medical Centre, Abeokuta. Abeokuta is the capital of Ogun state and the biggest urban centre in the state. It is about 90 kilometres from Lagos and 740 kilometres from Abuja, the capital of Nigeria. With a postal code of 110, Abeokuta has an area of 71Km^2 and a population of 250, 278 at 2006 census. Federal Medical Centre, Abeokuta was established in 21st April, 1993 and provides medical services to its host state, and neighbouring states and the nation (https://fmcabeokuta.net).

It was a descriptive cross-sectional study involving apparently healthy individuals who were above 18 years, screened, positive to HIV, and also attending the hospital. Those who were under 18 years of age were exempted from the study.

The sample size was determined using Yamane (1967) formula

$$n = \frac{N}{1+N(e^2)}$$

N=Population size (250)
n = Sample size
e = Acceptable sample error (0.05)
95% confidence level and e=0.05

$$n = \frac{250}{1+250(0.05^2)}$$

$$n = \frac{250}{1+250(0.0025)}$$

$$n = \frac{250}{1+0.625}$$

$$n = \frac{250}{1.625}$$

n = 153.85 =154
Ten percent (10%) was added to account for attrition which made the sample size 170. However, two (2) of the respondents discontinued with the study which brought the sample size to 168.

A semi- structured questionnaire was used to collect data on the socio-demographic characteristics and food habits of the respondents. Anthropometric measurements such as body weight and height of the respondents were measured. Weight of the respondents was measured using SECA weighing scale with both arms by the sides, without shoes and cap, and with only light clothe on. The pointer of the scale was adjusted to zero before each measurement was taken, and recorded to the nearest kilogram. The height was taken with the participant heels, buttocks and scapular touching the height stick and looking straight. The height was measured while standing with the head fixed against the meter and recorded to the nearest meter. The Body Mass Index (BMI) was calculated and compared with the reference standard.

Data on the health-related quality of life (HRQoL) of respondents were obtained using WHOQoL-BREF and WHOQoL-HIV BREF instrument. The WHO-QoL-HIV BREF tool has domain scores and comprises 31 questions. Each question was evaluated on a 5-point Likert scale. One (1) indicates low negative perception while 5 shows high positive perceptions. Most of the domain scores are scaled in a positive direction where higher scores indicate higher quality of life, while seven (7) facets, which are question 3, 4, 5, 8, 9, 10, 31 are not scaled in a positive direction, that is, for those facets, higher scores do not indicate higher quality of life. Those facets were re-coded in a positive direction accordingly, so that high scores reflect higher quality of life. The six domains of QoL entail physical health, psychological health, level of independence, social relationship, environmental health, as well as spiritual health. The first two questions of WHO-QoL-HIV BREF examine the general quality of life (Getandale & Teshale, 2019). The questionnaires were administered by 2 nurses under training and with the assistance of a dietitian. The questions were translated into local (Yoruba) language which was 26 questions on QoL-BREF (Akinpelu, 2006). The other 5 questions present in QOLHIV-BREF but not on QOLBREF were translated by the researchers.

The quality-of-life questionnaire was scored and categorized according to the method described by Gebremichael, Hadush, Kebede, & Zegeye (2018). In order to identify predictors of QoL, the respondents were separated into two groups based on the mean score of the facet; "overall quality of life and general health perceptions" (range 1 to 5), a respondent with a mean score > 3.0 was categorised as having good quality of life, while the one with a mean score ≤ 3.0 is said to have poor QoL. Based on the "domain mean" (range 4-20) since mean scores multiplied by four make domain scores comparable with the scores in the WHOQoL-100, respondents with mean score >12.0 were categorised as having good QoL and the ones with mean score of ≤ 12.0 as having poor QOL.

This study was approved by the Health and Ethics Committee of the Federal Medical Centre, Abeokuta with a Protocol number: FMCA/479/HREC/01/2020/18. The patients were briefed about the objectives of the study and informed consent was taken from all the respondents prior to data collection. Absolute confidentiality was ensured during data collection, as name and address of the respondents were not captured in the questionnaire.

