SOCIO-DEMOGRAPHIC CHARACTERISTIC OF THE ELDERLY AND THEIR HEALTH CARE SEEKING BEHAVIOUR IN KOKONA LOCAL GOVERNEMNT AREA OF NASARAWA STATE, NIGERIA

Mamman Matthew SAMUEL
Sociology Department, Faculty of Social Sciences,
Nasarawa State University, Keffi, Nigeria
+2348031851387, mattsam001@gmail.com

&

Attah Amana PHILIP
Department of Social Sciences and Humanities,
Federal Polytechnic, Idah, Kogi State, Nigeria
+2348069619629, philipfpi.paa@gmail.com

Abstract

The proportion of elderly in the world is growing three times faster than the World population itself. This paper examines the socio-demographic characteristics of the Elderly and their health care seeking behaviour among Elderly persons in Kokona Local Government Area of Nasarawa State, Nigeria. A social survey design was adopted. A sample of 383 elderly persons aged 60 years and above was drawn, using multi-stage sampling techniques including simple random, systematic sampling, clustered and purposive sampling techniques in the selection of electoral wards, towns/villages, main streets, houses, households and individuals. Primary and secondary data were utilized in the study. The primary data were generated through the use of questionnaires. The questionnaires were analyzed quantitatively using logistic regression. The results show that marital status, religion, monthly income, living arrangement and number of children are the most significant socio-demographic characteristics affect the choice the types of medicine and health facilities. The paper recommends that policy formulation and implementation by government should be directed towards improving access to healthcare services. This can be done by increasing the number of health facilities in under-served areas, improved the quality of services in the existing ones, supportive supervision and other measures could be embarked upon in order improve quality and accessibility to health care services and there should be an increase availability of key services by health administrators for the aged population which is a crucial approach to improve health care seeking behaviour among the old. Periodic orientation should be conducted by health administration for health care personnel on rudimentary principles of human relations to make better friendly services for the elderly who need special services.

Introduction

The proportion of elderly in the world is growing three times faster than the World population itself, and by 2050, one out of four people will be older than 60 years of age. Aging society offers many benefits, as older adults possess a wealth of knowledge and experience that can be an invaluable asset to economic development (Tsang, 2017). In the last few decades there have been drastic changes in population, particularly in developed countries. The increase of aged population is more than that of general population. Global population increased by 37.6% in between 1980 and 2000, while 60+

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

group increased by 60.5%. In developing countries the changes were 46.2% and 82.5% respectively. Even 80+ population which was 34.2 million globally in 1980 has increased to 58.2 million in 2000 and expected to reach 103.9 million in 2030, meaning an increase of 204% between 1980 to 2020 (WHO, 2017).

However, as people age, they are prone to experience physical and cognitive impairment during the natural process of growing older, and getting appropriate care can become challenging. Older adults are also more vulnerable to social isolation, loss of autonomy, loss of privacy, economic barriers and depression which has been linked to further disability and is associated with loneliness and poverty (UNPFA, 2017)

Aged people constitute a category of population that demands attention. But when one considers the problems the aged face on social, economic and health grounds the urgency becomes more evident. Health condition becomes more important in elderly because of increased health care costs, increased demand, costly procedures, lengthy hospitals stay and long term care. Getting older persons to keep themselves healthy for as long as possible minimizes the cost and this has drawn attention of the public health personnel (Health seeking behavior of aged population. http://dspace.sctimst.ac.in/jspui/bitstream/123456789/2075/1/MPH_2004_04.pdf).

Elderly persons, particularly the frail older adult, have been the most significant consumer of health resources (Young, 2013). Old people need health care because old age is associated with pain and ill health (Chen, 2012). According to Campbell (2012), this rapid growth of the elderly population is a challenge to the medical profession, administration and the society as well. The delivery of health care to the older adults has been recognized to be more complex than that of younger adults because, according to Mion (2003), the elderly persons utilize the majority of health care services. The complex needs have implication for future health care delivery to the geriatric population. Specifically in Nigeria, the number of elderly citizens has been on the increase and their health needs receiving popular recognition (Abdulraheem, 2007).

World Health Organization (2013) observed that the population of Nigerians Elderly 60 years and above is already increasing. United Nation's population profile (2015), shows that there were 5 million Nigerians elderly 60 years and above in 2015 and the number will continue to increase by year 2025, it is estimated that 6% of the population will be 60years and above. Abdulraheem (2007) stated that it may be necessary for policy makers to consider establishing neighborhood adult day care centres where elderly persons can meet each other during the day. Other services like medical, nutritional, recreational and educational services can also be incorporated into the neighborhood day care centres (Okoye, 2012). The use of adult day care centres has been reported by many scholars to be very advantageous to elderly persons and their families. To Paul (2011), the delivery of health care to the older adults has been recognized to be more complex than that of younger adults because the elderly persons utilize the majority of health care service while the complex needs have implication for future health care delivery to the geriatric population, Specifically in Nigeria, where the number of elderly citizens has been on the increase and their health needs receiving popular recognition.

