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Nutritional Quality and Prevalence of Diseases among Young Adults in Internally Displaced Persons Camps in Bayelsa State, Nigeria

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Abstract: The study investigated the nutritional quality and prevalence of diseases among young adults in internally displaced persons camps in Bayelsa State, Nigeria. The study was a cross-sectional study that sampled 120 young adults aged 18-30 years across our (4) IDPs camps in Bayelsa State. The structured 42-item instrument titled "Nutritional Quality and Prevalence of Diseases Among Displaced Adults Scale" (NQPDADAS) was used for the collection of data analyzed using mean and standard deviation as well as regression analysis. The study revealed that the insufficient intake of the daily quantity of vitamins, minerals, vegetables, fruits, water, fats and oil as well as low intake of carbohydrates, protein and fibre rich foods (like oaks, beans, maize, etc.) constituted unhealthy dietary pattern among young adults in IDP camps in Bayelsa State. Also, the study found that the effects of unhealthy dieting pre-disposed young adults in IDP camps in Bayelsa State to economically sapping and fatal nutritional diseases such as obesity, cholera, kwashiorkor, diarrhoea, malnutrition, malaria, dysentery, chickenpox and tuberculosis. The study concluded that the lifestyle and dietary patterns of young adults in IDPs camps in Bayesa State was grossly unhygienic, generally unhealthy as well as boring without sports, recreational and brain training games (like scrabble, chess, etc.). The study recommended among others that governments (federal, state and local) should include nutritionist into emergency/disaster management committees in order for them to desire appropriate meals with the daily required protein, minerals, vitamins, carbohydrates, fats and oil for the healthiness of young adults in IDPs camps.

Keywords: Nutritional Quality, Prevalence, Diseases, Young Adults, Internally Displaced Persons' Camp.

Introduction

Internal Displace Persons (IDPs) camp is generally a temporary and safe shelter for displaced persons that are exiled or evacuated from their homes due to communal, bandit, terrorist and cult crisis or attacks including disasters such as flooding, erosion and pandemic (Nwabughiogu, 2015). Equally, internal displace person are largely individuals that are forced or coerced to leave their homes to a central place within the same country due to natural disasters, conflicts and wars that disorganizes and destroys their livelihood, peaceful coexistence, businesses, families and properties (UNHCR, 2020). As at 2022, Nigeria was home to 3.6 million IDPs, out of which 1.9 million displaced persons were living in protracted

displacement in the North East and North West, with the rest spread in Abuja, Benue, Lagos and Koji (UNHCR, 2023). The issue of protracted displacement have become the tales and experiences that have changed and redefined the narratives in internal displace persons (IDPs) camps especially in Nigeria.

The effect of conflicts, disasters and uprisings that displace and confine people to certain enclosed location (like IDPs camp) could lead to the disruption of normal social interactions, livelihood and career that would negatively impact on the socio-economic statuses of the dislodged persons (Nwabughiogu, 2015). Accordingly, negative socioeconomic status could eventually predict an individual emotional state and living conditions, which will in turn significantly influence the diet quality of displace persons across varying age stratification (such as infants, children, adolescents, adults and even the aged). This implies that those in IDPs (internally displaced persons) camps could be said to be those literally living in a worsening, unpalatable and crisis conditions that could affect their diet quality. Implicitly, the poor dieting nature of majority of IDPs that are just fighting for survival emanates from them eating low nutrient, high fibre, high calorie, poorly cooked and even low appetizing food that could predispose them to nutritional diseases like obesity, and other non-communicable diseases in the future.

Internal displace persons camp in Abuja and other parts of Nigeria could be regarded as a place of tears, uncertainties and sufferings (Nwabughiogu, 2015). Thus, the sufferings experienced by IDPs could be propelled by the lackadaisical attitude of governments (federal, state and local) including the slothfulness of communities and Non-Governmental Organizations (NGOs) to care and provide adequate facilities for persons in IDP camps in Nigeria. This situation could lead to the erroneous ascription of persons in IDPs camps as “refugees” that are often restricted and treated with arrogance and disdain by constituted authorities. Thus, the erroneous description of displaced persons as refugees is contrary to the assertion of Bottigliero (2002), which mentioned that displaced persons in their country do not fall within the legal definition of a refugee.

