THE INFLUENCE OF EDUCATIONAL AND OCCUPATIONAL STATUS ON THE NUTRITIONAL STATUS OF THE ELDERLY PEOPLE IN AKWA IBOM STATE

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ABSTRACT

The study analyzed the influence of educational and occupational status on the nutritional status of the elderly people in Akwa Ibom State. A correlational survey design was used for this study. The study area is Akwa Ibom State. The population of the study comprised of 59,545 elderly men and women. Multi stage sampling technique was used to have a sample size of 400 elderly men and women in the three Senatorial District in Akwa Ibom State. The measurement for data collection will be structured questionnaire tagged: "Demographic Variables and Elderly Nutritional Status Questionnaire (DVENSQ)". The instrument passed through face validation by experts. The yielded reliability coefficient of .81 indicates that the internal consistency of the item is highly reliable for the study. The data generated for this study was analyzed using mean score rating and standard deviation. Hypotheses were tested using Pearson product moment correlation analysis at 0.05 level of significant. The study showed that there is no significant influence of educational and occupational status on the nutritional status of the elderly people in Akwa Ibom State. The study concluded that educational and occupational status slightly contributes to the nutritional status of the elderly in Akwa Ibom State. One of the recommendations made was that home scientists should consider all the variables found to have influence on the nutritional status of the elder people while prescribing menu for their health.

Keywords: Educational and Occupational Status, Nutritional Status, Elderly People, Akwa Ibom State

INTRODUCTION

World statistics show that the elderly represent the segment of the population that is growing most rapidly, and as a result it is likely to become the largest demographic group in many countries around the globe in the coming decades (Sharpe & Finke, 2003). Policy-makers are therefore concerned about the quality of life and needs for care of an ageing population which are influenced by many interrelated factors including genetic traits, health status, lifestyle choices, socio-demographic characteristics, economic conditions and the other characteristics of the environment in which the elderly live. Ageing is often accompanied by the occurrence of illness which may increase the risk of nutritional deficiency. Altered nutritional status is associated with the pathogenesis of a number of

common diseases of the elderly. Thus, it would appear that nutritional modulation represents one possible approach to successful ageing. A complete assessment of nutritional status, according to Sahyoun & Basiotis (2001) includes determination of dietary intake, anthropometric assessments, biochemical measurements, hematological measurements, immune function measurements, various functional assessment and clinical assessment. That is why Sharpe & Finke (2003) states that nutrition is the science that interprets the interaction of nutrients and other substances in food (e.g. phytonutrients, anthocyanins, tannins, etc.) in relation to maintenance, growth, reproduction, health and disease of an organism. It includes food intake, absorption, assimilation, biosynthesis, catabolism and excretion. Food is comprised of nutrients that are classified by their role in the body: the energy-yielding macronutrients (carbohydrates, protein, and fat), the essential micronutrients (vitamins, minerals, and water), and numerous other components.

Good nutrition plays a vital role in the well being and health of elderly people. International demographic statistics shows that the world is experiencing an unprecedented phenomenon in terms of people forming the category of the elderly. The proportion of people aged over 60 is growing faster than any other age group in almost every country of the world, and it is projected to reach l billion by 2020 and almost 2 billion by 2050. The drivers of this remarkable growth are the recent declines in fertility rates, the increase of life expectancy and the dynamic evolution of past variations in birth and death rates (Christensen, Dob hammer & Rau, 2009).

It is obvious that globally, approximately 64% of the population of persons who are 60 years and older currently reside in developing countries. Estimates suggest that this proportion will increase to about 80% in the next four decades (World Health Organization, 2008). However, surviving to old age remains a challenge in many such countries. Despite global increases in life expectancy and decreases in mortality, poverty and deprivation may affect long-term survival among people in low-and middle-income countries (LMICs). In Nigeria, as an example, about 70% of the population lives on less than $1.25 per day (Central Bank of Nigeria, 2011).