Provision of health care services for older people is different across countries, continents and cultural societies. In developed regions of the world, health care is often provided by well-equipped public health facilities and nursing homes designated for the elderly individuals. In United States, older adults have a higher frequency of primary care visit, 50% hospital consultation, 80% home care

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

services and occupy 90% of all nursing home beds (Moe, 2012). Paradoxically, in developing regions, the picture is rather different as the contemporary health care facilities might not be the first point of contact for an elderly person.

In most Sub-saharan African countries, availability and utilization of health care services among the elderly is poorly reported. For instance, a study carried out in Democratic Republic of Congo revealed that more than half of the elderly people (55.6%) consulted private facilities and traditional spiritual healers once they were ill. The public health facility was used by only 3.3% elderly persons (Soai, 2012). In Ghana, it was reported that in the last three years, about one-third of the elderly (31.5%) utilize health care and others utilize traditional healers (UN, 2017).

In Nigeria, geriatrics care has not yet received its desire attention. Most elderly persons utilize the conventional health care facilities whenever they fall ill while others subscribe to self-medication with orthodox medicine and traditional herbs. In Nasarawa State, there are no known available social support services, elderly homes and designated health facilities where health care for the elderly population is prioritized. In some situations, most elderly persons tend to depend on their families, relatives and friends for utmost care. This accounts for why they are care-dependent. However, studies have shown that health care seeking behaviour among the elderly is suboptimal.

A conglomerate of research has shown that certain factors affecting the health care seeking behaviour among the elderly persons. It has been observed that distance, waiting time and attitude of health workers hinders adequate access and use of health services especially among older adults (Soai, 2012). A qualitative follow-up study in Hong Kong reported that barriers to health care seeking behaviour among the elderly include; lack of knowledge about aged care services, poor transport system, long waiting time, lack of services during non- offices hours, lack of accommodation for people with disability or dementia and a complication of procedure (Moe, 2012). A household survey carried out in Nigeria revealed that a number of factors such as poverty (50.3%) followed by nature of illness (25.2%), quality of service provided (10.8%), attitude of health caregivers (3.6%), waiting time (3%), availability of service (2.8%), distance (2.3%) and level of education (2%) influence healthcare seeking behaviour among the elderly (Okumagba, 2011). Based on the foregoing, this paper examines the socio-demographic characteristics of the Elderly and their health care seeking behaviour among Elderly persons in Kokona Local Government Area of Nasarawa State, Nigeria.

Hypothesis

   i.   There is no significant relationship between socio-demographic characteristics of the elderly and their health seeking behaviour

Conceptual Clarification and Theoretical Framework

Elderly

Defining "elderly" is challenged by the changing average lifespan of human beings. Around 1900, average life expectancy was between 45 and 50 years in the developed countries of that time. Now, life expectancy in developed countries reaches 80 years. The United Nations uses 60 years to refer to elderly person (UN, 2017). This line, which divides younger and older cohorts of a population, is also used by demographers. However, in many developed countries, the age of 65 is used as a reference point for older persons as this is often the age at which persons become eligible for old-

age social security benefits. So, there is no exact definition of "elderly" as this concept has different meanings in different societies. There are other definitions of "elderly" that go beyond chronological age. Elderly as a social construct is often associated with a change of social roles and activities, for example, becoming a grandparent or a pensioner. Elder persons often define old age as a stage at which functional, mental and physical capacity is declining and people are more prone to disease or disabilities (Thebe & Robert de Graft, 1999).

According to the United Nations (2013), elderly persons in ages 60 years and over doubled from 841 million in 2013 to more than 2 billion in 2050. The UN (2013) further stated that, developing nations will experience more growth in the number of elderly groups as a result of improved quality health care. The World Health Organization (2015) posits the chronological age of 60 years as an acceptable definition of elderly or older persons in developed countries. Similarly, United Nation has not adopted a standard criterion, but generally uses 60+ years to refer to the elderly population (WHO 2015). Many westernized concepts does not adapt well to the situations in Africa. Goman (2000) defined elderly in many developing countries to begin at a point where their contribution is no longer active, or age at which one begin to receive pension benefits. Richman (2007), define "elderly" as a chronological age of 60 years old or older, while those from 65 through 74 years old are referred to as "early elderly" and those over 75 years old as "late elderly.

Health Seeking Behaviour
Health-seeking behaviour has been defined as a "sequence of remedial actions that individuals undertake to rectify perceived ill-health" (Mackian, 2012). In particular, health-seeking behaviour can be described with data collected from information such as the time difference between the onset of an illness and getting in contact with a healthcare professional, type of healthcare provider patients sought help from, how compliant patient is with the recommended treatment, reasons for choice of healthcare professional and reasons for not seeking help from healthcare professionals.
In the broadest sense, health behaviour includes all behaviours associated with establishing and maintaining a healthy physical and mental state, (Primary Prevention). Health-seeking behaviours also include behaviours that deals with any digression from the healthy state, such as controlling (Secondary Prevention) and reducing impact and progression of an illness (Tertiary prevention) (Dawodu & Uzobo, 2015).