Similarly, the controlled and regimented nature of activities in temporary and restricted settlements like the internally displaced persons (IDPs) camp makes this abode as a place of stress and scarcity that even permeates to poor dieting behaviour (Deliens et al., 2014). This implies that the lacks, cries, miseries and sufferings experienced by displaced persons could among other things emanate from nutritional related issues. Moreover, the disordered eating behaviours and even poor-quality food as well as the uncoordinated schedules and unsanitary nature in mainly IDPs camps could be responsible for the escalation of diseases with the propensity to speedily kill more than the crisis that induced their displacements (Sogari et al., 2018).

Furthermore, the frequent consumption of small or large quantities of unhealthy food could lead to an increase in individuals including young adults body mass index (BMI) that is often associated with obesity, etc. (Mróz et al., 2022). Also, the unhealthy and poor-quality nutrition among displaced persons makes them to be confronted with low immunity likely to make them susceptible to different nutritional diseases. These nutritional diseases are malnutrition, kwashiorkor (severe protein malnutrition), dysentery (infection of the intestines), diarrhea or diarrhoea (bleeding, abdominal cramp and watery stools), chickenpox (itchy rash breaks mostly on the face), cholera (acute diarrheal illness caused by infection of the intestines), tuberculosis, malaria among others terminal and economic-sapping diseases (Asouzu, 2014; 2017; 2020; 2021).

Young adulthood (i.e., 18-25 years) is an important period to establish good habits and healthy eating patterns that would help to build immunity and prevent the risk of chronic diseases with the propensity to affect their present and latter quality of life (Diaz et al., 2023). Thus, young adults’ knowledge of the right quantity of vitamins, protein, minerals, carbohydrates, fats and oil that come with the intake of fruits, vegetables, beans, plantains, millet, rice, and oaks with high fibre content that helps to prevent the

incidence of obesity, kidney, renal malfunctioning among other nutritionally-induced diseases (Antonio et al., 2016; Jhee et al., 2019). In specificity, adherence to the daily required quantity of fruits, vegetables, protein and fibre-rich foods rich could culminate to the right dietary pattern and food security (Betancourt-Núñez et al., 2023).

Conversely, the goal and expectation of right dietary pattern could be thwarted by the unceremonious and sometimes conscription of a good number of young adults in IDPs camp in response to emergencies (like flooding, earthquake, landslide, erosion and even pandemic) as well as when fleeing attacks (like terrorist, bandit, cultist, unknown gun men and even communal). Thus, the restrictive nature of this IDPs camps could make them to lose certain rights and privileges even pertaining to their dieting patterns as the case may have been when they were in their homes or families. Matsumura et al. (2022) observed that the dietary pattern wherein young persons are predisposed to skipping meal like breakfast and substituting it with alcohol consumption could be categorized as unhealthy habits that increases their vulnerability to the associated toxic effects.

Dietary patterns are defined as the selection or combination of different quantities or proportions of foods or drinks with the right nutrients in diets as well as the frequency with which they are habitually or regularly consumed by individuals (Betancourt-Núñez et al., 2023). This implies that the propriety, timeliness and regularity at which the daily required nutrients are consumed would eventually enhance the health and development of humans' especially young adults. The awareness on the right dietary patterns is key towards healthy living of all humans. For instance, examining the nutritional quality of diets stems on the awareness, consideration and availability of the essential nutrients within the required proportion that would enhance the nourishment, wellbeing and healthy development of especially young adults (Asouzu, 2017).

From the foregoing, it could be deduced that the dietary patterns in the Nigerian IDPs camps could be literally said to be the abode of malnutrition and outbreak of preventable diseases that culminate to poor quality health. This is as a result of the compromised, enclosed and overcrowded environment of a typical IDPs camp in Nigeria without facilities like adequate housing, electricity, mosquito net, sanitation, pipe borne water, conveniences (like toilets, bathrooms, etc.), could be to meet the carrying capacity of such IDP camp. Accordingly, the overcrowded and enclosed nature of internally displaced persons camps leads to the scenario where if one person who develops cough, that cough can spread to almost all the people in that camp.

Problem Specification

Individuals in internally displaced person camps are supposed to be momentarily separated from their families as well as disrupted from their culture, inheritances, occupation, lifestyles, etc. This thereby, imply the possibility of such individual to lack access to good health services, clean water, hygiene and quality nutrition. The foregoing culminates to mainly malnutrition as the perpetual quandary, difficulty or dilemma that is experienced in most of IDPs camps in Nigeria. Thus, the rising issue of malnutrition among IDPs stem as a serious matter that urgently need to be tackled in order to forestall the consequential astronomical level of violence, banditry, cultism, terrorism, kidnapping, and societal unrest and underdevelopment that could be perpetuated through the malnutrition, hunger or starvation of young adults.