The problems faced by the elderly stem from economic, social, cultural and political factors. The economic and social factors as powerful determinants have far-reaching consequences on health and general well-being of aged persons Poor economic status earlier in life could be one of the determinants of poor health at all stages of life. Therefore, the aim of this study is to identify cultural and demographic variables that influence nutritional status of the elderly people in Akwa Ibom State.

STATEMENT OF PROBLEM

It has been observed that the elderly being the gemstones of any society are often ignored. Their care and wellbeing especially in rural communities depend largely on their children, relatives and sometimes government resources. This places a huge financial burden on their caregivers with a consequent lack in adequately providing for the nutritional and health needs of the aged in their care. Inadequate household food security, income, location, family type among others have been documented as important determinants of poor nutritional status of elderly Africans. All these increases in the cost of living affects to a great

extent dietary intakes and nutritional status of not only the general populace, but the often neglected elderly population. Furthermore, the vulnerability of the aged in Nigeria being far greater than that of the younger population shows the need for continuous monitoring of the aged with a view to identifying the extent of malnutrition among them in Nigeria.

RESEARCH OBJECTIVE

1. To determine the level of influence of educational status on the nutritional status of the elderly people in AkwaIbom State.
2. To ascertaine the level of influence of occupational status on the nutritional status of the elderly people in AkwaIbom State.

RESEARCH QUESTION

1. To what extent does educational status influence the nutritional status of the elderly people in AkwaIbom State?
2. To what extent does occupational status influence the nutritional status of the elderly people in AkwaIbom State?

RESEARCH HYPOTHESIS

H_o1 There is no significant difference in the mean rating of the respondents with low and high education on the nutritional status of the elderly people in AkwaIbom State.

H_o2 There is no significant difference in the mean rating of the respondents with low and high occupational status on the nutritional status of the elderly people in AkwaIbom State.

CONCEPTUAL REVIEW

CONCEPT OF NUTRITION

Human nutrition deals with the provisionupation of essential nutrients in foods that are necessary to support human life and health. Generally, people can survive up to 40 days without food, a period largely dependent on the amount of water consumed, stored body fat, muscle mass and genetic factors (Lieberson. 2004). Poor nutrition is a chronic problem often linked to poverty, a poor understanding of nutrition and dietary practices, and deficient sanitation and food security. Malnutrition and its consequences are large contributors to deaths and disabilities worldwide. Good nutrition helps elderly people grow physically, promotes human biological development and helps in the eradication of poverty (Lean, Michael, 2015).

The human body contains chemical compounds, such as water, carbohydrates (sugar, starch, and fiber), amino acids (in proteins), fatty acids (in lipids), and nucleic acids (DNA and RNA). These compounds consist of elements such as carbon, hydrogen, oxygen, nitrogen, phosphorus, calcium, iron, zinc, magnesium, manganese, and so on. All the chemical compounds and elements contained in the human body occur in various forms and combinations such as hormones, vitamins, phospholipids and hydroxyapatite. These compounds may be found in the human body as well as in the various types of organisms that humans consume (WHO, 2004). The seven major classes of nutrients are carbohydrates, fats, fiber, minerals, proteins, vitamins, and water. These nutrient classes are categorized as either macronutrients or micronutrients (needed in small quantities). The macronutrients

are carbohydrates, fats, fiber, proteins, and water. The micronutrients are minerals and vitamins. The combination of all this nutrients in the right proportion makes a healthy living for older adults

NUTRITIONAL NEEDS OF OLDER ADULTS

1. Energy: - Energy is not a nutrient but is required in the body for metabolic process, physiological functions, muscular activity, heat production, growth, and the synthesis of new tissues. Food components release energy through oxidation during the digestive process. Protein, carbohydrate, fat (the macronutrients), alcohol from foods and drinks are the only sources of energy for humans. Due to the reduction in basal metabolic rate as a result of ageing and possible reduction in levels of activity, older people require less energy than younger adults.