Shehu (2005) described health behaviour as a pattern of choices constituting what one does and what one fails to do that affects fitness level and health status. Examples of such behaviour are physical activities, drug abuse, proper nutrition, alcoholism and indiscriminate sexual practices. He added that health seeking behaviour is acts of making choices from the alternatives that are available and to the ease with which they are able to choose certain ones over others. The researchers observed that the effectiveness of using health behaviour for well-being depends largely on many factors among which demography plays a prominent role. Demographic factors are socio-economic characteristics of a population expressed statistically as age, gender, educational qualification, income level, marital status, occupation, religion, birth rate, death rate and size of the family (Shehu, 2005). The identified demographic factors have positive and negative effects on man's state of health, but the improvement, corrections and preventive measures are acquired through man's health-seeking behaviour. Health care seeking behaviour which is a sequence of remedial actions to address perceived ill health, is a complex, dynamic and multidimensional process that is not only influenced by the individual alone but by a broader interaction between the individual, household and community within the constraints of existing factors such as affordability, availability and accessibility. In seeking health care, people's behaviour differ in relation to the number and type of

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

health care services sought, which is influenced by the nature of the disease and who is experiencing it within the context of what they believe is the causation; and also, when it comes down to individual choices, people with care options will seek the care that perceivably meets their quality, convenience and cost (Mazzilli & Davis, 2009).

Theoretical Framework

This paper is situated within the framework Health Belief Model. The Health Belief Model (HBM) is a Psychological Model that attempt to explain and predict health behaviours. This is done by focusing on the attitude and beliefs of individuals. The Health Belief Model was developed in the 1950s by Social Psychologists Hochbaum, Rosenstock and Kegels working in the USA public Health Services. This theory explains psychological health behaviour change, the model is developed to explain and predict health-related behaviours, particularly in regard to the uptake of health services (Janz, Nancy; Marshall & Becker 1984, Rosenstock, 1974). It remains one of the best known and most widely used theories in health behaviour research (Christopher, 2010). The Health Belief Model suggests that people's beliefs about health problems, perceived benefits of action and barriers to action, and self-efficacy explain engagement (or lack of engagement) in health-promoting behaviour (Rosenstock, 1974). A stimulus, or cue to action, must also be presented in order to trigger the health promoting behaviour.

The Health Belief Model attempt to predict health behaviour through a variety of means, health is influenced by behaviour and behaviour is modifiable (Stretcher & Rosenstock, 1997). According to MacKian (2003), the process of health care seeking involves identification of pathways to the formal health care system, often commencing with home care and traditional healers and extending to the formal system, pathways differing according to the present condition.

In a review of Health Belief Model or theory, Chen (2012) demonstrated that the decision to engage with a particular medical channel is influenced by a variety of variables, including sex, age, the social status of the aged, the type of illness, access to services and perceived quality of the service. Health-seeking behaviour looks at illness behaviour more generally and focuses in particular on motivating factors of illness perception and health belief. Health care seeking behaviour Studies look beyond the individual for social patterns or determinants of decision making. Health seeking behaviour clearly varies for the same individuals or communities when faced with different illnesses. For example, Barret (2008) highlights contrasting pathways to care for aged women when faced with abnormal vaginal discharge, as opposed to malaria. For the former, the woman is bound far more by rituals and obligations, such as shaving prior to examination, and being accompanied to a medical consultation by her husband.

The Health Belief Model is used to develop effective interventions to change aged health-related behaviours by targeting various aspects of the model's key constructs (susceptibility, severity, benefits, cue to action). Interventions based on the Health Belief Model may aim to increase perceived susceptibility and perceived seriousness of a health condition by providing education about prevalence and incidence of disease of the aged, individualized estimates of risks, and information about the consequences of aged related disease or illnesses (e.g., medical, financial, and social consequences). Interventions may also aim to alter the cost-benefit analysis of engaging in a health-promoting behaviour when seeking health care by the aged (i.e., increasing perceived benefits and decreasing perceived barriers) by providing information about the efficacy of various behaviours to

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

reduce risk of disease, identifying common perceived barriers towards health care, providing incentives to engage in health-promoting behaviours, and engaging social support or other resources to encourage health-promoting behaviours among the aged persons.

Furthermore, interventions based on the Health Belief Model may provide clues to action to remind and encourage aged persons to engage in health-promoting behaviours such as practicing healthy aging. Interventions may also aim to boost self-efficacy by providing training in specific health-promoting behaviours, particularly for complex lifestyle changes in aged persons (e.g., changing diet or physical activity, adhering to a complicated medication regimen). Interventions can be aimed at the individual level (i.e., working one-on-one with aged individuals to increase engagement in health-related behaviours) or the societal level (e.g., through legislation, changes to the physical environment.