In addition, the occurrence and escalation of crisis and natural disasters leads to the disintegration of communities, separation of families, displacement of people, disruption of economic activities, and destruction of agricultural activities. These issues can lead to the possibility of food scarcity, unemployment, lack of access to good health services, clean water coupled with unsafe and unhealthy food among displaced persons. Thus, the lack or inadequacy of essential food materials and nutrients, clothing,

shelter, poor sanitation, poor hygiene among other necessities stems as factors that have expedited the increase in the rate of malnutrition as well as other nutritional-induced diseases prevalent among displaced individuals (including young adults) in IDPs camps especially in Bayelsa State.

Apparently, the laidback, lack of policy framework and lackadaisical attitude of governments (federal, state and local) including the negligent communities and Non-Governmental Organizations (NGOs) towards caring and providing adequate facilities for persons in IDP camps especially in Nigeria is indeed a problem. This problem could make IDPs camps in Nigeria to become a place for the easy assemblage and enlistment of "ready militias" in the hands of persons or groups that provides their basic lacks like food, drug, shelter and money. Thus, this scenario if not swiftly addressed from a holistic and policy point of view would lead to the unending cycle of preventable incidence of violence and armed conflict with its attendant inevitable displacement of humans, establishment of displaced persons camps, and lack of basic necessities that could be exploited by the wickedly intended arms-giver. It based on this backdrop that this study examined the nutritional quality and prevalence of diseases among young adults in internally displaced persons camps in Bayelsa State, Nigeria.

Objectives of the Study

The objectives of the study are to:

1. Determine the nutrients that are required daily to improve the quality of health of young adults in internally displaced persons camps in Bayelsa State.
2. Ascertain the lifestyles and dietary patterns that could predispose young adults in internally displaced persons camps in Bayelsa State to nutritionally-induced diseases.
3. Identify the government-induced actions that can affect the quality of health of young adults in internally displaced persons camps in Bayelsa State.
4. Find out the effects of unhealthy dietary patterns and poor-quality nutrition among young adults in internally displaced persons camps in Bayelsa State.

Research Questions

1. What are the nutrients required daily to improve the quality of health of young adults in internally displaced persons camps in Bayelsa State?
2. What are the lifestyles and dietary patterns that can predispose young adults in internally displaced persons camps in Bayelsa State to nutritionally-induced diseases?
3. What are the government-induced actions that can affect the quality of health of young adults in internally displaced persons camps in Bayelsa State?
4. What are the effects of unhealthy dietary patterns and poor-quality nutrition among young adults in internally displaced persons camps in Bayelsa State?

Scope of the Study

The study centred on examining the nutritional quality and prevalence of diseases among young adults in Internally Displaced Persons (IDPs) camps. In terms of geographic scope, the study focused in Bayelsa State, Nigeria. While in terms of content scope, the study focused on the young adults (18-25 years) in the internally displaced persons (IDPs) camps in Otuoke, Yenagoa, Toru-Orou, and Kiama communities in Bayelsa State.

Methodology

Research Design: The study adopted the survey research design for a cross section of young adults (male and female) in the IDPs camps in Bayelsa State, Nigeria.

Study Area: The study was conducted in Bayelsa State, which is one of the 36 states in Nigeria, it comprises of eight (8) Local Government Areas (LGAs) domiciled in the three senatorial zones namely: Bayelsa East, Bayelsa West, and Bayelsa Central. Bayelsa State is populated by mainly the Ijaw ethnic nationality as well as the minority ethnic group such as Urhobo around Sagbama Local Government Area. Also, the vegetation in Bayelsa State is the tropical rain forest and has double maxima of rainfall. Most of the areas have large arid or fertile land, which accounts for high level of farming activity in crops like oil palm products, cassava, yam, maize, cocoyam etc. and vegetables, melon, pineapples, mango, pepper, banana and plantain. Similarly, the avalanche of streams, rivers and ocean traversing the state especially River Nun accounts for the presence of fishing activities in the coastal regions.

Population of the Study: The population of the study consisted of all young adults (male and female) currently dwelling in IDPs camps located Ogbia, Yenagoa, Sagbama, and Kolokuma/Okpokuma Local Government Areas in Bayelsa Rivers State, Nigeria. Also, the population of the study comprised all the 24 Nutritionists and 20 Dieticians that are resident in Bayelsa State.

