

Research Article

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Knowledge, Attitude and Practice of Adequate Diet Among People Living with HIV In Auchi, Edo State

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Abstract

Human immunodeficiency virus (HIV)/Acquired Immuno Deficiency Syndrome (AIDS) is a global public health challenge which affects individuals across various age groups, social strata, and geographic locations. Also, the roles of adequate nutrition in the management of diseases including HIV cannot be underestimated. The study aimed to assess the knowledge, attitudes and practices of adequate diet among people living with HIV in Auchi, a developing town in Edo State. A descriptive cross-sectional study design was employed. Data was collected from 90 individuals living with HIV in Auchi, Edo State using a structured questionnaire. The findings revealed that the majority of respondents had good knowledge (92.22%) and a positive attitude (77.78%) toward maintaining a nutritious diet. However, 55.56% exhibited good dietary practices while 44.44% displayed poor practices. Among the factors affecting dietary practices were financial constraints (72.22%), challenges in accessing fresh fruits and vegetables (77.78%), cultural beliefs influencing dietary choices (55.56%), emotional stress or depression affecting eating habits (61.11%), social stigma or discrimination related to HIV (44.44%), and the availability of adequate nutritional counseling (66.67%). The knowledge and attitude regarding adequate diet among people living with HIV in Auchi, Edo State was generally high. However, there is a need to translate this knowledge into improved dietary practices for improving disease outcomes. A patient-centered and interdisciplinary approach to nutritional care is also recommended.

Keywords: human immunodeficiency virus; acquired immuno deficiency syndrome; hiv; aids; adequate diet

Introduction

Human immunodeficiency virus (HIV) is a Ribo nucleotide androgen (RNA) virus in the family of Retroviridae and subfamily Lentiviridae implicated in the etiology of Acquired Immuno Deficiency Syndrome (AIDS) [1]. HIV and AIDS caused over 20 million deaths globally with significant proportions occurring in sub-Saharan Africa [2]. HIV can be found in most human body fluids including blood, semen, vaginal fluids and breast milk. HIV is transmitted through unprotected sexual activity, contact with infected or contaminated blood or blood products; use of contaminated skin piercing instruments or equipment and from infected mother to her child [1]. AIDS, a syndrome of immune dysregulation, dysfunction and deficiency is defined as all situations involving immuno suppression as measured by absolute CD4 lymphocytes count for CD4/CD8 ratio [3]. HIV and AIDS remain the greatest health challenges of this age [4]. It has been stated that the AIDS phenomenon is nothing short of war on humanity. The heavy toll on human lives, large scale

devastation and the emasculation of the human spirit occasioned by the scourge were testaments [5].

Nutrition plays vital roles in the maintenance of health and wellness and prevention of disease development and progression [6-12]. Nutrition is a source of antioxidants and anti-inflammatory substances which are necessary for boosting immunity [13-16]. Dietary status is a measure of adequacy of nutrient intake of an individual or a population in relation to his or their health [17]. Dietary status is a strong predictor of survival and functional status among people living with HIV/AIDS. Dietary problems may occur at any stage of disease and can contribute to impaired immune response, accelerated disease progression, increased frequency and severity of opportunistic infections and decreased effectiveness of HIV and AIDS medications.

People living with HIV face a vicious cycle in which repeated episodes of illness caused by HIV lead to malnutrition. HIV damages the immune system [9,11] and the repeated illness that ensues reduces appetite. Nutrients lost from vomiting and diarrhoea and the

use of medications [9,17]. The infection also interferes with the body's ability to absorb and use nutrients, which are needed to immunity [17].

Nutritional status and nutritional choices are influenced by the level of geographical development [18]. People who live in rural areas have access to locally grown food s and inexpensive healthy nutritional products when compared to urban settlers [19,20]. Auchi is a developing town in Etsako Local Government and one of the fast-growing urban areas with a population of 150, 000 people [21]. The aim of the study was to assess the knowledge, attitudes and practices of adequate diet among people living with HIV in Auchi in Edo State.

Materials and Methods

Research Design

A descriptive cross sectional study design was used to determine the knowledge attitude and practice of adequate diet among people living with HIV in Auchi, Edo state.