Statistical analysis

The data obtained from the study was subjected to descriptive and inferential statistic using statistical package for social sciences (SPSS V.20.0). Descriptive statistics such as frequency, percentage, mean and standard deviation was used. Inferential statistics (chi-square) was used to determine the association between the categorical variables and the difference between means was determined using analysis of variance (ANOVA).

RESULTS AND DISCUSSION

Results:

Socio-demographic and economic characteristics of the respondents as presented in Table 1 shows that a great fraction of the participants (54.8%) was female of Yoruba descent (57.1%) and within the age range of 29-39 years. Half (50%) of them were Christians and more than half (55.4%) of them came from polygamous homes. Also, majority of the participants (41.1%) were married while 25.6% of them were single. Moreso, 10.7%, 14.3% and 7.7% of the respondents were cohabiting, divorced and widowed respectively. The result also shows that majority of the respondents (26.8%) had secondary education, self-employed (40%) and earned above ₦20, 000 monthly (35.1%).

Table 1: Socio-demographic and economic characteristics of the respondents

Variables	Categorization	Frequency (N=168)	Percentage (%)
Sex			
	Male	76	45.2
	Female	92	54.8
Age			
	18 - 28 years	40	23.8
	29 - 39 years	55	32.7
	40 - 50 years	41	24.4
	50 years and above	31	18.5
	No response	1	0.6
Ethnic group			
	Yoruba	96	57.1
	Igbo	40	23.8
	Hausa	23	16.1
	Igala	1	0.6
	Tiv	2	1.2
	Urhobo	1	0.6
	Nupe	1	0.6
Religion			
	Christianity	84	50
	Islam	62	36.9
	Traditional	20	11.9
	No religion	2	1.2
Family Structure			
	Monogamy	74	44.0
	Polygamy	93	55.4

	No response	1	6
Type of family			
	Nuclear	81	48.2
	Extended	68	40.5
	Joint family	19	11.3
Marital status			
	Single	43	25.6
	Married	69	41.1
	Cohabiting	18	10.7
	Divorced	24	14.3
	Widowed	13	7.7
	No response	1	6
Highest educational level			
	No education	20	11.9
	Primary education	25	14.9
	Secondary education	45	26.8
	NCE/OND	41	19.0
	HND/B.Sc	32	19.0
	M.Sc	5	3.0
Present Occupation			
	Retired	11	6.5
	Self Employed	74	44.0
	Farming	17	10.1
	Civil Servant	18	10.7
	Petty Trading	27	16.1
	Employees of private organization	12	7.1
	Can no longer work for money	7	4.2
	No response	2	1.2
Estimated monthly income			

	₦1000-5000	12	7.1
	₦6000-10000	31	18.5
	₦11000-15000	39	23.2
	₦16000-20000	26	15.5
	₦20000 above	59	35.1
	No response	1	0.6

Furthermore, the food habit of people living with HIV/AIDS attending Federal Medical Centre, Abeokuta is presented in Table 2. The result show that 53.6%) of the respondents ate 3 times daily, 37.5% ate 2 times daily, 6.5% ate more than 3 times a day, while few (2.4%) did eat once daily. Skipping of meal was observed among less than half (38.7%) of them and the meal usually skipped was lunch. This meal skipping was attributed to busy schedules (18.5%). Moreover, a larger proportion (78.6%) of them ate in-between meals (snacks), and pastries was the usual snacks (45.8%). The result also shows that majority of them (67.9%) patronised food vendors and the meal usually bought from vendors was lunch (41.5%). Majority of the respondents (74.4%) reported that they did not smoke and more than half of them (53%) do take alcohol. Conversely, 25.6% of the respondents said they do smoke while 46.4% took alcohol.

