

Study on Social Demographic Characteristics and Nutritional Preferences as Determinant of Preliminary Health Conditions of Patients Age 60-75 Years in Abia State

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Abstract

While food preference refers to how people choose from among available foods based on biological or economic perceptions such as taste, value purity, ease or difficulty of preparation, and the availability of fuel and other preparation tools, nutritional preference may be useful when viewed as a liable phenotypic character that can vary both within and among individuals. Elderly people's diet has a significant impact on their health and aging process. They frequently have decreased appetites and energy expenditures, which is accompanied by a decline in biological and physiological functions like lean body mass, cytokine and hormonal changes, and fluid electrolyte imbalances. Literature was reviewed based on the set objectives. A descriptive survey method was adopted based on the three (3) senatorial zones I.e. using the three (3) major hospitals in the zones. Questionnaire and oral interview were used to obtain the data. The required data obtained were analysed in tables while the hypothesis was also analysed and all their results were represented conspicuously. From the analysed results, it was very clear that nutritional references are very common in elderly patients due to many reasons whereby reason like health issues were their main challenge followed by degeneration of the body system due to depreciation of hormones and body mass index. Empirical review was also highlighted and the necessary results were enlisted which authenticate the findings outlined. The results of the findings showed a very great relationship between the age of the patient and the nutritional preferences.

Keywords: social demographic characteristics, nutritional preferences, preliminary health conditions, age 60-75 years , abia state

1.Introduction

The term "food preference" describes how humans select among a variety of foods based on biological or economic factors, such as flavor, value, purity, ease or complexity of preparation, and the accessibility of fuel and other preparation supplies [1]. People's evaluative views regarding food are known as food preferences. Food preferences encompass both the cost and the qualitative assessment of items. One good way to think of nutritional choice is as a liable phenotypic characteristic that can differ within and between people [2]. The aging process is impacted by nutrition, which is a significant aspect of health in the elderly population. In addition to a deterioration in biological and physiological processes, such as decreased lean body mass, changes in cytokine and hormone levels, and changes in fluid electrolyte levels, older adults frequently have decreased appetite and energy expenditure [3]. Everyone has to go through the natural process of becoming older. In a larger context, aging encompasses all of the changes that occur from birth until an individual matures, matures, and reaches old age. People start to notice wrinkles and a fair amount of physical decline around their

middle years. Physical impairment that occurs gradually is making older people more dependent. Humans cannot control the dynamics of aging. Ageing is accompanied by various changes that can make it more difficult for nutritional needs to be satisfied. These alterations fall into three general categories: physiological, psychological, and physical [4]. It goes without saying that as aging draws near, the physical, pathological, and psychosocial makeup of the body drastically changes. At this point, the elderly patients will begin to develop dietary preferences that could negatively impact their health. Malnutrition, which will worsen their health status, is one component of this negative consequence [5]. With age, some patients may lose interest in maintaining a healthy diet because they believe it will have no benefit to their bodies. Since their illnesses and disabilities may also affect them, these elderly patients in this age group will prefer to eat snacks rather than properly prepared meals. As people age, their chances of developing one or more chronic illnesses, such as respiratory disorders, arthritis, stroke, depression, and dementia, increase. These conditions can affect their appetite, their

functional ability to swallow, or their ability to swallow, all of which can modify their food intake and impair their nutritional status due to food preference [6]. Medications used to treat chronic illnesses can also negatively impact their nutritional status through reduced gastrointestinal motility, dry mouth, nausea, diarrhea, and loss of appetite, which can cause patients to have food preferences in order to maintain good health [7].

Body composition changes with aging, such as an increase in fat mass and a decrease in lean body mass (muscle) (sarcopenia). Muscle mass loss starts at age 60 and increases after that, but fat mass keeps rising until the person is about 75 years old. Loss of muscle mass causes the basal metabolic rate to drop by about 15% between the ages of 30 and 80, which in turn causes the energy needs to drop by about 150 kcal per day after the age of 75. [8] The main cause of malnutrition, which is linked to a higher risk of morbidity and mortality, is food preferences, which also increases the risk of falls, infection, loss of energy and mobility, poor wound healing, and confusion [9]. Obesity is thought to be a greater risk to older adults' health, and it also raises the risk of diabetes, hypertension, and cardiovascular disease. It is also thought that traditional food preparation techniques can have an impact on the nutritional value of food, for instance, by inhibiting bacterial growth. The aforementioned points make it clear that the nutritional preferences of the elderly (those between the ages of 60 and 75) are determinants of their initial health conditions because our food preferences may be inherited or the result of cultural traditions and availability [10]. Nutritional preference is a common occurrence in one's life, particularly when a person's health condition does not appear to be functioning normally. The main reason why people eat what they eat in the elderly is straightforward: either because it is there or because it is what is available at the moment. In the evolutionary school, human behavior focuses on choosing the best possible food by determining what it is, whether it is edible, and which combinations are good and which are not. Anthropologists in particular believe that traditional food preparation methods can have an influence on useful nutritional value, such as using spices may inhibit bacterial growth [11]. Food plays a very important role in people's lives, and sometimes our taste preferences are innate and help us choose from a selection of thousands of potential nutrients and toxins. From the above, one will not be so much in doubt why the aged (age 60 – 75 years) nutritional preference serves as determinants of preliminary in their health conditions since our food preference may start from cradle or as a result of cultural traditions and supply.