Research Setting

The setting chosen for this study was Auchi, Edo state. Auchi is a town located in Etsako west local government area of Edo state with over 150,000 populations (2016 census). Auchi town is divided into five grand quarters which could also be referred to as districts which in turn are made up of 25 villages. The five grand quarters are: Utsogun, Akpekpe, Aibotse, Igbhei and Iyekhei.

Sample Size

The average population of people living with HIV in Auchi, Edo state was 103. The target populations for this study are people living with HIV patients in Auchi, Edo state. The sample size was determined using Yamane's formula.

Sampling Technique

This research utilized response driven sampling in selecting the 91 respondents from the total population who satisfied the inclusion criteria.

Inclusion Criteria

1. People living with HIV/AIDS.
2. People living in Auchi, Edo state.
3. Those who have lived in Auchi for three or more years.

Method of Data Collection

Data collection data was collected within the period of 3 weeks through self-administered questionnaire.

Data was collected by carefully administering the questionnaire to the people living with HIV in Auchi, Edo state. The respondents agreed to take part after consent was taken. The reason for the questionnaire is assess the knowledge, attitude and practice of adequate diet among people living with HIV in Auchi, Edo state. The respondent's name was kept anonymous in order to retain their confidentiality. The questionnaire is divided into 5 sections comprises of 25 questions:

Section A: contains Socio demographic Variables comprises of 5 questions

Section B: contains knowledge of Adequate Diet among People Living with HIV which consists of 7 questions.

Section C: contains attitude of Adequate Diet among People Living with HIV which consists of 5 questions.

Section D: contains practice of Adequate Diet among People Living with HIV which consists of 4 questions.

Section E: contains factors affecting the practice of adequate diet among people living with HIV in Auchi, Edo State, which consist of 4 questions.

Validity of Instrument

The validity of the instrument was measured by comparing the content of the instrument with the literature review (content validity). To ensure the validity of the research instrument, the questionnaire was submitted to the project supervisor who made necessary corrections and suggestions which was implemented.

Method of Data Analysis

The descriptive analysis was done using statistical package for Socio Sciences (SPSS) 20.0 version. The data obtained were collated, tallied and summarized using percentages and results were presented in a table.

Ethical Consideration

A signed letter of introduction was obtained from the department of nursing science, Edo State University Uzairue. Approval to conduct research was obtained from the head of Etsako West Local Government area Auchi, Edo state to proceed with the research. A verbal informed consent was obtained from the participants. Anonymity was ensured in the process of data collection.

Results

Table 1 showed the socio-demographic characteristics of the respondents participating in the study. The

respondents' age distribution shows that 27.78% of the participants were aged 45 and above. 22.22% were between ages 27-32 also has a substantial representation at 22.22%. The study has a distribution of sex that consisted of male (44.44%) and female (55.56%). The majority of the respondents were either married (50%) or single (27.78%). The study predominantly includes

respondents who identified with Christianity (83.33%). The proportions of Islamic (11.11%) and Traditional (5.56%) religious affiliations reflect some religious diversity within the sample. The respondents have varying educational backgrounds. A majority (55.56%) have completed secondary education, while 27.78% have tertiary education, and 16.67% have only completed primary education.

Table 1: Socio-demographic characteristics of the respondents.

Demographic Variable	Category	Frequency	Percentage
Age	15-20	5	5.56%
	21-26	15	16.67%
	27-32	20	22.22%
	33-38	15	16.67%
	39-44	10	11.11%
	45 and above	25	27.78%
Sex	Male	40	44.44%
	Female	50	55.56%
Marital Status	Single	25	27.78%
	Married	45	50%
	Divorced	10	11.11%
	Widowed	10	11.11%
Religion	Christianity	75	83.33%
	Islamic	10	11.11%
	Traditional	5	5.56%
Educational Level	Primary	15	16.67%
	Secondary	50	55.56%
	Tertiary	25	27.78%

Table 2 provided insights into the knowledge of adequate diet among people living with HIV in Auchi, Edo State. The majority of respondents (83.33%) believed that maintaining a proper diet can impact the management of HIV. Approximately 72.22% of the respondents claimed to know the specific dietary requirements for people living with HIV/AIDS (PLWHA). About 77.78% of the respondents were familiar with the importance of adequate protein intake. An impressive 88.89% of the

respondents understood the significance of consuming fruits and vegetables. While 66.67% were aware of the role of whole grains in a PLWHA's diet. 94.44% of the respondents recognized the importance of staying well-hydrated. Overall, the findings in Table 2 suggest that the majority of respondents have a good understanding of various aspects related to adequate diet for people living with HIV.