Sample and Sampling Technique: A sample of two hundred and twenty-two (222) respondents (comprising 200 young adults in IDPs, 12 Nutritionists, and 10 Dieticians) were selected for the study using a four-phase multistage sampling technique. In the first phase, random sampling technique was used in the selection of four (4) out of the six (6) IDPs camps that were in existence during the 2022 flooding. This led to the selection of IDPs camps at Otuoke in Ogbia Local Government Area, Igbogene in Yenagoa Local Government Area, Toru-Orou in Sagbama Local Government Area, and Kiama in Kolokuma/Okpokuma Local Government Area. Thirdly, 12 Nutritionists were randomly selected from Niger Delta University, Amasoma, and Bayelsa Medical University Yenagoa. While in the fourth and final phase, random sampling technique was used in the selection of 10 Dieticians were proportionally selected as follows: 4 from the Federal Medical Centre Yenagoa, 2 from Niger Delta University, Amasoma, and 4 from Bayelsa Medical University Yenagoa. This constituted a sample of 200 displaced young adults, 12 nutritionists, and 10 Dieticians in Bayelsa State, totaling 222 respondents that were used for the study.

Instrument for Data Collection: The instrument for data collection was a 36 item structured questionnaire titled " Nutritional Quality and Prevalence of Diseases Among Displaced Adults Scale" (NQPDADAS). The NQPDADAS instrument was patterned after a 4 point modified rating Likert scale of "Strongly Agree" (SA, 4 Points), "Agree" (A, 3 Points), "Disagree" (D, 2 Points), and "Strongly Disagree" (SD, 1 Point). Similarly, the NQPDADAS instrument was validated by 2 experts (via 2 Home Economists) whose comments and observations were incorporated in the final construction of the NQPDADAS instrument. In addition, the reliability of the NQPDADAS instrument was established using the Cronbach Alpha method to establish the internal consistency of the non-cognitive instrument. In order to accomplish this, fifty (50) young adults were randomly selected equitably from Internally Displaced Persons (IDPs) camps in Ahoada and Mbiama in Ahoada East Local Government Area and Ahoada West Local Government Area respectively (which was not included among the sample). Then 50 copies of the NQPDADAS instrument were simultaneously administered to the young adults. Upon completion of the pilot study, the NQPDADAS instrument was retrieved, coded and analyzed using the Cronbach Alpha (r_a) method to obtain the reliability coefficient of 0.917 for the NQPDADAS instrument. This result necessitated the use of the NQPDADAS instrument for the study or data collection.

Method of Data Collection: The researcher alongside two trained research assistants administered and also retrieved the NQPDADAS instrument administered to the respondents comprising 200 displaced young adults, 12 Nutritionists, and 12 Dieticians in Bayelsa State. At the end of the administration exercise, out of the 222 copies of the NQPDADAS instrument administered to the respondents, only 205 copies (representing approximately 92% return rate) were valid copies of the NQPDADAS instrument retrieved and

subsequently used for administration.

Method of Data Analysis: The data collected was tabulated and subsequently analyzed using mean and standard deviation to answer the research questions (with a criterion mean cut off of 2.5).

Results

Research Question 1: What are the nutrients required daily to improve the quality of health of young adults in internally displaced persons camps in Bayelsa State?

Table 1: Mean and Standard Deviation on the nutrients required daily to improve the quality of health of young adults in internally displaced persons camps in Bayelsa State

S/N	The nutrients required daily to improve the quality of health of young adults in internally displaced persons camps in Bayelsa State include:	N = 205 Mean	SD	Decision
1	Carbohydrate rich foods like yam, cassava, rice, plantain, cocoyam, millet, etc.	3.75	.44	**SA**
2	Fibre rich foods like oaks, beans, maize, etc.	3.68	.47	**SA**
3	Minerals from milk, nuts, yoghurt, butter, shell fish, etc.	3.69	.48	**SA**
4	Right amount of protein (0.8 g/kg/day) in foods such as egg, beans, fish, soyabeans, meat, etc.	3.72	.45	**SA**
5	Vitamin rich foods like carrot, citrus, avocado, bell-pepper, cabbage, etc.	3.85	.36	**SA**
6	Fats and oil from food source like palm oil, groundnut oil, margarine, etc.	3.55	.52	**SA**
7	Right quantity of water (8 cups per day)	3.64	.53	**SA**
8	Fruits like orange, pineapple, pawpaw, banana, mango, sugar cane, grape, etc.	3.70	.46	**SA**
9	Vegetables like fresh tomatoes, onions, garlic, ginger, carrot, lettuce, spinach, cabbage, etc.	3.83	.38	**SA**
Grand Mean		**3.71**	**0.45**	**SA**

SA (Strongly Agree) = ≥ 2.50 while SD (Strongly Disagree) < 2.50.