Table 2: Food habit of the respondents

Variables	**Categorization**	**Frequency N=168**	**Percentage (%)**
How many times do you eat in a day?			
	Once	4	2.4
	Twice	63	37.5
	Thrice	90	53.6
	More than thrice	11	6.5
Do you skip meals?			
	Yes	65	38.7
	No	101	60.1
	No response	2	1.2
If yes, state the meal usually skipped?			
	Breakfast	14	8.3
	Lunch	34	20.2

	Dinner	11	6.5
	No response	8	4.8
	Not applicable	101	60.1
What is the reason for skipping meal?			
	Busy schedules	31	18.5
	Tooth pain	6	3.6
	Tiredness	3	1.8
	No appetite	9	5.4
	No response	18	10.7
	Not applicable	101	60.1
Do you take breakfast?			
	Yes	152	90.5
	No	15	8.9
What time do you take breakfast?			
	6-7am	28	16.7
	7.01-8am	76	45.2
	8.01-9am	30	17.9
	9.01-10am	17	10.1
	Other times	2	1.2
	No response	1	0.6
	Not applicable	14	8.3
Do you take lunch?			
	Yes	134	79.8
	No	34	20.2
What time do you take lunch?			
	12.00-1.00pm	23	13.7
	1.01-2.00pm	47	28.0
	2.01-3.00pm	48	28.6
	3.01-4.00pm	14	8.3

	Others	1	0.6
	No response	1	0.6
	Not applicable	34	20.2
Do you take dinner?			
	Yes	154	91.7
	No	14	8.3
What time do you usually take dinner?			
	6.00-7.00pm	19	11.3
	7.01-8.00pm	46	27.4
	8.01-9.00pm	55	32.7
	9.01-10.00pm	26	15.5
	Above 10.00pm	8	4.8
	No response	1	0.6
	Not applicable	13	7.7
Do you eat in between meals?			
	Yes	132	78.6
	No	36	21.4
If yes, What did you usually take?			
	Fruits/vegetables	37	22.0
	Pastries	77	45.8
	Soft drinks	10	6.0
	Others	5	3.0
	No response	4	2.4
	Not applicable	35	20.8
If no, why?			
	No reason	8	4.8
	Lack of fund	20	11.9
	Watching weight	9	5.4

	No response	3	1.8
	Not applicable	128	76.2
Do you buy food from vendors?			
	Yes	114	67.9
	No	54	32.1
If yes, how often?			
	Everyday	10	6.0
	Frequently	40	23.8
	Occasionally	64	38.1
	No response	1	0.6
	Not applicable	53	31.5
Which meal do you usually buy from vendors?			
	Breakfast	19	11.3
	Lunch	69	41.1
	Dinner	25	14.9
	No response	2	1.2
	Not applicable	53	31.5
Do you prefer meals from vendors to your family diet?			
	Yes	31	18.5
	No	136	81.0
	No response	1	0.6
How often do you prepare meal in your house?			
	Everyday	105	62.5
	Frequently	47	28.0
	Occasionally	16	9.5
Do you smoke?			
	Yes	43	25.6
	No	125	74.4

If yes, how often do you smoke?			
	Once	17	10.1
	Twice	12	7.1
	More than twice	12	17.1
	No response	2	1.2
	Not applicable	125	74.4
Do you take alcohol?			
	Yes	78	46.4
	No	89	53.0
	No response	1	0.6

Table 3 shows the anthropometry measurement of the study participants. The male respondents had the mean weight, height and body mass index (BMI) of 70.804 ± 11.02kg, 1.7689 ± 0.12m, and 22.936 ±4.68kg/m^2 respectively, while the females had mean weight of 68.617 ± 16.36kg, height of 1.7632 ± 0.12m, and body mass index of 22.201±5.43kg/ m^2 respectively. Also, no significant different ($p>0.05$) was observed between the mean weight, height and body mass index of the respondents.

Table 3: Anthropometry measurement of the respondents

Sex	**Weight (kg)**	**Height (m)**	**BMI(kg/m^2)**
Male	70.80±11.02	1.77±0.12	22.94±4.68
Female	68.62±16.36	1.76±0.12	22.20±5.43
f	0.99	0.09	0.86
p-value	0.32	0.76	0.36

**significant at $p< 0.05$*

The nutritional status of the respondents as assessed by BMI is presented in Figure 1. It reveals that almost half (48.2%) had normal nutritional status, 25.5% of them were underweight, while 19.6% and 6.5% were overweight and obese.