Table 2: Knowledge of Adequate Diet among People Living with HIV.

Statements	YES	NO
Do you believe that maintaining a proper diet can impact the management of HIV?	75 (83.33%)	15 (16.67%)
Do you know the specific dietary requirements for PLWHA?	65 (72.22%)	25 (27.78%)
Are you familiar with the importance of adequate protein intake?	70 (77.78%)	20 (22.22%)
Do you understand the significance of consuming fruits and vegetables?	80 (88.89%)	10 (11.11%)
Are you aware of the role of whole grains in a PLWHA's diet?	60 (66.67%)	30 (33.33%)
Do you know about the importance of staying well-hydrated?	85 (94.44%)	5 (5.56%)

The table demonstrates that the majority of respondents (92.22%) have a high level of knowledge

about adequate diet, while a smaller proportion (7.78%) has a low level of knowledge on Adequate Diet.

Table 3: Summary of Respondents' Level of Knowledge about Adequate Diet.

Level of Knowledge	Frequency (f)	Percentage (%)
High	83	92.22%
Low	7	7.78%

Table 4 presented the attitudes of people living with HIV in Auchi, Edo State, regarding adequate diet. The majority of respondents (77.78%) believed that maintaining a nutritious diet is important for their overall health. Approximately 72.22% of respondents expressed confidence in their ability to make informed dietary choices to support their health. An overwhelming majority (83.33%) recognized that adhering to dietary recommendations can have a

positive impact on their immune system's strength. A significant portion (88.89%) was open to receiving dietary counseling or guidance from healthcare professionals or nutritionists. Around 66.67% of respondents found dietary restrictions or recommendations challenging to follow due to their HIV diagnosis. 77.78% of respondents have sought information or resources about HIV-specific dietary guidelines to enhance their well-being.

Table 3: Attitude of Adequate Diet among People Living with HIV.

Statements	YES	NO
Do you believe that maintaining a nutritious diet is important for your overall health as a person living with HIV?	70 (77.78%)	20 (22.22%)
Are you confident in your ability to make informed dietary choices that support your health as a PLWHA?	65 (72.22%)	25 (27.78%)
Do you think that adhering to dietary recommendations can positively impact your immune system's strength?	75 (83.33%)	15 (16.67%)
Are you open to receiving dietary counseling or guidance from healthcare professionals or nutritionists?	80 (88.89%)	10 (11.11%)
Do you consider dietary restrictions or recommendations challenging to follow due to the HIV diagnosis?	60 (66.67%)	30 (33.33%)
Have you sought information or resources about HIV-specific dietary guidelines to enhance your well-being?	70 (77.78%)	20 (22.22%)

Discussion

HIV/AIDS epidemic is a global public health concern which forms one of the most serious challenges to the human race especially in terms of its adverse effects on social and economic development [2,22]. Since nutritional choices affect development and progression of disease [23,24], the study was designed to assess the knowledge, attitudes and practices of adequate diet among people living with HIV in Auchi, a developing town in Edo State.

In this study, the majority (55.56% of the respondents) were females. This gender distribution is consistent with studies conducted by Masuki and Lan, (2014) [25]. The study revealed that respondents in the age group of 27-32 years old were the most prominent, accounting for 22.22% of the total respondents, followed by those aged 45 and above at

27.78%. Regarding marital status, the study found that more than half of the respondents were married, constituting 50% of the total respondents.

The findings revealed that a substantial proportion of the respondents have a good understanding of various aspects related to adequate diet for people living with HIV. For instance, a majority of the participants (83.33%) believed that maintaining a proper diet can impact the management of HIV indicating a strong awareness of the importance of diet for HIV management. Moreover, approximately 72.22% of the respondents knew the specific dietary requirements for people living with HIV, showing a reasonable level of knowledge regarding the nutritional needs of individuals with HIV.