2. Fat: - Fats are the most concentrated form of energy for the body. They also aid in the absorption of the fat soluble vitamins A, D, E and K, and other fat-soluble biologically and active components. Fat carries food's flavor components, assists with satiety and enhances palatability. Although there are no specific recommendations outwit for the adult population as a whole, it is worth considering fat intake. Increased fat intakes are associated with higher levels of overweight and obesity, cardiovascular disease, some forms of cancer and diabetes mellitus.

3. Protein: - Protein occurs in all living cells and has both functional and structural properties .Amino acids assembled in long chains are the building blocks of protein. Proteins are necessary to build and repair tissue, in hormone, enzyme and antibody synthesis, and for many other body functions. Inadequate protein intake in older people is associated with increased skin fragility, decreased immune function, poorer healing, and longer recuperation from illness.

4. Vitamin D: - Vitamin D is primarily required for bone health in both children and adults with a deficiency resulting in rickets in children and osteomalacia in adults. Osteomalacia is associated with increased risk of fractures in older people. More recently, low vitamin D status has been implicated in a range of diseases including osteoporosis, several forms of cancer, cardiovascular disease, tuberculosis, multiple sclerosis and type 1 diabetes. Older people tend to expose less skin even when there is adequate sunlight which results in lower plasma levels of 25(0h)D (the marker for vitamin D status).

EDUCATIONAL QUALIFICATIONS AND NUTRITION OF THE ELDERLY

The educational qualifications include knowledge of psychology, sociology, human relations and communications. According to Udofot (2002) educational level and Socio economic status has been found to affect the nutritional intake and psychological health of aging individuals. The relevance of qualifications to maximum intake of nutrients among older people has been emphasized.

According to U.S. Census Bureau, (2006), socioeconomic status being an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others is based on income, education, and occupation. According to him, education here plays a very important role in the nutrition

and health of every human being, irrespective of age, ((Butrica, Toder, & Toohey, 2008). When analyzing a family's SES, the household income, earners' education, and occupation are examined, as well as combined income, versus with an individual, when their own attributes are assessed or more commonly known to depict an economic difference in society as a whole. Socioeconomic status depends on a combination of variables, including occupation, education, income, wealth, and place of residence.

When placing a family or individual into one of these categories, any or all of the three variables (income, education, and occupation) can be assessed. Additionally, low income and education have been shown to be strong predictors of a range of physical and mental health problems, including respiratory viruses, arthritis, coronary disease, and schizophrenia. These problems may be due to environmental conditions in their workplace, or, in the case of mental illnesses, may be the entire cause of that person's social predicament to begin with, (Social Security Administration, 2006). Education in higher socioeconomic families is typically stressed as much more important, both within the household as well as the local community. In poorer areas, where food and safety are priority, education can take a backseat. Youth audiences are particularly at risk for many health and social problems in the United States, such as unwanted pregnancies, drug abuse, and obesity, (Karp et al., 2004). The standing of a person or group in a community or society based on education, occupation and income, which is often, used as a benchmark for investigating health inequalities. The relative position attained by an individual in a cultural and financial hierarchy.

There is remarkable influence of educational attainment and nutritional education on lifestyle modification interventions in a resource limited country, is possible and can improve serum albumin after 6 months intervention. The high prevalence of overweight/obesity observed draws the attention of health care providers to involve dieticians in the care and management of nutritional education. Also future nutritional interventions should focus not only on strategies to increase weight, but also on optimising weight, respectively weight reduction in treatment naive HIV patients. Nutritional Education, as defined by the Administration on Aging, is "A program to promote better health by providing accurate and culturally sensitive nutrition, physical fitness, or health (as it relates to nutrition) information and instruction to participants, caregivers, or participants in a group or individual setting overseen by a dietitian or individual of comparable expertise. As reported in www.aoa.gov(2016), in order to be effective, programs must incorporate methods to encourage behaviorial changes. To do so, nutritional education must be provided on a continuous basis to Obstetrics Anesthetics Association (OAA) Nutritional Program participants.

a. Each congregate meal nutrition site shall provide nutritional education at a minimum of quarterly.

b. Home delivered meals shall provide nutritional education one time per year, when the required minimum nutrition risk assessment occurs.