Figure 1

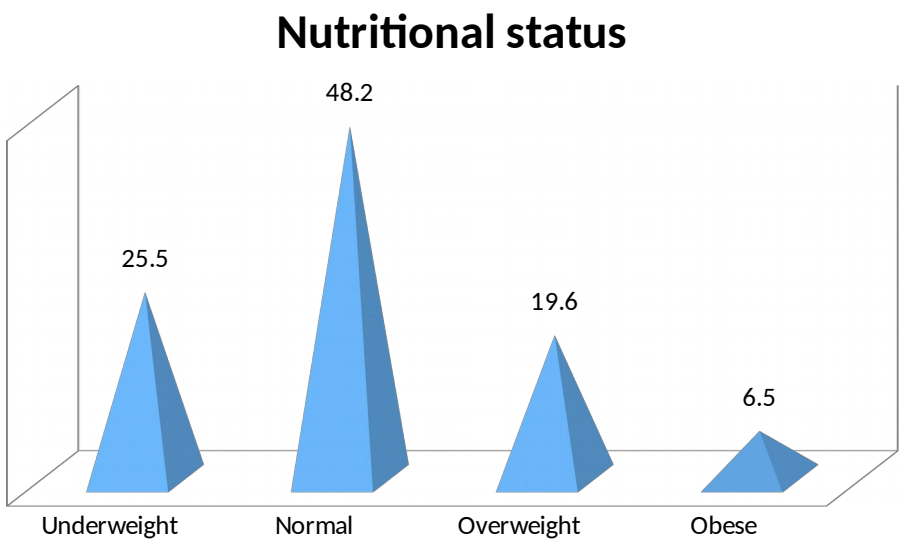

Table 4 shows the respondent's quality of life which was divided into 6 domains. Majority of the respondents (63.7%) had poor quality of life in the general quality of life domain, while half of the respondents (50%) had good quality of life in the Physical health and psychological health domain respectively. More than half of the respondents (54.8%) had good quality of life in the Level of independence domain, while majority of the respondents had poor quality of life in social relationship (51.8%, Environmental domain (63.1%) and spiritual/religion (68.5%) respectively.

Table 4: Quality of life of the respondents

	Good (%)	Poor (%)
General QoL	61(36.3)	107(63.7)
Physical Health	84(50)	84(50)
Psychological health	84(50)	84(50)
Level of independence	92(54.8)	76(45.2)
Social relationship	81(48.2)	87(51.8)
Environmental domain	62(36.9)	106(63.1)
Spirituality/religion	53(31.5)	115(68.5)

Significant association ($p>0.05$) was observed between the nutritional status and food habit of the respondents except reason for meal skipping and snacking as presented in table 4.

Table 5: Association between nutritional status and food habit of the respondents.

Food habit	χ2	Df	p-value
Number of meal consumed per day	20.714	9	0.01*
Frequency of meal skipping	19.782	12	0.05*
Reasons for meal skipping	17.661	15	0.28
Snacking	1.909	3	0.59
Food vendor patronage	7.770	3	0.05*
Frequency of food vendor patronage	22.724	12	0.03*
Smoking	17.610	3	0.00*
Alcohol consumption	17.664	12	0.00*

significant at p< 0.05

DISCUSSION

The study was aimed at assessing nutritional status, food habit and health related quality of life of people living with HIV/AIDS attending Federal Medical Centre, Abeokuta. In this study, there were more female cases than male, this might be due to high HIV/AIDS prevalence among females than males which is in consonance with several studies (Mahathir, 1997; Aishwarya, 2015; Otuneye *et al.,* 2017; AVERT, 2019; UNAIDS, 2020). According to UNAIDS (2020), young females who are between 15 – 24 years of age in sub-Sahara Africa are twofold more likely to be living with HIV than men. Women especially adolescent girls are more vulnerable to HIV due to many factors which include unequal cultural and socio-economic status, lack of access to healthcare, poverty, lack of access to education, sugar daddy culture and transactional sex and child marriage (AVERT, 2019). The educational levels show that most of the respondents are educated and believed to have certain degree knowledge about HIV. Education has been acknowledged to be a social determinant of health and also a social vaccine against contracting HIV/AIDS (McGill, 2016; Leon *et al,* 2017). This high prevalence of HIV among educated individuals suggests that there is likely disregard or refusal to adopt the ABC rules concerning the prevention of HIV which are **A**bstinence, **B**eing faithful to one's sexual partner and the use of **C**ondom. However, findings of Odimayo *et al.* (2010) who reported that persons with primary and no level of education are more vulnerable. Majority of the respondents are married. It is tempting to say that most of the transmission of the virus may be by heterosexual contacts and not dominated by other means such as the use of infested tools, blood transfusion amongst others. This is in consonance with the research carried out by Laah and Ayiwulu (2010) on the socio-demographic characteristics of patients screened for HIV/AIDS in Eggon, Nasarawa state, Nigeria. They reported that 60.3% of the patients diagnosed with HIV/AIDS were married people. Also, most of the study participants fell within the age range of 29-39 years, practiced Christian religion, belonged to Yoruba ethnic group and earned above ₦20000 monthly.

