ANALYZING THE PATTERN OF AGING POPULATION IN KWARA STATE, NIGERIA

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ABSTRACT

This study attempts a spatial analysis of the 60+ segment of the population of Kwara State, Nigeria. For this purpose, a survey was undertaken utilizing a multi-stage sampling approach to collect data on demographic as well as socio-economic attributes of 488 elderly respondents in six selected LGAs of Kwara State. The data collected were summarized by means of descriptive and inferential statistical analysis. Factor analysis was used to reduce the dataset as well as determine the variables accounting for spatial variability. Therefore, 14 variables were identified which altogether explained 63.95% of the variance explanation. The factor scores derived from this procedure was used to map the pattern of aging over space. Multiple and stepwise multiple regressions were used to rewrite the model equation with intention of arriving at the best fitted model. These however revealed that only 10 (Social Wellbeing, Income, Support, Economic factor, Disability, Diseases, Health Insurance, Residential Quality, Recreational factor and Safety Nets) of the 14 identified variables were actually important in the explanation, and they all contributed 53.4% explanation to the pattern of aging in Kwara State. However, Social Wellbeing factor (Scwf) is the most important factor influencing the aging pattern in the state contributing 24.2% explanation. Furthermore, the percentage explanation of pattern of aging in the study ranges between 12% in Baruten to 59% in Asa LGAs. The study conclude that the population of the aged as well as factors influencing aging varies spatially. It however recommends the establishment and enhancement of pro-elderly health, social wellbeing and empowerment schemes. These are needed for a dignified and graceful aging which enhance greater independence in later life.

Key words: Aging population, Elderly, Kwara State, Nigeria, Spatial pattern

INTRODUCTION

Aging of population is a summary term for shifts in the age distribution (age structure) of a population toward older ages (Gavrilov and Heuveline, 2003; Arokiasamy, Bloom, Lee, Feeney and Ozolins, 2011; Bloom, 2011). This happens because of rising life expectancy or declining birth rates. Population aging had been described by Vierck and Hodges (2003) as a global phenomenon. This is so, because by the year 2025 the total number of elderly people in the world is expected to reach 1.2 billion, which indicates that by then 15% of the total populations will reach 60 years or more (UN, 1997). In almost every country, the proportion of people above 60 years is growing faster than any other age group (UN, 2009). This is as a result of both longer life expectancy and declining fertility rates (WHO, 2011). Buttressing this fact, the United Nations (2010), Pillay and Maharaj (2013) opined that the 60+

population in 1980 was 378 million. However, 3 decades later, the figure doubled to 759 million and is projected to rise almost threefold to two billion by 2050.

In addition, the United Nations reported the current global growth rate of the older population (1.9%) as significantly higher than that of the total population (1.2%). By 2025 – 2030, it is projected that the 60+ population will be growing 3.5 times as rapidly as total global population (2.8% compared to 0.8%, www.un.org/population/.../worldageing). This scenario as asserted by Velkoff and Kowal (2006) is becoming the most important demographic dynamics affecting families and societies in the world. The reasons being that people are living longer and, in some parts of the world, healthier lives, which is without any doubt a major achievement of the last century. However, significant challenges now confront us.

Societal aging may affect economic growth, family sustainability, and international relations. This is because populations differ significantly over space and time in terms of age, sex, ethnicity, household and other compositional traits. According to Taj-Uddin, Islam, Alam and Baher (2010), it is equally true that the number of elderly people is increasing rapidly in the developed countries but it is also increasing rapidly in the developing countries. In fact, nearly 63% of the population age 60 and above currently resides in developing countries, and this percentage will increase to about 73% in the next 25years (Velkoff and Kowal, 2006). In fact the UNFPA (2002), also corroborated this assertion in which developing countries were observed to be housing more than half of the global elderly population. However, Velkoff and Kowal (2006) noted the contrast in the comparatively well-documented cause and implications of aging in developed countries and the limited understanding of the demographics of aging in the developing countries. The knowledge on the structure of a population especially its age profile, is therefore particularly important because it is a major determinant of service requirements, labour supply, the level and nature of consumer demand and the potential for future natural increase (McCracken and Siciliano, 2011).