- Nutritional Education has to go beyond providing information alone, distributing newsletters or brochures that contains nutritional information from a trusted source do not

constitute nutritional education unless they are accompanied by some form of instructions to a group or individual. Instruction is defined as imparting knowledge or information.

OCCUPATIONS AND NUTRITION OF THE ELDERLY

The one-size fits all world of the post war years has survived for too long. For many decades both health and social care systems, and the dedicated staff on whom they depend, have been under constraints that have tended to frustrate the best efforts of staff to change them. Too often they have had to work against the systems, and across organisational boundaries, to try to get the best for the patients and service users to whom they are responsible. In the intervening years, society has changed and attitudes have changed. Retirement is no longer seen as preparation for decline. All services, public and private, are attempting to catch up with a concept of old age that encompasses new ideas like the third age, the grey pound, grandparent power and increased volunteering particularly in services like the National Health Service (NHS). In recent decades an overdue and new found respect for older people has emerged, and the attitude that too often wrote people off as "elderly" has given way to one that demands that older people are seen as having individual needs. That people are living longer is something to celebrate, reflecting the achievements of organisations like the NHS, social services and the voluntary sector.

Occupation may be one of the main contributors to older people's health and well-being. This is because occupation in elderly populations not only provides economic independence but also continuously provides social support and emotional recognition, even though there are also certain mediating factors, such as psychosocial stress and exposure in the workplace (Depp & Jeste, 2006). Therefore, they assert that the benefits (i.e., economic independence, social support, and emotional recognition) may translate directly or indirectly into better health later in life. Many older persons want or need to work even after voluntary or mandatory retirement, for economic and psychological reasons; the burning question is whether this is better for their health and well-being, and more information is needed to understand this issue.

Individuals belonging to higher status and occupational groups consume more healthy foods such as fruit, salad and vegetables, whole meal bread and high fiber breakfast cereals. Thus, the combination of low available income and high prices of healthy foods may well be one of the main causes of inadequate and poor diets among the elderly. Public health literature supports the view that healthy and varied diets tend to cost relatively more than energy-rich and nutrient-poor diets (Drewnowski, 2010; Deeming, 2011). Healthy foods such as fruit and vegetables cost more than a basket of junk foods (Capacci et al. 2012). As a result, food intake of the elderly decreases not only for the decline of their nutritional needs, but also because the income of the majority of the elderly is a pension which in many cases is not sufficient for the subsistence (Garcia & Grande, 2010). Dean et al, (2009) conducted a survey in eight African countries and found that older people's variety of food intake was positively correlated to monthly income, access to a car and living arrangement.

Beydoun & Popkin (2004) investigated the impact of occupation on cognitive and physical function within an occupational window covering the past 15 years, using a nationally representative sample in Korea. They revealed that employment would have

different effects on cognitive and physical function including nutrition depending on sex and job types. Substantial effort has been devoted to clarifying the impact of occupations on health and nutrition in later life (Beydoun & Popkin, 2004). Most of all, education has been focused as a main determinant of nutrition, due to positive and long-lasting effects on subsequent functional changes in later life. Calmels (2000) asserts that despite the importance of education, considering the stigma associated with older people, who are among the most economically disadvantaged segments of society and are often isolated and ignored, occupation may be a better discriminator of health risk than education for older persons. Actually, there is some negative publicity related to exposure to harmful materials or stressful work conditions, but occupation seems to give rise health advantages for them. The benefits of engagement in occupation in later life extend beyond the effects of labor itself, as occupation may lead to economic independence, healthy nutrition, improved self-esteem, and social integration and recognition. Although there are differences based on sex and job type, these benefits may directly or indirectly sustain better function and greater comfort.