Furthermore, 88.89% of the respondents understood the significance of consuming fruits and vegetables, which are rich sources of essential nutrients,

micronutrients and antioxidants required for boosting immunity. Additionally, a substantial 94.44% of the participants were aware of the importance of staying well-hydrated, which is vital for overall health, especially for those with HIV. Although 66.67% of the respondents were aware of the role of whole grains in a PLWHA's diet, there is need for more education.

The findings of the study indicated a predominantly high attitude among the respondents. 77.78% of the participants believed that maintaining a nutritious diet is important for their overall health as individuals living with HIV. This positive attitude is essential as it reflects the recognition of the significance of dietary choices in managing HIV. Moreover, 83.33% of the respondents think that adhering to dietary recommendations can positively impact their immune system's strength. This positive perception indicates an understanding of the potential health benefits of dietary compliance.

Additionally, 88.89% of the participants were open to receiving dietary counseling or guidance from healthcare professionals or nutritionists. This willingness to seek professional guidance demonstrates a proactive approach to managing their dietary needs. However, it's noteworthy that 66.67% of respondents find dietary restrictions or recommendations challenging to follow due to their HIV diagnosis. This highlighted a potential area for intervention and support to help individuals overcome these challenges. The high level of awareness regarding the importance of adequate protein intake and the significance of consuming fruits and vegetables is consistent with prior research [25-27].

It is note-worthy that approximately 44.44% of the respondents currently utilized dietary supplements or nutritional support as part of their HIV management. While this percentage is fair, there is room for improvement as far as utilization of additional dietary resources that could benefit their health is concerned. On a positive note, 66.67% of the respondents have participated in educational programs or received guidance related to nutrition and HIV management. This active engagement in educational programs suggests a willingness to make informed dietary choices. Furthermore, 61.11% of the participants claimed to consume a variety of fruits and vegetables regularly as part of their daily diet. This is essential for obtaining essential nutrients and antioxidants that support overall health. However, it's noteworthy that

only 50% of the respondents follow specific dietary recommendations provided by healthcare professionals or nutritionists. Additionally, one-third (33.33%) of the respondents experienced specific dietary challenges due to their HIV status. These challenges may include restrictions or difficulties related to their dietary choices, which can impact their dietary practices [6,9,28].

In the study, several factors influenced dietary practices among the respondents. Financial constraints were identified as a barrier by 72.22% of the participants, indicating that economic challenges can hinder their ability to maintain a nutritious diet. Accessing fresh fruits and vegetables was cited as a challenge by 77.78% of respondents, highlighting the importance of addressing accessibility issues to promote healthier dietary choices. The influence of cultural beliefs or practices on dietary choices was acknowledged by 55.56% of the participants. This underscores the significance of considering cultural factors when designing dietary interventions. Emotional stress or depression affecting eating habits was reported by 61.11% of respondents, emphasizing the need for holistic support that addresses mental health in addition to dietary concerns. Furthermore, 44.44% of the respondents mentioned the impact of social stigma or discrimination related to HIV on their dietary practices, indicating the importance of creating a supportive and non-discriminatory environment. Approximately 66.67% of the participants received adequate nutritional counseling or guidance from healthcare providers or dietitians, suggesting that professional support is available for many individuals.

Future research should focus on developing and evaluating the effectiveness of nutritional interventions specific to people living with HIV. These interventions should target financial constraints, access to fresh produce and emotional well-being as potential barriers to adequate nutrition. Research into culturally competent care for people living with HIV can help in understanding how cultural beliefs and practices affect dietary choices. This can lead to more culturally sensitive healthcare and dietary recommendations.

Conclusion

In conclusion, this study provides valuable insights into the knowledge, attitudes, and practices of individuals living with HIV regarding adequate diet.

The findings of the study indicated good knowledge and attitudes regarding adequate diet among people living with HIV in Auchi, Edo State. However, there is room for improvement in the translation of this knowledge into practice. Dietary challenges related to HIV status must be addressed to ensure better nutritional outcomes for individuals living with HIV. The study highlights the need for a patient-centered and interdisciplinary approach to nutritional care.

Abbreviations

AIDS: Acquired Immuno Deficiency Syndrome

HIV: Human Immunodeficiency Virus

Declarations

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Conflict of Interest

None.

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