Table 1 shows that the mean rating and standard deviation on the nutrients required daily to improve the quality of health of young adults in internally displaced persons camps in Bayelsa State include: vitamins rich foods like carrot, citrus, avocado, bell-pepper, cabbage, etc. ($\bar{X}$ =3.85) in item 5, vegetables like fresh tomatoes, onions, garlic, ginger, carrot, lettuce, spinach, cabbage, etc. ($\bar{X}$ =3.83) in item 9, carbohydrate rich foods like yam, cassava, rice, plantain, cocoyam, millet, etc. ($\bar{X}$ =3.75) in item 1, right amount of protein (0.8 g/kg/day) in foods such as egg, beans, fish, soyabeans, meat, etc. ($\bar{X}$ =3.72) in item 4, fruits like orange, pineapple, pawpaw, banana, mango, sugar cane, grape, etc. ($\bar{X}$ =3.70) in item 8, minerals from milk, nuts, yoghurt, butter, shell fish, etc. ($\bar{X}$ =3.69) in item 3, fibre rich foods like oaks, beans, maize, etc. ($\bar{X}$ =3.68) in item 2, right quantity of water (8 cups per day) with $\bar{X}$ =3.64 in item 2, while the least was fats and oil from food source like palm oil, groundnut oil, margarine, etc. ($\bar{X}$ =3.55) in item 6. Furthermore, the grand mean score of 3.71 indicates that items 1-9 relates to the nutrients required daily to improve the quality of health of young adults in internally displaced persons camps in Bayelsa State.

Research Question 2: What are the lifestyles and dietary patterns that can predispose young adults in internally displaced persons camps in Bayelsa State to nutritionally-induced diseases?

Table 2: Mean and Standard Deviation on the lifestyles and dietary patterns that can predispose young adults in internally displaced persons camps in Bayelsa State to nutritionally-induced diseases

S/N	The lifestyles and dietary patterns that can predispose young adults in internally displaced persons camps in Bayelsa State to nutritionally-induced diseases include:	N = 205 Mean	SD	Decision
1	Inability to regularly exercise and burnout calories	3.78	.43	**SA**
2	Inadequate sleep time of up to 8 hours	3.77	.54	**SA**
3	Non-adherence to daily eating of vegetables and fruits	3.64	.53	**SA**
4	Frequently skipping of breakfast and even lunch	3.75	.46	**SA**
5	Regular consumption of low fibre foods	3.90	.30	**SA**
6	Insufficient intake of protein and carbohydrate rich foods	3.66	.49	**SA**
7	Regularly using additive foods and ingredients rather than natural/organic foods and ingredients daily	3.79	.41	**SA**
8	Non-access to mentally tasking activities like reading, playing games, working, etc.	3.80	.43	**SA**
9	Non-observance of rest daily	3.53	.50	**SA**
Grand Mean		**3.74**	**0.45**	**SA**

SA (Strongly Agree) = ≥ 2.50 while SD (Strongly Disagree) < 2.50.

Table 2 shows that the mean rating and standard deviation on the lifestyles and dietary patterns that can predispose young adults in internally displaced persons camps in Bayelsa State to nutritionally-induced diseases include: regular consumption of low fibre foods ($\bar{X}$ =3.90) in item 5, non-access to mentally tasking activities like reading, playing games, working, etc. ($\bar{X}$ =3.80) in item 9, regularly using additive foods and ingredients rather than natural/organic foods and ingredients daily ($\bar{X}$ =3.79) in item 7, inability to regularly exercise and burnout calories ($\bar{X}$ =3.78) in item 1, inadequate sleep time of up to 8 hours ($\bar{X}$ =3.77) in item 2, frequently skipping of breakfast and even lunch ($\bar{X}$ =3.75) in item 4, insufficient intake of protein and carbohydrate rich foods ($\bar{X}$ =3.66) in item 6, non-adherence to daily eating of vegetables and fruits ($\bar{X}$ =3.64) in item 3, while the least was non-observance of rest daily ($\bar{X}$ =3.53) in item 9. Furthermore, the grand mean score of 3.74 indicates that items 1-9 relates to the lifestyles and dietary patterns that can predispose young adults in internally displaced persons camps in Bayelsa State to nutritionally-induced diseases.

Research Question 3: What are the government-induced actions that can affect the quality of health of young adults in internally displaced persons camps in Bayelsa State?