Research Design

In this research design, the researcher use a cross sectional descriptive survey design to do the study which focused on nutritional preferences as determinants of preliminary health conditions of patients of age limit of 60 – 75 years in Abia State. The descriptive design was chosen. It is referred as the specific methods used which will help the researcher in data collection and it is also placed as a master plan which the researcher used in conditioning and it is authentic explanation of the work. The researcher used exploratory design which enabled the researcher which aimed at exploring a specific aspect of the area of the study. As the name exploratory implies, it does not aimed at providing final and conclusive answers to the study but it can change its direction to an extent. This research design will enable the researcher to have a critical analysis of argument and investigate the nutritional preferences in aged.

Setting

The setting of the study is Abia State and the researcher subdivided the state according to it three senatorial zones i.e. Abia North, Abia Central and Abia South.

Abia North is made up of five local government areas i.e. Bende, Isuikwuato, Umunneochi, Ohafia and Arochuku. Out of these five local government

areas, is only Ohafia Local Government Area that has functionable General Hospital which was chosen by the researcher to be her working area. The Abia North is the food basket of Abia State precisely Bende. These five local governments are peaceful and tolerates one another as they have common boundaries with each other. Their citizens are more educative, more in civil service and Nigeria army too while few of them are semi-illiterates. The hospital of choice is Ohafia General Hospital which is situated at Amaekpu coming from Umuahia to Ohafia, it is situated at the major road. It is a government owned hospital with all the health worker are employed by government. It is a referral hospital for other hospitals in the zone as it is highly equipped than others. Abia Central Senatorial zone is made up of six (6) local government areas which comprises of Umuahia North, Umuahia South, Isiala-Ngwa North, Isiala-Ngwa South, Ikwuano and Osisioma Local Government Areas. The researcher chooses Federal Medical Centre as the hospital for the study. The hospital is located at Umuahia North Local Government Area which is close to Abia Government House in the North as the boundary, Nigeria Correction Centre/Golden Guinea Brewery in the West, Isi-gate (Umuahia township) in the East and High Court Umuahia in the South. The hospital is a tertiary health in situation owed by Federal Government. It houses fifteen (15) ward, twenty-one unit and eleven departments. It is a referral centre for all government and private hospital in the state and beyond. It is a training institution for post-graduate doctors, nurses on internship. Abia South Senatorial zone is made up of six (6) local government areas which comprises of Aba North, Aba South, Obingwa, Ugunagbo, Ukwu East and Ukwu West and the hospital of choice in this Senatorial zone is Abia State University Teaching Hospital Aba (ABSUTH). The hospital is situated at Abayi i.e. Aba-Owerri Road in Osisioma Local Government Area. The hospital has ten (10) wards, eight (8) units and five (5) departments. It is a referral centre for all the government and private hospitals in the zone.

Ethical Consideration

The researcher observed all the ethical considerations ranging from

- Consent from patients used
- Confidentiality of information obtained
- Aims and objective of the study
- Anonymity
- Phalgrism observation

Target Population

The target population for the study are males and females who are within the age range of 60 years – 75 years who are hospitalized or attend clinics for a routine check-up in the three Senatorial Chosen hospitals in the State. The study focused attention on the above age limit because people within the above age range are the population who use to place nutritional preferences in their feeding. Looking at their age bracket, population of that age group has one ill-health or another and some of them were not conversant with the new menu that are in existence these days. Some of the people in this population group prefers eating the kind of food they are used to even when the new foods are available or introduced to them.