"Quality of life refers to the degree of excellence in a person's life at any given period that contributes to satisfaction and happiness of the person and benefits society" (Oguntibeju, 2012). This study showed that majority (63.7%) of PLWHA had poor quality of life score in general and in all other domains of health-related quality of life except level of independence, physical health and psychological health. This is contrary to the finding of Getandale and Teshale (2019) in a study

conducted in Ethiopia and that of Venter *et al.* (2009) in a study conducted among HIV/AIDS patients in South Africa. They reported high proportion of good quality of life among people living with HIV. This disparity may be due to differences in socio-demographic and economic characteristics, study design and clinical status of the respondents (Getandale and Teshale, 2019). How long an individual is infected with HIV can also affect the quality of life. De Carvalho, Policarpo and Moreira (2017) attributed the better QoL outcomes in their study to the recency in diagnosis of HIV among their patients.

Among the respondents, the best health related QoL was observed in the domains related to level of independence, physical health and psychological health. This finding is contrary to Ethiopan study (Getandale & Teshale, 2019) which observed best QoL in the dimensions related to social relationship and spirituality. This finding is in line with Nigerian study (Folasire, *et al.*, 2012). The high level of independence is suggestive of the fact that majority of the respondents were below 50 years of age. The level of independence domain measures aspects such as mobility, activities of daily living, dependence on medication and work capacity. The lower scores in the social and environmental domain may be a reflection of the discrimination and stigmatisation that PLWH experience in developing countries, including Nigeria (Folasire *et al.*, 2012).

Nutritional and dietary practices play an important role in the rapid progression of HIV. These aspects are key factors in evaluating the quality of life among PLWHA (Enwereji, et al, 2019). This study found that 53.7% of the respondents consumed at least three meals in a day, with the rest consuming two meals or less a day. Not eating enough food will lead to a lower nutrient intake that matches the increased nutrient demands for PLWHA. In a study conducted among HIV patients in India, Aishwarya (2015) found food/nutrient intake of the respondents to be lower than the recommended dietary allowance. Meal skipping was observed among less than half (38.7%) of the respondents, and the meal usually skipped was lunch. This meal skipping was attributed to busy schedules. In order to maintain an optimum nutritional status that will boost the immune system, people living with HIV/AIDS are expected to eat smaller portion of food more frequently throughout the day, eat healthful in-between meals (snacks) to increase nutrient intake, and consume variety of foods that will supply all the nutrients the body needs (USAID, 2001).

Furthermore, majority of the respondents had normal BMI while few of the respondents were found to be obese. Co-existence of underweight and overweight was also observed among the respondents. The prevalence of overweight and obesity observed in this study was lower than that reported by Khatri *et al.* (2020) in a study conducted in Nepal on nutritional status and its associated factors among people living with HIV. In a similar study, Thapa *et al.* (2015) reported higher normal nutritional status; and the proportion of underweight is lower than the present study.

CONCLUSION

High prevalence of underweight (25.5%) which co-exist with overweight and obesity was observed among the study participants and was found to be significantly associated with their food habit. A larger proportion of the respondents had poor general HRQOL and in all domains of quality of life except for level of independence and physical and psychological domain. Effort should be made to increase social support and enhance the implementation of supporting policy in other to improve the quality of life of people living with HIV/AIDS. Also, the inclusion of nutrition education in the management of HIV/AIDS will help improve nutrient intake and nutritional status.

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