Table 3: Mean and Standard Deviation on the government-induced actions that can affect the quality

of health of young adults in internally displaced persons camps in Bayelsa State

S/N	The government-induced actions that can affect the quality of health of young adults in internally displaced persons camps in Bayelsa State include:	N = 205 Mean	SD	Decision
1	Inadequate housing for displaced young adults	3.61	.50	**SA**
2	Poor or lack of electricity supply	3.64	.50	**SA**
3	Non-provision of brain training games (like scrabble, chess, monopoly, etc.) to mentally engage adults	3.84	.36	**SA**
4	Lack of pipe borne water and poor sanitation that can induce waterborne diseases	3.58	.53	**SA**
5	Lack of adequate and functional conveniences such as toilets, bathrooms, etc.	3.61	.54	**SA**
6	Non-availability of sports/recreational facilities like table tennis, football, skipping rope, etc. to keep adults active	3.71	.50	**SA**
7	Overcrowding leads to spread of diseases in IDP camps	3.83	.37	**SA**
8	Non-provision of mosquito nets can increase malaria prevalence	3.53	.50	**SA**
9	Non-provision of essential like foods, beddings, mattresses, toiletries and even clothings	3.67	.47	**SA**
Grand Mean		**3.67**	**0.47**	**SA**

SA (Strongly Agree) = ≥ 2.50 while SD (Strongly Disagree) < 2.50.

Table 3 shows that the mean rating and standard deviation on the government-induced actions that can affect the quality of health of young adults in internally displaced persons camps in Bayelsa State include: non-provision of brain training games (like scrabble, chess, monopoly, etc.) to mentally engage adults ($\bar{X}$ =3.84) in item 3, overcrowding leads to spread of diseases in IDP camps ($\bar{X}$ =3.83) in item 7, non-availability of sports/recreational facilities like table tennis, football, skipping rope, etc. to keep adults active ($\bar{X}$ =3.71) in item 6, non-provision of essential like foods, beddings, mattresses, toiletries and even clothing ($\bar{X}$ =3.67) in item 9, poor or lack of electricity supply ($\bar{X}$ =3.64) in item 2, inadequate housing for displaced young adults in item 1, and lack of adequate and functional conveniences such as toilets, bathrooms, etc. in item 5 (each with $\bar{X}$ =3.61), lack of pipe borne water and poor sanitation that can induce waterborne diseases ($\bar{X}$ =3.58) in item 4, while the least was non-provision of mosquito nets can increase malaria prevalence ($\bar{X}$ =3.53) in item 8. Furthermore, the grand mean score of 3.67 indicates that items 1-9 relates to the government-induced actions that can affect the quality of health of young adults in internally displaced persons camps in Bayelsa State.

Research Question 4: What are the effects of unhealthy dietary patterns and poor quality nutrition among young adults in internally displaced persons camps in Bayelsa State?

Table 4: Mean and Standard Deviation on the effects of unhealthy dietary patterns and poor quality nutrition among young adults in internally displaced persons camps in Bayelsa State

S/N	The effects of unhealthy dietary patterns and poor quality nutrition among young adults in internally displaced persons camps in Bayelsa State include:	N = 205 Mean	SD	Decision
1	Cholera as acute diarrheal illness that is caused by	3.72	.49	

	infection of the intestines			**SA**
2	Tuberculosis	3.56	.53	**SA**
3	Malaria	3.61	.54	**SA**
4	Dysentery caused by infection of the intestines	3.59	.50	**SA**
5	Increased body mass index that is associated to obesity	3.83	.37	**SA**
6	Malnutrition	3.65	.50	**SA**
7	Diarrhoea due to bleeding, abdominal cramp and watery stools	3.67	.47	**SA**
8	Kwashiorkor due to severe protein malnutrition	3.71	.50	**SA**
9	Chickenpox as itchy rash on the face and other parts of the body	3.58	.50	**SA**
Grand Mean		**3.66**	**0.49**	**SA**

SA (Strongly Agree) = ≥ 2.50 while SD (Strongly Disagree) < 2.50.

Table 4 shows that the mean rating and standard deviation on the effects of unhealthy dietary patterns and poor quality nutrition among young adults in internally displaced persons camps in Bayelsa State include: increased body mass index that is associated to obesity ($\bar{X}$ =3.83) in item 5, cholera as acute diarrheal illness that is caused by infection of the intestines ($\bar{X}$ =3.72) in item 9, kwashiorkor due to severe protein malnutrition ($\bar{X}$ =3.71) in item 8, diarrhoea due to bleeding, abdominal cramp and watery stools ($\bar{X}$ =3.67) in item 7, malnutrition ($\bar{X}$ =3.65) in item 6, malaria ($\bar{X}$ =3.61) in item 3, dysentery caused by infection of the intestines ($\bar{X}$ =3.59) in item 4, chickenpox as itchy rash on the face and other parts of the body ($\bar{X}$ =3.58) in item 9, while the least was tuberculosis ($\bar{X}$ =3.56) in item 2. Furthermore, the grand mean score of 3.66 indicates that items 1-9 relates to the effects of unhealthy dietary patterns and poor quality nutrition among young adults in internally displaced persons camps in Bayelsa State.