Sample Size

Convenience sampling is a qualitative research sampling strategy that involves selecting participants based on their accessibility and availability. It is not drawn at random, because of the kind of people used for the study. The participants in the study are picked as a result of their availability in the three hospitals either as a patient in the ward (hospitalized) or as a patient who is on out patient clinic (check-up) routine check-up. It is a simple and easy way to get information when compared to other sampling methods. It does not depend on chance and it is often used.

Abia North (Ohafia Gen. Hosp)	Abia Central (FMC Um)	Abia South (ABSUTH Aba)
60-65 (Males) – 4	60-65 (Males) – 10	60-65 yrs (Males) – 8
60-65 (Females) – 5	60-65 (Females) – 8	60-65 yrs (Females) – 7
60-70 yrs (Males) – 3	60-70 yrs (Males) – 15	60-70 yrs (Males) – 5
60-70 yrs (Females) – 5	60-70 yrs (Females) – 10	60-70 yrs (Females) – 10
71-75 yrs (Males) – 1	71-75 yrs (Males) – 7	71-75 yrs (Males) – 4
71-75 yrs (Females) – 2	71-75 yrs (Females) – 4	71-75 yrs (Females) – 6
Total 20	60	40

From the table above, a total of one hundred and twenty (120) patients from the target population were selected using convenience sampling. The researcher Taroi Yamane formula in calculating sample size which is a mathematical formula used to estimating or determining sample size in respect to the population under study and it read thus:

$n = N(1 + N(e)^2)$ where n signifies the sample size

N signifies the population under study

e signifies the margin error which could be 0.05

I-constant

$n = 70/1.175$

n-120

Sampling Technique

The researcher used convenience sampling method to obtain the one hundred and twenty (120) patients in the three (3) Senatorial zones of the chosen hospitals. The wards that are mainly used are male and female medical wards and General out-patient department (GOPD) for those who are on routine check-up. The patients are basically those from age range of 60 – 75 years.

Instrument For Data Collection

Based on the objective of the study, the researcher made a structured questionnaire which was subjected to supervisor who went through and necessary corrections made before it was put in use. The questionnaire was caption in four (4) sections i.e.

Section A -Bio-Data

Section B -Using Yes/No

Section C -Using Options

Section D -Using Likert Scale

In the use of the questionnaire, the literate patients were given the questionnaire to fill in their options i.e. chosen items while the illiterate ones were interviewed using the questionnaire through the assistant who happened to be nurses in the ward or clinic. Since the patient used for the study were convenience type, the researcher visit the hospitals often to obtain information on available patients in the wards who were hospitalized and general outpatient clinic for those on a routine check-up. The researcher also step-up to hospitals kitchens to solicit the help of the hospitals

nutritionist/Dietitians who plans the menus for the in-patients (hospitalized patients).

Validity

The validity of the instrument was measured through a structured questionnaire which contented the research objectives/researcher questions in a precise content and same were submitted to the supervisor who went through it and made the necessary corrections and same were carried out by the researcher before the questionnaire were used to obtain the necessary information required for the study.

Reliability

The researcher used internal consistency as it uses one instrument which was administered only once. In using this instrument, the alpha value was within 70 and the researcher deemed it to be reliable.

Method Of Data Collection

For the collection of data from the chosen hospitals in the three (3) Senatorial zones were not carried out subsequently. The researcher made a road-map via the Ethical-Research Development units of each hospitals who then granted her the permission to use the facilities via the introductory letter from the department. The necessary protocols of each hospitals were reached and at the same time an approval letters were given which gave the researcher to approach the Nursing Services Department that gave another permission to the wards and units heads of both male and female wards and general out-patient department.

The researcher made several visitations to the different locations of the hospitals in different days to obtain the information from patients in use i.e. 60-75 years. On each visit, the researcher made use of nurses on duty as an assistant on different locations after explaining the procedures and criterion to them. The nurses were ability of useful help in the data collection especially during interview on those illiterate patients both in the wards and general out-patient department.

Method Of Data Analysis

In the analysis, the researcher looked at the better understanding of the relationship between the two variables i.e. nutritional preferences and age of the patients within 60 – 75 years. The researcher used correlation in the analysis of the data obtained.