Nutrition is a positive concept emphasizing the fulfillment of integrated functions including social well-being, personal resources, and physical fitness (Calmels, 2000). Health status can be affected by several factors, such as personal behaviors and occupation, in a variety of ways; among these, occupational factors may be more fundamental in that they enable older people to access important resources that can be used to minimize disease risk or affect health outcomes. Older adults may not absorb nutrients well because of age-related changes in metabolism, according to Alberta Caregiver College. Vitamin B12 deficiency is particularly common because the digestive tract of an older adult doesn't absorb this vitamin well, which can increase the risk of depression and dementia. A blood test can detect deficiencies; supplements or vitamin B12 shots are the recommended therapy. Elderly people living on fixed incomes may not be able to afford the amount of nutritious food needed to maintain good health. Food banks and the U.S. food stamp program, known as the Supplemental Nutrition Assistance Program, help by providing low-income people access to free food.

Older people should no longer be seen as a burden on society. They are a vital resource of wisdom, experience and talent. However, there have been reports of poor, unresponsive, insensitive, and in the worst cases, discriminatory, services. Instances of adverse discrimination have usually been inadvertent, a result of the survival of old systems and practices that have failed to keep pace with changing attitudes or advances in the capacity of professionals to intervene successfully. This has been shown in specific problems such as the lack of rehabilitation, inadequate dementia services and inconsistencies in stroke care. Health and social care staff have been at the forefront of efforts to secure a better deal for older people, but too often the structures and practices that they have had to work with have frustrated these efforts. 7. In the NHS context, the evidence suggests that, in spite of these problems, older people are more satisfied with services than are younger people. More than two thirds of people over the age of 65 say they are satisfied with the NHS, compared to just over half of 25-34 year olds. 91% of people over the age of 65 are satisfied with their GP, compared to 74% of 25-34 year olds. The same pattern is repeated for inpatient and outpatient care. For social care services, Social Services Inspectorate inspections of services for older people regularly show user satisfaction rates of around 80%. 8. This is probably

partly because people who have more contact with the NHS and social services tend to be more satisfied, but also because older people are often more conscious of how difficult things could be before the advent of the NHS and the modern welfare state. In 2008 the women born in 1948 are due to retire. They are very different from the women who retired in 1948, with higher expectations, of public sector services.

Differences in occupations and socioeconomic status are responsible for important disparities in the nutrition, housing, safety, and health of large groups of people. In general, the lower one's occupations or socioeconomic status, the greater one's risk of malnutrition, heart disease, infectious diseases, and early mortality from all causes. Income, education, occupation, vocation, and wealth all contribute to socio-economic scale. The position of an individual on an occupations and socio-economic scale that measures such factors as income, type of occupation, place of residence, and in some populations, ethnicity and religion.

Decades of demographic research about older Americans indicate a strong association between level of wealth and status of health. This association has led some to conclude that senior citizens who have more household wealth are healthier simply because they can afford better health care as they age. The implication of this view is that programs providing poorer elderly citizens with more funds for health care would minimize the existing disparity in health status and enable these poorer individuals to function as effectively as their wealthier counterparts, (Fratiglioni & Rocca, 2001).

Sociologists often use occupations and socioeconomic status as a means of predicting behavior. occupation or socioeconomic status is commonly conceptualized as the social standing or class of an individual or group. It is often measured as a combination of education, income and occupation .Examinations of socioeconomic status often reveal inequities in access to resources, plus issues related to privilege, power and control. Socioeconomic status is typically broken into three categories (high occupation/SES, middle occupation/SES, and low occupation/SES) to describe the three areas a family or an individual may fall into.

METHODOLOGY

A correlational survey design was used for this study. The study area is Akwa Ibom State. The population of the study comprised of 59,545 elderly men and women. Multi stage sampling technique was used to have a sample size of 400 elderly men and women in the three Senatorial District in Akwa Ibom State. The measurement for data collection will be structured questionnaire tagged: “Demographic Variables and Elderly Nutritional Status Questionnaire (DVENSQ)“. The instrument passed through face validation by experts. The yielded reliability coefficient of .81 indicates that the internal consistency of the item is highly reliable for the study. The data generated for this study was analyzed using mean score rating and standard deviation. Hypotheses were tested using Pearson product moment correlation analysis at 0.05 level of significant.