Literature Review

Socio-demographic Characteristic of the Elderly and their Health Care Seeking Behaviour

The factors determining trends in the health seeking behaviour may be seen in various contexts like socio-demographic, socioeconomic and cultural. Most countries have diverse health systems according to the local circumstances, and a multi-level coordination is essential for better health profile of the nation. Features of the health facility and confidence in health care workers also play a major role in decision making about the choice of the health facility. Health seeking behaviour has been explored in many international and its significant determinants included the physical, demographic, Socio-economic and cultural factors and the organization of healthcare system (Socio-Economic Determinants of Geriatric Healthcare .... https://www.ijsr.net/archive/v7i9/ART20191114.pdf).

Socio-demographic characteristics of a population expressed statistically as age, gender, educational qualification, income level, marital status, occupation, religion, birth rate, death rate and size of the family (Shehu, 2005). The identified socio-demographic characteristics have positive and negative effects on man's state of health, but the improvement, corrections and preventive measures are acquired through older person health-seeking behaviour. The socio-demographic characteristics like sex, marital status and religious affiliation plays significant role in the life of an individual (Shehu, 2005).

In developing countries there is still inadequate understanding of how gender influences health itself, access to health information and services, health-seeking behaviour and the use of services, treatment and attitudes of providers, and health outcomes (Buor, 2003; Hjortsberg, 2003). This is important because if we believe that health is genetically, biologically, ecologically, culturally and socially determined, then gender must be recognized as being one of these determinants as it is interconnected with biology and the socio-cultural factors that affect health (Vlassoff & Moreno, 2002). In some developing countries gender is reported to affect the utilization of health and medical services. There is an association between gender and health seeking, and differences in seeking treatment for other family members, such as female and male children (Ahmed, et al, 2005). For certain conditions, gender, income and literacy determinants do not affect any delay in health care seeking. Women in developing countries are frequently confronted with a countless of socio-cultural factors which negatively impinge upon physical well-being and accessibility to appropriate health

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

care services (Nash & Gilbert, 1992). For Hartigan, (2001) some cultural practices that do not allow women to be seen in public during the day, as in many Muslim communities, negatively affect healthcare seeking behaviour. In Nepal, for general health issues gender has been shown not only to affect illness reporting, but also the decision to choose a health care provider and how much to spend on a sick child (Pokhrel, Snow, Dong, Hidayat, Flessa, & Sauerborn, 2005). In terms of specific conditions such as tuberculosis, women were more likely to delay in seeking treatment than men, while perceptions of illness were found to be different between men and women (Pokhrel & Sauerborn, 2004). In Ghana, women are more likely to seek health care than men, in Zambia; women with low level of education were more likely to delay in seeking treatment (Needham, Foster, Tomlinson, 2003).

As a determinant of health care seeking behaviour among the elderly, literacy is intimately tied to gender, education level, and regular income and is considered an indicator of socio-economic status (Bharmal, 2000). Male literacy levels are consistently higher than female, particularly in developing countries (Institute for Statistics Literacy and Non Formal Education Sector, 2002). Low literacy levels affect the ability to access health information presented in print form, to read labels and instructions for medications, or even safety advice. People with low levels of literacy are less likely to request care early on in their illness. A low level of literacy is an indicator of higher hospitalization rates, greater rates of malnutrition, and skin disease (Bharmal, 2000). A key socio-cultural determinant of health is education. Available data in all countries points to the relationship between the risk of disease and lower levels of education (Mackenbach & Howden-Chapman, 2003). Occurrence of illness is significantly lower in groups with higher education, especially among men. Buor (2003) reports that in Ghana higher education results in higher utilization of health facilities. Education may be the single most important factor to influence women's health. In developed countries education level is a correlate of access to a national health service, and directly affect women's access to healthcare in developing countries also education and economic status of the household are positively related with choosing to act and seek health care when ill in Zambia (Hjortsberg, 2003). Multiple studies around the world have also used female and maternal education levels as health indicators for everything from social problems in dealing with types of illnesses to utilization of hospitals, immunization levels and other health services. Education increases the possibility of health education and health literacy, but is not a guarantee (Tomlinson, 2003).

Income is a determinant of health care seeking behaviour among the elderly. It determines not just health seeking behaviour, but risk factors associated with health outcomes, barriers to seeking health care, types of treatment and delays in service use (Johansson, Long, Diwan, & Winkvist, 2000). According to (Pillai, Williams, Glick, Polsky, Berlin, & Lowe, 2003) economic status is the most significant predictor of healthcare service use. Income affects the level to which care facilities are sought and used (Buor, 2003). Decision to seek health care is often based upon the cost as compared to the perceived benefit (Hjortsberg, 2003). According to Buor (2003) the ability to pay determines the use of health services. A lack of finances affects health care seeking behaviour, willingness to pay for services and the means to do so (Foreit & Foreit, 2003). Low income is a barrier to health care seeking behaviour. In a study in Southeast Nigeria Onwujekwe and Uzochukwu, (2005), found that rural populations were less likely to pay the cost of health care treatment upfront and more likely to pay in installments. Most elderly Nigerian citizens live in poverty and this impact on their healthcare seeking behaviour.