Discussion of Findings

The result in Table 1 shows revealed grand mean score of 3.71, which indicated that the nutrients required daily to improve the quality of health of young adults in internally displaced persons camps in Bayelsa State include: vitamin rich foods like carrot, citrus, avocado, bell-pepper, cabbage, etc., vegetables like fresh tomatoes, onions, garlic, ginger, carrot, lettuce, spinach, cabbage, etc., carbohydrate rich foods like yam, cassava, rice, plantain, cocoyam, millet, etc., right amount of protein (0.8 g/kg/day) in foods such as egg, beans, fish, soyabeans, meat, etc., fruits like orange, pineapple, pawpaw, banana, mango, sugar cane, grape, etc., minerals from milk, nuts, yoghurt, butter, shell fish, etc., fibre rich foods like oaks, beans, maize, etc., right quantity of water (8 cups per day), and fats and oil from food source like palm oil, groundnut oil, margarine, etc. This finding is consistent with the findings by Antonio et al. (2016), Asouzu (2017); Jhee et al. (2019); Dekker et al. (2022), and Betancourt-Núñez et al. (2023) an individual's adherence daily required quantity of vitamins, protein (0.8 g/kg/day), water (i.e. 8 cups per day), minerals, carbohydrates, fats, oil, fruits and vegetables as well as high fibre rich foods and dairy products (like milk, butter, cheese, yoghurt, butter, etc.) would culminate to the right dietary pattern that enhances quality of health as well as help to prevent the incidence of obesity, kidney among other nutritionally-induced diseases.

The result in Table 2 revealed a grand mean score of 3.74, which indicated that the lifestyles and dietary patterns that can predispose young adults in internally displaced persons camps in Bayelsa State to nutritionally-induced diseases include: regular consumption of low fibre foods, non-access to mentally

tasking activities like reading, playing games, working, etc., regularly using additive foods and ingredients rather than natural/organic foods and ingredients daily, inability to regularly exercise and burnout calories, inadequate sleep time of up to 8 hours, frequently skipping of breakfast and even lunch, insufficient intake of protein and carbohydrate rich foods, non-adherence to daily eating of vegetables and fruits, and non-observance of rest daily. This finding is consistent with the findings by Adedeji et al. (2019), and Betancourt-Núñez et al. (2022) that non-adherence to daily eating of proteins, carbohydrates, vegetables, fruits and micronutrients supplements as well as regular skipping of breakfast culminates to unhealthy eating behaviours that leads to malnutrition, low immunity, kwashiorkor among other nutritionally-induced diseases that affects an individual's healthiness among displaced adults in IDPs camps. Asouzu (2021) observed that utilization of additive, spiced foods and ingredients rather than using natural/organic foods like fresh tomatoes, onions, garlic, ginger, carrot, lettuce, spinach, cabbage, etc. culminate to poor dieting behaviour that predisposes an individual to nutritionally induced diseases. Also, the finding of the study aligns with the position of Asouzu (2017 & 2020) found that inability to regularly exercise, engaging in activities to burnout calories, inadequate rest time, insufficient sleep time of up to 8 hours as well as sleeping in sedentary position in a chair rather than laying down posture can predispose an individual to back pain, swollen leg, among other diseases prevalence.

The result in Table 3 revealed a grand mean score of 3.67, which indicated that the government-induced actions that can affect the quality of health of young adults in internally displaced persons camps in Bayelsa State include: non-provision of brain training games (like scrabble, chess, monopoly, etc.) to mentally engage adults, overcrowding leads to spread of diseases in IDP camps, non-availability of sports/recreational facilities like table tennis, football, skipping rope, etc. to keep adults active, non-provision of essential like foods, beddings, mattresses, toiletries and even clothing, poor or lack of electricity supply, inadequate housing for displaced young adults, and lack of adequate and functional conveniences such as toilets, bathrooms, etc., lack of pipe borne water and poor sanitation that can induce waterborne diseases, and non-provision of mosquito nets can increase malaria prevalence. This finding is in agreement with previous finding by Nwabughiogu (2015) and Adedeji et al. (2019) that the lackadaisical attitude of governments, communities and NGOs towards displaced persons is evident in the non-provision of essential like foods, beddings, mattresses, toiletries and even clothing could trigger poor hygiene situation in IDPs camps in Nigeria. Also, Sogari et al. (2018) found that the inadequate housing, electricity, mosquito net, sanitation, pipe borne water, conveniences, recreational activities, brain training games (like scrabble, chess, monopoly, etc.) is indeed a problem that would affect the quality of health of young adults in IDPs camp.