RESULTS AND DISCUSSION

RESEARCH QUESTION 1

To what extent does educational status influence the nutritional status of the elderly people in Akwa Ibom State?

Table 1: Correlation analysis of Educational status on the nutritional status of the elderly people in Akwa Ibom State

Variables	XY_r
educational status	
	.22
nutritional status	

Table 1 presents a correlation coefficient of .22 which is positive and within .70 to 1.00 correlation coefficient of Creswel (2008), showing moderately high relationship between the two variables. This indicates that educational status to a positive, high extent influence the nutritional status of the elderly people in Akwa Ibom State.

RESEARCH QUESTION 2

To what extent does occupational status influence the nutritional status of the elderly people in Akwa Ibom State?

Table 2: Correlation Matrix of occupational status influence on the nutritional status of the elderly people in Akwa Ibom State

Variables	XY_r
occupational status	
	.14
nutritional status	

Table 2 presents a correlation coefficient of .14 which is positive and within .70 to 1.00 correlation coefficient of Creswel (2008), showing moderately high relationship between the two variables. This indicates that occupational status to a positive, high extent influence the nutritional status of the elderly people in Akwa Ibom State.

HYPOTHESIS TESTING

Hypothesis 1: There is no significant influence of educational status on the nutritional status of the elderly people in Akwa Ibom State.

Table 3: Correlation Matrix of Educational status influence on the nutritional status of the elderly people in Akwa Ibom State

		educational status	nutritional status
educational status	Pearson Correlation	1	.221
	Sig. (2-tailed)		.241
	N	30	30
nutritional status	Pearson Correlation	.221	1
	Sig. (2-tailed)	.241	
	N	30	30

The Table also indicates a p-value of .24 which is greater than the alpha value of .05. This means that there is no significant influence of educational status on the nutritional status of the elderly people in Akwa Ibom State. Therefore, the hypothesis that there is no significant influence of educational status on the nutritional status of the elderly people in Akwa Ibom State was not rejected. This is in consonance with the result of Udofot (2002) that educational level and socio economic status affect the nutritional intake and psychological health of aging individuals.

HYPOTHESIS 2

Occupational status significantly influence the nutritional status of the elderly people in Akwa Ibom State.

Table 4: Correlation Matrix of occupational status influence on the nutritional status of the elderly people in Akwa Ibom State

		occupational status	nutritional status
occupational status	Pearson Correlation	1	.136
	Sig. (2-tailed)		.110
	N	30	30
nutritional status	Pearson Correlation	.136	1
	Sig. (2-tailed)	.110	
	N	30	30

The Table also shows a p-value of .11 which is greater than the alpha value of .05. This means that occupational status does not significantly influence the nutritional status of the elderly people in Akwa Ibom State. Therefore, the hypothesis that occupational status significantly influences the nutritional status of the elderly people in Akwa Ibom State was

not upheld. These findings have the support of Ukoima (2008) who found that some of cultural and demographic characteristics of respondents like educational status were directly related to the nutritional health of older adults.

CONCLUSION

The assessment of occupational status on the nutritional status of the elderly in Akwa Ibom State reveals a strong correlation between past employment, income levels, and dietary habits. Retired individuals with stable pensions tend to have better nutrition, while those who relied on informal or physically demanding jobs often face food insecurity. Limited financial resources, health challenges, and lack of social support further impact their ability to access balanced diets. The study highlights the need for targeted nutritional interventions and social welfare programs. Government and community efforts should focus on improving food accessibility, healthcare, and support for the elderly. Addressing economic disparities among the aging population is crucial for enhancing their overall well-being.

RECOMMENDATIONS

- Home scientists should consider all the variables found to have influence on the nutritional status of the elder people while prescribing menu for their health.
- Psychologists should consider all the variables found to have influence on the nutritional status of the elder while counseling them to accommodate certain factors and adopt the best menu for their health.

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