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

Age is a factor associated with health both in it and in conjunction with other factors (Kaplan, Newsom, McFarland, & Lu, 2001). The effects of age can be due to differences in socio-economic status as defined by employment, education and income, as well as greater economic dependency, poor housing, loneliness and lowered self-esteem (Waweru, Kabiru, Mbithi, & Some, 2003). The elderly are often unable to access adequate health care which can contribute to their poor health status. This can be a concern in developed countries and those less developed. Examination of incomes, health status, social support of the elderly shows that there have been persistent inequalities related to age, gender and social class in terms of resources, access to informal and formal care and value accorded to later life. These inequalities are due to differences in status and resources. The elderly may be more likely to use informal health care, home and folk remedies, traditional healers and medicine, and even faith healers not just because of economic reasons (although often traditional medicine can be more expensive, but as likely out of habit, tradition, or personal beliefs and attitudes.

Methodology

Kokona Local Government Area is one of the thirteen Local Government Areas in Nasarawa State, Nigeria. It was created on 4th December, 1996 with Garaku as headquartered. Kokona Local Government Area covers an area of 1,844 km². The Local Government Area is bounded to the west and north-west by Karu Local Government Area, also to the west by Keffi Local Government Area, to the north-east by Kaduna State, to the east by Akwanga, Nasarawa Eggon and Lafia Local Government Areas, and to the south by Nasarawa Local Government Area.

This paper adopts the social survey research design. The social survey entails a research design that allows the collection of data from a fraction of a study population, which can be seen as truly representing the larger population using questionnaire. The choice of social survey is because it gives the researcher ample advantage in the collection of data from the population spread at ease and it is a distinctive means of getting systematic information of considerable magnitude. Kokona Local Government Area has a projected population of 146,500 populations as at 2018 (National Population Commission, 2018). However, the target population for this paper is not the entire population of Kokona Local Government Area but the elderly persons, both male and female, who are 60 years and above in some selected electoral wards which include Agwada, Amba, Dari, Garaku, Kofar Gwari, and Kokona. The population of this category of people from the selected electoral wards is 32,325 (Kokona Local Government Primary Health Care Department, 2008).

Sample size was determined using Yamane (1967) statistic, where n= required sample size, N=population size (the universe) e=sample error (usually 10,05 and 01 acceptable error) and n=raised to the power of 2
According to Yamane, (1967):

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

Where:
N = Total population,
n = required sample size
e = margin of error allowed (5%)
Hence
e = $(0.05)^2$,
n = 32, 325

$$n = \frac{32,325}{} = \frac{32,325}{} = \frac{32,325}{}$$

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

1+ 32, 325 (0.05)^2	32, 326 (0.0025)	80.813

n   =   399.9

n   =   400 app.

The paper employed multistage sampling technique. A multistage sampling technique involves selecting sample from another sample. In this sampling procedure, the primary groups and sub-groups are selected on the basis of geographical distribution rather than other characteristics. Multistage sampling technique was employed in the selection of electoral wards; streets; houses/compounds, household and respondent/individual. The reliability and validity of information for the paper demand both Primary and Secondary sources of data collection. For the primary data, the paper relied on Questionnaire. Secondary data are second hand information, that is data already collected and presented in a particular form and which would be useful to interested researchers. It was used to complement the primary data. This paper elicits data from quantitative methods. Quantitative data was analyzed using multivariate analysis. Multivariate analysis involves the use of binominal regression in order to show the extent of relationship among the variables.

Test of Hypothesis
The tables below are presented in relation to the hypothesis formulated in this work. To ensure this is achieved, binomial regression was used to indicate whether there is relationship or not between socio-demographic characteristics of the elderly and their health seeking behaviour.

Testing the significant influence of socio-demographic characteristics on the types of medicine
Logistic regression was utilized to envisage if socio-demographic characteristics of the elderly affect the types of medicine (Orthodox and Traditional medicine) respondents rely on when sick in the study area. The socio-demographic characteristics are sex, marital, religion, level of educational attainment, occupation, living arrangement, ethnic group, types of marriage and number of children which are independent variables and types of medicine (Orthodox and Traditional medicine) is the dependent variable. Respondents were evaluated base on the type of medicine (Orthodox and Traditional medicine).

Variables in the Equation

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
SEX	.376	.237	2.514	1	.113	1.456	.915	2.318
MARITAL STATUS	.000	.094	.000	1	.998	1.000	.831	1.203
RELIGION	.392	.156	6.336	1	.012	1.480	1.091	2.008
EDUC. ATTAINM	.034	.118	.084	1	.772	1.035	.821	1.305
OCCUPATION	.065	.088	.554	1	.457	1.068	.899	1.268
MONTHLY INCOM	-.343	.077	19.813	1	.000	.710	.611	.826
LIVING ARR	-.198	.124	2.547	1	.111	.820	.643	1.046
ETHNIC GROUP	.133	.045	8.671	1	.003	1.142	1.045	1.247
TYPE OF MARRIAG	.100	.255	.155	1	.694	1.106	.670	1.824
NO. OF CHILDREN	.248	.104	5.667	1	.017	1.282	1.045	1.573
Constant	-1.719	.883	3.790	1	.052	.179		

 a. Variable(s) entered on step 1: SEX, MS, REL, EA, OCCUP, MON, ARR, ETHNIC, TYPE, CHILDREN.