Therefore, an appreciation of spatial dimensions of change is essential for policy actors since variations in trend across space and time demand different policy responses (Appleton, 2000). Moreover, Nigeria, with a population of about 140 million (NPC, 2007) has about 76 million as the dependent population, made up of both the children below age 18 and the elderly above 60 years and above (NBS, 2007). It implies that about 54% of the population is dependent and this proportion is expected to increase over the years going by the population transition demographic theory (Olaniyan, Olayiwola and Odubunmi, 2011). It is against this background that this research was embarked upon and with the objectives of identifying the factors accounting for spatial variability in aging in Kwara State and examining the spatial pattern of these aging influencing factors in the state. Essence of these, is the need to understand the determinants or nature of the shifts in the age distribution/aging pattern and its various dimensions in Kwara State, because it is essential for planning, awareness creation on the plight of the aged, as well as public policy formulation to satisfy the needs and enhancing the welfare of the aged citizens of Kwara State and the country in general.

STUDY AREA

Kwara State is located between Latitudes $8^0$05' and $10^0$05' North and Longitudes $2^0$50' and $6^0$05' East of Greenwich Meridian (Oyebanji, 2000). The State occupies 36,825km^2 of land and shares boundary with Niger State in the North, Kogi and Ekiti States in the East, Osun

and Oyo States in the South and an International boundary with the Republic of Benin in the West (Figure 1). Ilorin, the State capital is 306km from Lagos and 500km from Abuja (Kwara State Diary, 2004). There are sixteen Local Government Areas in the State (See Fig. 1).