The result in Table 4 revealed a grand mean score of 3.66, which indicated that the effects of unhealthy dietary patterns and poor quality nutrition among young adults in internally displaced persons camps in Bayelsa State include: increased body mass index that is associated to obesity, cholera as acute diarrheal illness that is caused by infection of the intestines, kwashiorkor due to severe protein malnutrition, diarrhoea due to bleeding, abdominal cramp and watery stools, malnutrition, malaria, dysentery caused by infection of the intestines, chickenpox as itchy rash on the face and other parts of the body, and tuberculosis. This finding aligns with the findings in the studies by Asouzu (2014; 2017; 2020; 2021) and Mróz et al. (2022) that unhealthy dieting predisposes an individual to high BMI, obesity, and low immunity, which increases susceptible to nutritional diseases such as malnutrition, kwashiorkor (severe protein malnutrition), dysentery (infection of the intestines), diarrhea or diarrhoea (bleeding, abdominal cramp and watery stools), chickenpox (itchy rash breaks mostly on the face), cholera (acute diarrheal illness caused by infection of the intestines), tuberculosis, malaria among other terminal diseases.

Conclusion

The study revealed that vitamin rich foods (like carrot, citrus, avocado, bell-pepper, cabbage, etc.), vegetables (like fresh tomatoes, onions, garlic, ginger, carrot, lettuce, spinach, cabbage, etc.), carbohydrate rich foods (like yam, cassava, rice, plantain, cocoyam, millet, etc.), and right amount of protein rich foods (such as egg, beans, fish, soyabeans, meat, etc.). Alongside, fruits (like orange, pineapple, pawpaw, banana, mango, sugar cane, grape, etc.), minerals from milk, nuts, yoghurt, butter, shell fish, etc., fibre rich foods like oaks, beans, maize, etc., right quantity of water (8 cups per day), and fats and oil from food source like palm oil, groundnut oil, margarine, etc. that were daily required for the health of the young adults in IDPs camps in Bayelsa State were insufficiently consumed.

Furthermore, the inadequate intake of daily required nutrients by young adults in IDPs camps in Bayelsa State culminated to wrong dietary pattern that declined their quality of health. Also, IDP camps in Bayelsa State were considered boring because they lacked sports/recreational facilities (like table tennis, football, skipping rope, etc.), beddings, mattresses, toiletries and brain training games (like scrabble, chess, monopoly, etc.) that makes it be regarded as boring. Hence, the study concluded that the lifestyle and dietary patterns among young adults was grossly unhygienic and generally unhealthy respectively. This makes IDPs camps in Bayelsa State to be literally an abode of malnutrition and outbreak of preventable nutritional-induced diseases such as obesity, malnutrition, kwashiorkor, dysentery, diarrhoea, chickenpox, cholera, tuberculosis, and malaria that leads to low immunity and poor-quality health.

Recommendations

1. Adequate budgetary allocation should made for the scheduled provision of fruits, vegetables, beans, plantains, palm oil, millet, rice, and oaks with fibre content that would help to moderate the weight and enhance the functioning of young adults kidney.
2. Government should include nutritionist into emergency/disaster management committees in order for them to desire appropriate meals with the daily required protein, minerals, vitamins, carbohydrates, fats and oil for the healthiness of young adults in IDPs camps.
3. Governments at all levels should partner with corporate organizations and NGOs in equipping IDP camps with power supply, pipe borne water, conveniences, brain training games (like scrabble, chess, monopoly, etc.) sports/recreational facilities like table tennis, football, skipping rope, etc. and essential materials like beddings, mattresses, mosquito nets, toiletries and clothing that can boost the comfort, healthiness and mental development of displaced young adults.
4. Meals in IDP camps should be prepared with natural spices rather than addictive spices and other unhealthy ingredients that can induce nutritional diseases such as obesity, cholera, kwashiorkor, malnutrition, diarrhea, malaria, dysentery among others.

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