Logistic regression was carried out to establish how the types of medicine utilized by the respondents in the sampled areas of the study is determined by socio-demographic characteristics of the Elderly (sex, marital, religion, level of educational attainment, occupation, living arrangement, ethnic group, types of marriage and number of children) The logistic regression model was statistically significant, x^2= 53.751, p<.0005. The model explained 17.9 percent (Nagelkerke R^2) of the variance in the types

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

of medicine and correctly classified at 64.8 percent of cases. Monthly income and living arrangement are the most probably socio-demographic characteristics that affect respondents' choice of types of medicine to be utilized in the sampled areas of the study.

Testing the significant influence of socio-demographic characteristics on the health facilities respondents patronized most when sick

Logistic regression was used to predict if socio-demographic characteristics of the elderly and the health facilities (Government hospital/health centre and Private hospital/health centre) respondents patronized on when sick in the study area. Respondents were evaluated base on the health facilities (Government hospital/health centre and Private hospital/health centre) they patronized most when sick which is the dependent variable.

Variables in the Equation

Variables	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
SEX	.128	.226	.320	1	.571	1.137	.730	1.771
MARITAL STATUS	-.043	.094	.204	1	.652	.958	.797	1.153
RELIGION	-.302	.155	3.774	1	.052	.740	.545	1.003
EDUC. ATTAINM	.181	.118	2.348	1	.125	1.199	.951	1.511
OCCUPATION	.015	.081	.036	1	.850	1.015	.866	1.191
MONTHLY INCOM	-.101	.071	2.029	1	.154	.904	.786	1.039
LIVING ARR	.139	.118	1.393	1	.238	1.149	.912	1.447
ETHNIC GROUP	.095	.041	5.265	1	.022	1.099	1.014	1.192
TYPE OF MARRIAG	.394	.241	2.668	1	.102	1.483	.924	2.378
NO. OF CHILDREN	-.025	.101	.059	1	.808	.976	.800	1.190
Constant	-1.599	.863	3.430	1	.064	.202		

 a. Variable(s) entered on step 1: SEX, MS, REL, EA, OCCUP, MON, ARR, ETHNIC, TYPE, CHILDREN.

Logistic regression was performed to ascertain how the health facilities patronized by the respondents in the area of study is determined by socio-demographic characteristics of the Elderly (sex, marital, religion, level of educational attainment, occupation, living arrangement, ethnic group, types of marriage and number of children).

The logistic regression model was statistically significant, x^2= 18.011, p<.0005. The model explained 63.0 percent (Nagelkerke R^2) of the variance on the health facilities respondents patronized when sick and correctly classified at 62.7 percent of cases. Marital status, Religion, monthly income, living arrangement and number of children are the most certainly socio-demographic characteristics that affect respondents' choice of health facilities in the sampled areas of the study.

Decision rule

There are socio-demographic characteristics identified that influenced the types of medicine (Orthodox and Traditional medicine) and health facilities (Government hospital/health centre and Private hospital/health centre) respondents utilized and patronized in the study area. The study established that marital status, religion, monthly income, living arrangement and number of children

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

are the most significant socio-demographic characteristics affect the choice the types of medicine and health facilities.

Discussion of Findings

This paper was designed to examine socio-demographic characteristics of the Elderly and their health care seeking beaviour among Elderly persons in Kokona Local Government Area of Nasarawa State, Nigeria. Considering the hypothesis, the finding indicated that marital status, religion, monthly income, living arrangement and number of children are the most significant socio-demographic characteristics affect the choice the types of medicine and health facilities. In corroborating the finding, socio-demographic characteristics of a population expressed statistically as age, gender, educational qualification, income level, marital status, occupation, religion, birth rate, death rate and size of the family (Shehu, 2005). The identified socio-demographic characteristics have positive and negative effects on man's state of health, but the improvement, corrections and preventive measures are acquired through older person health-seeking behaviour. The socio-demographic characteristics like sex, marital status and religious affiliation plays significant role in the life of an individual (Shehu, 2005).

Conclusion and Recommendations

Aged people constitute a major category of population that demands attention. When people begin to age, their   physical body and immune system begins to fail them. Thus most of them become vulnerable to different diseases such as high blood pressure, heart or cardiac problems, diabetes, joint pains, kidney infections, cancer and tuberculosis that take a lengthy of time to heal. To improve their health status, most of the elderly utilize both orthodox and traditional medicine. While others visit hospitals and adhere to medical prescriptions, some of them prefer self-medication. This health seeking behaviour is largely determined by the marital status, religion, monthly income, living arrangement and number of children, most importantly the availability of healthcare services. The following recommendations were made;

   i.   Health educators and religious leaders should jointly involve in the campaign against unhealthy lifestyles. This campaign would help to address religious taboos, beliefs and superstitions associated with nutrition and other health practices in the Kokona Local Government Area of Nasarawa State, Nigeria
   ii.   Policy formulation and implementation by government should be directed towards improving access to healthcare services. This can be done by increasing the number of health facilities in under-served areas, improved the quality of services in the existing ones, supportive supervision and other measures could be embarked upon in order improve quality and accessibility to health care services.
   iii. There should be an increase availability of key services by health administrators for the aged population which is a crucial approach to improve health care seeking behaviour among the old. Periodic orientation should be conducted by health administration for health care personnel on rudimentary principles of human relations to make better friendly services for the elderly who need special services.
   iv.   Establishment of public health centers in the core rural areas by the government, Non-governmental organizations, religious organizations, communities and spirited individuals would increase the proximity and accessibility of rural aged persons to health facilities.