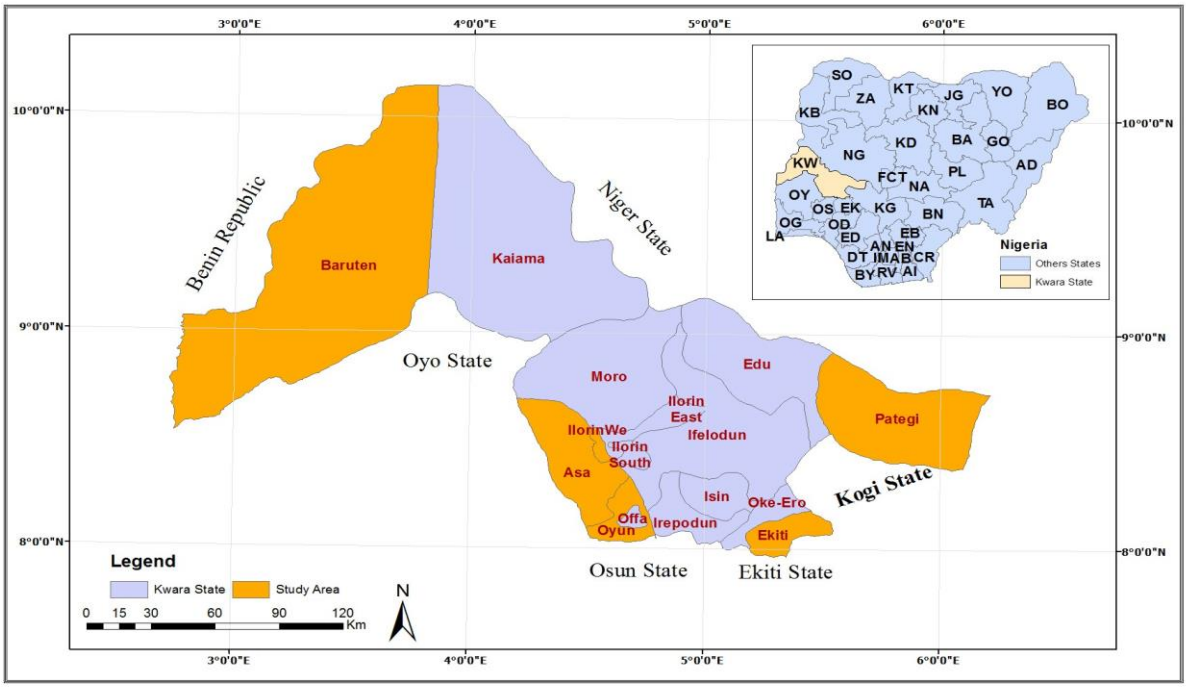

Fig. 1: Map of Kwara State Showing the Study Area.
Source: Adapted from Kwara State Ministry of Lands and Housing, 2012

MATERIALS AND METHODS

Primary and Secondary data derived from structured questionnaire interview and published documents were utilized in the study. A multi-stage sampling technique was used to select respondents for the questionnaire survey. Firstly, the state was divided into the three senatorial clusters of north, central and south. Secondly, systematic sampling technique was used in which the various LGAs in each senatorial zone are serially numbered and the first and last LGA were selected per zone and this gave a total of Six (6) LGAs. Thirdly, purposive sampling was used to determine the settlements/towns from which respondents would be chosen and every LGA headquarter was selected. Reason for this is because of the high possibility of getting the required number of target population in these areas.

Fourthly, purposive sampling technique was also used to identify respondents, which was 0.1 percent of the elderly population in each of LGA based on the 2006 population census figures which put Kwara State total elderly population at 116,099 (NPC, 2006). A total of 488 elderly respondents of age 60 years and above were sampled through the administration of structured questionnaire. Lastly, systematic sampling technique was employed whereby households that were previously identified through the assistance of local resource persons were serially numbered to determine the respondents for the study. Every 3rd house was used

as the sampling point till the total number of designated respondents in the settlements was captured. However, in cases where no respondent was available, the next house was automatically selected.

Descriptive statistics like frequencies, tabulation, graphs were used in the analysis of generated data. Also inferential statistics such as Factor Analysis using the Statistical Package for Social Science (SPSS) 15.0 version was used in determining the variables that account for the pattern of aging over space. From these, all values with a coefficient of 0.60 were selected as factor defining variables. Stepwise Regression Analysis was used to model the spatial pattern of these changes in the aging population in Kwara State. The choice of stepwise regression is informed by its statistical power to establish a relationship between dependent and independent variables. The regression model will be of the form:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_n x_n$$

where Y = Age (60 years and above)
a, b_1 and b_2 are constants of regression. e = error terms

RESULTS AND DISCUSSION

Factors Determining Spatial Variability in Aging in Kwara State

The results of the factor analysis after varimax rotation for selected Local Government Areas show some underlying factors. These factors are 14 in number. They altogether explained 63.95% of the variance in the explanation (See Tables 1a and 1b)

Factor 1 has the strongest loading on Local Government Area. It is equally strongly loaded on two other variables: Duration of marital union and Availability of Specialized Hospitals. This factor has the greatest contribution to the pattern of aging in Kwara State offering 6.53% explanation to the variance and an eigen value of 3.01. It is an index of Social Wellbeing. Factor 2 offered 6.16% to the explanation with an eigen value of 2.84. Its highest loading is on Enrolment on the National Health Insurance Scheme (NHIS). It is equally strongly loaded on Duration of enrolment on the National Health Insurance Scheme (NHIS), Reasons for non-enrolment on the National Health Insurance Scheme (NHIS) and Availability of old peoples' homes. It is a measure of Health Insurance. Factor 3 contributes as much as 5.37% to the explanation and an eigen value of 2.50. Its highest loading is on Any History of Ailment. It equally loaded strongly on Nature of Ailment, and Hospitalization in last 12 months. It is a measure of Diseases.