Results

Variables	Classification	Frequency No	Percentage %
Age (years)	60-64	18	15.0
	65-69	24	20.0
	70-74	36	30.0
	75 and above	42	35.0
	Total	120	100
Gender	Male	57	47.5
	Female	63	52.5
	Total	120	100

Marital status	Single	12	10.0
	Married	54	45.0
	Divorced	6	5.0
	Widowed	48	40.0
	Total	120	100
Occupation	Retiree	18	15.0
	Business	24	20.0
	Trading	48	40.0
	Farming	30	25.0
	Total	120	100
Educational qualification	First school leaving certificate	18	15.0
	WASC	24	20.0
	Graduate	36	30.0
	None of the above	42	35.0
	Total	500	100
Location of hospital	Abia North General hospital, Ohafia	20	16.7
	Abia Central, FMC, Umuahia	60	50.0
	Abia South, ABSUTH	40	33.3
	Total	500	100

Table 1: Socio-demographic characteristics of the respondents studied.

Variables	Classification	Frequency No	Percentage %
Nutritional needs are due to illness condition that follow aging process	Agreed	52	43.3
	Disagreed	24	20.0
	Strongly agreed	30	25.0
	Strongly disagreed	14	11.7
	Total	120	100
Nutritional needs arise due to new pattern to generational foods	Agreed	49	40.8
	Disagreed	23	19.2
	Strongly agreed	29	24.2
	Strongly disagreed	19	15.8
	Total	120	100.0
Nutritional preference predisposes them to infection due to low immune system	Agreed	47	39.2
	Disagreed	25	20.8
	Strongly agreed	29	24.2
	Strongly disagreed	19	15.8
	Total	120	100
Factors that predispose the aged to nutritional needs are many e.g. illness	Agreed	49	40.8
	Disagreed	25	20.8
	Strongly agreed	31	25.8
	Strongly disagreed	15	12.5
	Total	120	100
Aging process increases food preferences	Agreed	49	40.8
	Disagreed	26	21.7
	Strongly agreed	30	25.0
	Strongly disagreed	15	12.5
	Total	120	100
Avoidance of eating between meals will help out in avoidance of developing large body index at old age.	Agreed	25	20.8
	Disagreed	47	39.2
	Strongly agreed	16	13.3
	Strongly disagreed	32	26.7
	Total	120	100

Table 2: Nutrition preference of the respondents studied

Discussion

The socio-demographic characteristics of the respondents studied Indicated that most of the respondents aged 75 years and above (35.0%), minority were 60-64 years (15.0%); others were aged 65-69 years (20.0%) and 70-74 years (30.0) respectively. This implies that majority of the respondents were 75, 76, or 77 years old and above. Moreover, 47.5% were males and 52.5% were

females signifying that most of the respondents were of the female gender. It was recorded that 45.0% of the respondents were married, 40.0% were widowed, 10.0% were single and 5.0% divorced. The result further showed that 40.0% of the respondents were traders, 25.0% were farmers, 20.0% were into business and 15.0% were retirees with 33.3% of the respondents

hospitalized at Abia South, ABSUTH, 50.0% at Abia Central, FMC, Umuahia and 16.7% at Abia North General hospital, Ohafia.

The nutrition preference of the respondents studied indicated that a majority of the respondents agreed that nutritional needs are due to illness condition that follow aging process (43.3%), 40.8% agreed that nutritional needs arise due to new pattern to generational foods, 39.2% agreed that nutritional preference predisposes them to infection due to low immune system, 40.8% agreed that factors that predisposes the aged to nutritional needs are many e.g illness, 40.8% agreed that aging process increases food preference and 39.2% disagreed that avoidance of eating between meals will help out in avoidance of developing large body index at old age.

Health needs and ignorance are reasons for nutritional preference in the elderly people which is in agreement with [12] who said that the aged patients expressed the attitude of having difficulty in swallowing which is medically known as dysphagia and when this condition occurs, nutritional preferences come up which also make food intake to be less or taking foods that has less nutritional values [13] To emphasis on the above, out of 120 respondents, 90(66.7%) said yes on it while 40(33.3%) said no to it.

One of the causes of the nutritional needs of the elderly is aging. When one is aging, he/she may not eat all that is available. He/she may be selective on what to eat. Out of 120 respondents, 76(63.3%) said yes while 44(36.7%) said no. This is in contrast to what [14] said on immune system changes which bring about declining function. Some elderly people suffer chronic health condition like cardiac or diabetic conditions. Because of these diseases, some of them tends to develop nutritional needs that will conform with their health condition. Out of 120 respondents in the study, 73(60.8%) said yes while 47(39.2%) said no which means that the majority of the respondents are in line with (Iwundu, 2018) which said that there are health conditions that encourages food preferences example hepatitis, urinary cases and gastrointestinal conditions.