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

v.   National Health Insurance Scheme coverage should be scale up. This would provide financial protection for elderly persons with lower socioeconomic status in order to encourage use of appropriate healthcare sources.

References

Abdulraheem I.S. (2007). Health Needs Assessment and Determinants of Health Seeking Behaviour Among Elderly Nigerians. *A household survey, Ann Afr med, 6(2) 58- 63*

Ahmed, S. M., Tomson, G., Petzold, M., & Kabir, N. K. (2005). Socio-economic status overrides age and gender in determining health seeking behaviour in rural Bangladesh. *Bulletin of the World Health Organization*; 83(2):81-160.

Barrett L.(2008) .*Healthy at Home.* Washington, DC: AARP Foundation; March

Bharmal, F. (2000). Inequity and health: Is malnutirition really caused by poor nutrition? *Journal of the Pakistan Medical Association*, 50, 273-275.

Buor, D. (2003). Analysing the primacy of distance in the utilization of health services in the Ahafo-Ano South district, Ghana. *International Journal of Health Planning &Management*, 18(4), 293-311.

Campbell, C. (2012). *Essentials of Health Management Planning and Policy.* Lagos: University of Lagos Press.

Chen, C. Y. (2012).*Cooking frequency may enhance survival in Taiwanese elderly.* Public Health Nutrition: p. 1-8.

Christopher, C. J. (2010). A meta-analysis of the effectiveness of Health Belief Model variables in predicting behaviour. *Health Communication 25 (8): 661— 669.*

Dawodu, A. O & Uzobo, E. (2015). *Ageing And Health :A Comparative study Of Rural And Urban Aged Health Status in Bayelsa state,* Department of Sociology and Anthropology, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria Department of Sociology and Anthropology, University of Benin, Benin city, Edo state, Nigeria

Foreit, J. & Foreit, K. (2003). The reliability and validity of willingness to pay surveys for reproductive health pricing decisions in developing countries. *Health Policy,* 63(1), 37-47.

Goman, H. (2000).*Elderly in Modern Society: An Africa Experience.* New York: International Federation on Aging.

Hartigan, P. (2001). The importance of gender in defining and improving quality of care: some conceptual issues. *Health Policy & Planning,* 16(Suppl.1), 7-12.

Hjortsberg, C. (2003). Why do the sick not utilise health care? The case of Zambia. *Health Economics*, 12(9), 755-770.

Institute for Statistics Literacy and Non Formal Education Sector. (2002). *Special Estimates and Projections of Adult Illiteracy for Population Aged 15 Years Old and Above, By Country and By Gender.* Paris: United Nations Educational Scientific, and Cultural Organization (UNESCO).

Janz, N. K. & Marshall H. B. (1984).The Health Belief Model: A Decade Later. *Health Education Behaviour 11 (1): 1-47.*

Johansson, E., Long, N. H., Diwan, V. K., &Winkvist, A. (2000). Gender and tuberculosis control: perspectives on health seeking behaviour among men and women in Vietnam. *Health Policy,* 52(1), 33-51.

Joice, M. B; Jane H. H; & Annabelle M. K. (2002). *Medical Surgical Nursing clinical Management for positive Outcomes.* 6th ed. Harcourt, New Delhi, India; 2002. p.45 -47.

Kaplan, M., Newsom, J., McFarland, B., & Lu, L. (2001). Demographic and psychosocial correlates of physical activity in late life. *Am J Prev Med.*, 21(4), 306-312.

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

Mackenbach, J., & Howden-Chapman, P. (2003). New perspectives on socioeconomic inequalties in health. *Perspectives in Biology and Medicine,* 46(3), 428-444.

Mackian, S (2003).*A Review of Health Seeking Behaviour; Problems and Prospects. University of Manchester Health Systems Development Programme,* UK Department of International Development, United Kingdom.

Mazzilli, C. & Davis, A. (2009). *Health Care Seeking Behaviour in Somalia:* A literature Review. UNICEF, 10. https://www.unicef.org/somalia/SOM_HealthcareseekingbehaviourReport_10-WEB pdf

Mion, L. C. (2003). More provisions for the older adults: Who will provide? *Online journal of issues on nursing,* 8(2), Retrieved from: www.nursingworld.org.