There are many reasons why the elderly develop nutritional preferences which why the elderly develop nutritional preferences which ranges from their age, illness, loss of appetite, system conditions, disruption of dental settings, hatred for additional weight at old age which will exposed them to arthritis etc. Out of 120 elderly people the researcher was using, 90(75%) of them agreed on the above reasons while 30(25%) disagreed and said that all depends on individual's make up [15].

There are circumstances that offers benefit to the elderly when nutritional preferences come in. There are a lot of health conditions that arise as one get older e.g cardiovascular condition, urinary system conditions, digestive system conditions. When these elderly people are in any of the above, there are good benefit they will derive from the nutritional preferences with regards to their health conditions while 25(20.8%) said that it has no benefit to their general health condition.

From the general view point, there are food needs of the elderly being well or ill. As the age goes down, all the body systems starts to degenerate and because of the degenerate and because of the degeneration of the body systems, these elderly people have good need for foods that will sustain their life, boost their immune system, delete them. From infections and other benefit adequate nutrition carries [15]. Elderly people skips some meals based on their health conditions and other reasons like loss of appetite, obesity and loss of dental settings. As there is degeneration of cells in the body, some of these elderly people tends to skip meals in order not to accumulate fat in their bodies and at the same time. Since there is no new growth of body cells, they feel full with one or two meals in a day and this is in line with [16] who said that elderly people do not find it easy to take one or two meals in a day. Quality (adequate) food has a role to play in everybody's life. For the elderly, quality (adequate) meal plays a role in their nutritional status. When the elderly are able to take quality food, it help them to reduce illness like beri-beri, arthritis, scurve, bone deformation etc.. Adequate food with it nutrients in rightful proportion helps in the healthy living of individuals which elderly ones are among [17]. At the age of 60 – 75 years, the determinant factor to the elderly choice of food is the food taste

which is more functional in their body as their test-bud detects the food taste immediately. Other things in the human body degenerates fats as age is coming up but taste bud will be the last thing to degenerate. As one ages, there are certain foods he/she prefers taking which will go with the body system. For the elderly, majority of them observed some food preferences like taking malt instead of alcoholic drink as malt contains sugar and sweet taste. It was observed that some elderly prefers the taste of malt than the taste of alcohol as they believed that it gives more blood than alcohol [18].

Following the nutritional needs of the elderly, out of 120 subjects, 10(8.4%) agreed, 8(6.6%) disagreed, 92(76.6%) strongly agreed and 10(8.4%) strongly disagreed. Looking at the result, one will see that the majority strongly agreed that the nutritional needs of the elderly are due to illness condition that followed the aging process. Food preferences are evaluative attitudes that people express towards foods and it include the qualitative evaluation of foods and also how much the cost is. Nutritional preference may be usually viewed as a liable phenotypic character that can vary both with and among individuals [19]

Aging is a national process which everyone must undergo. In the broader sense, aging reflects all the changes starting from birth till one grows, develops and attains to old age. Middle age is the time when people notice the age wrinkled skin and fair amount of physical decline, slow and steady physical impairment which results to increased dependency on periodic old age. Food preferences are determined by lots of factors which include age, gender, wealth, childhood experiences etc. Food preferences are when individuals express a personal liking or dislike to a particular food or food group. It is a making of food choice based on what an individual enjoy most or find most satisfying or feel best to eat based on his body needs [20].

Food consumption was inferred from stated preferences or liking of a specific food item whereas an acceptable food was defined as one that was eaten by individual. In food preferences, it affects the agricultural systems because choices among cultivars are base on consumers needs.

Nutritional preference is a common phenomenon that happens in one's life especially when an individual health condition seem not to be in line with normal function. In aged, the main reason why people eat what they eat is simple. It could be either because its or it can be what is available at that point in time. Food plays a very important role in people's lives and sometimes our taste preferences are innate and help us to choose from a selection of thousands of potential nutrients and toxins. According to the evolutionary school, human behaviour focuses on selecting the best possible food by finding out what it is and also it is not edible and which combinations are good and which are not.

Conclusion

In conclusion, aging is a normal process of life which every living thing must undergo before eternity. The elderly people are not excepted in this process. As aging process occur, people tends to develop one issues or another. Therefore nutritional preferences in the aged individual is not abnormal rather there must be something that may precipitated it which may be in line with health condition or other physical issues. The majority cause of the nutritional preferences in them are systemic degeneration due to aging, ill-health like cardiological and urinary diseases which make it difficult for them to take all food. Other conditions that exposes the elderly to nutritional preferences are physical condition like arthritis and disruption of dental setting. All these are the major cause of nutritional preferences in the elderly patients.

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