Moe, S. K. (2012). Health Seeking Behaviour of Elderly in Myanmar, *International Journal of Collaborative Research on Internal Medicine and Public Health, 4(8), 1538-1544.*

Nash O, D., & Gilbert, C. (1992). Women's access to health care in developing countries. *Social Science & Medicine*, 35(4), 613-617.

Needham, D. M., Bowman, D., Foster, S. D., & Godfrey-Faussett, P. (2004). Patient care seeking barriers and tuberculosis programme reform: a qualitative study. *Health Policy,* 67(1), 93-106.

Okoye, U.O. (2012). Family Care-Giving for Ageing Parents in Nigeria: Gender Differences, Cultural Imperatives and the Role of Education. *International Journal of Education and Ageing 2 (2), 139–154.*

Okumagba P. O. (2011). Choice of health care services utilization by the elderly in Delta State in Nigeria. *J Sociology Soc. Anth; 2011; 2(2):131-138.*

Onwujekwe, O., & Uzochukwu, B. (2005). Socioeconomic and geographic differentials in costs and payment strategies for primary healthcare services in Southeast Nigeria. *Health Policy,* 71(3), 383-397.

Park K. P. (2009).*Textbook of Preventive and Social Medicine*. 20th ed. M/s Banarsidas Bhanot, Prem Nagar, Jabalpur, India; 2009. p. 412 - 14.

Paul, O. K, (2011). *Family Support for the Elderly in Delta State.* Department of Sociology and Psychology, Delta State University, P.O. Box 1, Abraka Delta State, Nigeria Telephone: +234-803-7645-971, ghene_okumagba@yahoo.com

Pillai, R. K., Williams, S. V., Glick, H. A., Polsky, D., Berlin, J. A., & Lowe, R. A. (2003). Factors affecting decisions to seek treatment for sick children in Kerala, India. *Social Science & Medicine,* 57(5), 783-790.

Pokhrel, S., Snow, R., Dong, H., Hidayat, B., Flessa, S., &Sauerborn, R. (2005). Gender role and child health care utilization in Nepal. *Health Policy,* 74(1), 100- 109.

Richman, S. K. (2007). The physical Aging Process in Midlife: Interaction with psychological & Socio-cultural Factors. *Hand book of middle Development.* (pg109-64).New York:Wiley.

Rosenstock, I. (1974). Historical Origins of the Health Belief Model. *Health Education Behaviour 2 (4):328—335.*

Rosenstock, I. M, Strecher, V. J. & Becker M. H. (1988). Social learning theory and the health belief model. *Health Education &Behaviour 15 (2): 175— 183.*

Shehu, R. A. (2005). Relationship between demographic factors and lifestyle of the people of Kaduna State, Nigeria. *Unpublished doctoral dissertation.* Ahmadu Bello University, Zaria, Nigeria.

Soai M. (2012). Distance, time and health workers' attitude: How they determine people's view towards the health care system. *Med Care Analysis; 2012; 1(2): 12-15*

Stretcher, V. J. & Rosenstock, I (1997).The health belief model .In Andrew Baum*. Cambridge handbook of psychology, health and medicine*. Cambridge, UK: Cambridge University Press.

Mamman Matthew Samuel & Attah Amana Philip, 2019, 6(1):65-78

Thebe, M. & Robert de Graft, A. (1999). *Contributions of Older People to Development.* The South African Study (HelpAge International, London, 1999).

Tomlinson, L. (2003). Patient and practitioner literacy and women's health: A global view from the closing decade 1990-2000. *Ethnicity and Disease,* 13, 248-258.

Tsang, M. (2017). Connecting and caring: innovations for healthy ageing. *Bulletin of the World Health Organization 90, 157*.

UNFPA (2017). *World Population Prospects*. The 2006 Revision Population Database United Nations Population Division New York: United Nations.

United Nations (2013). *Review and Appraisal of the Progress Made in Achieving the Goals and Programme of Action of the International Conference on Population and Development, Report. Sales No. E.99.XIII.16.*

United Nations (2017). *World aging population.* Available at www.un.org/esa/ population/publications/ WPA2007/ES-English.pdf

United Nations Population Fund (UNFPA) & Help Age International (2017).*Aging in the Twenty-First Century: A Celebration and a Challenge:* New York.

Vlassoff, C., & Moreno, C. (2002). Placing gender at the centre of health programming: challenges and limitations. *Social Science & Medicine,* 54, 1713- 1723.

Waweru, L., Kabiru, J., Mbithi, J., & Some, E. (2003). Health status and health seeking behaviour of the elderly persons in Dagoretti Division, Nairobi. *East African Medical Journal,* 80(2), 63-68.

WHO (2015), *Global Health Observatory data repository*. Retrieved from http://apps.who.int/gho/data/node.main.688

World Health Organization, (WHO) (2013).*Abuse of the elderly (Fact sheet).*Available at www. who.int/violence.injury.prevention.

World Health Organization, (WHO) (2017).*Active Ageing:* A Policy Framework. Geneva: World Health Organization.

Young, H.M.(2003). Challenges and solutions for care of frail older adults. *Online Journal of Issues on Nursing, 8(2),*