Factor 4 contributes 5.28% to the variance. It has an eigen value of 2.43. The highest loading is on the Number of children ever born. It equally loaded strongly on Duration of marital union and Number of surviving children. It is an index of Safety Nets. Factor 5 offered 5.20% to the explanation with an eigen value of 2.40. It loaded strongly on income per month. It equally loaded strongly on highest educational qualification and occupation. It is a measure of Economic Support. Factor 6 contributes 4.80% to the variance, and an eigen value of 2.20. The highest loading is on the present income earning activity the elderly are involved in. It equally loaded strongly on the kind of income earning activity the aged are engaged in. It is a measure of Income. Factor 7 offered 4.50% explanation and with an eigen value of 2.06. The

factor has its highest loading on whether there is any disability. It is also strongly loaded on the Nature of disability suffered by the elderly. It is an index of Disability.

Table 1a: Factors Controlling the Pattern of Aging in Kwara State

Variables	Factor													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Local Govt Area	**.801**	.124	-.084	-.155	.125	.031	-.028	-.090	-.063	.052	.010	.010	-.052	.003
Senatorial Zone	-.151	.227	-.077	-.109	.272	.023	.222	.093	.294	-.004	**.577**	.114	-.130	-.034
Sex	-.026	.002	-.104	-.080	-.131	-.001	-.049	**-.763**	.115	-.054	-.023	-.027	.115	.053
Age at last Birthday	.492	-.110	.148	.088	-.238	-.279	.175	-.031	-.101	.045	.254	.060	.027	.101
Marital Status	.239	-.116	.061	-.042	-.140	.014	.158	**-.627**	-.071	-.081	-.025	.096	-.043	-.025
Nature of Marital Union	-.084	.085	-.075	**.571**	-.103	.139	.095	-.269	.244	.048	.059	.096	-.230	-.087
Duration of Marital Union	**.672**	-.117	.033	.317	-.050	6.96E -005	.023	-.063	-.075	-.044	.213	.058	-.029	.041
No of Children Ever Born	.032	-.119	.039	**.856**	.015	-.059	.025	.093	-.053	-.067	.023	.027	.147	.038
No of Surviving Children	-.062	-.118	-.008	**.848**	-.004	-.033	.128	.180	-.075	-.033	.048	.038	.107	-.023
Religion	-.498	.104	.016	.244	-.338	.067	.065	.057	.031	-.037	.279	.120	.001	.022
Highest Educ. Quality.	.119	.154	.007	-.135	**.665**	-.016	-.040	.160	.075	.263	.127	-.065	-.050	-.164
Occupation	.008	-.193	-.018	.015	**-.590**	-.013	.037	.440	-.167	.029	.055	.208	.034	-.009
Income per Month	.075	.015	-.084	.066	**.682**	.057	.073	.228	-.013	.213	.222	-.072	-.047	-.010
Main Source of Material Support	.099	.000	.112	-.018	.505	.159	.041	.205	-.104	-.025	-.315	.036	-.037	.255
Nature of Support	.076	.071	.170	.050	-.027	-.034	-.048	.019	-.017	.120	**.632**	-.095	-.080	.088
Regularity of support	.242	.068	.035	.063	.160	.032	-.184	-.071	.074	-.017	.469	-.031	.300	-.139
Source of Econ Security	-.116	-.066	.100	.242	.380	-.075	.015	.151	-.193	-.054	.379	.065	.184	-.045
Present Residence	.099	-.005	.112	-.095	-.053	.055	.053	-.046	.193	-.191	.014	.086	-.109	**.714**
Who U Reside With Presently	.037	.013	-.061	.008	-.039	.003	.074	.003	-.054	.294	.123	.055	.491	.499
Hospitalized last 12 month	-.087	.026	**.777**	.036	.057	-.086	.158	.023	.160	.082	.024	-.002	.040	.091
History of Ailment	.012	-.030	**.889**	.007	.007	.003	.091	.014	.036	.005	.063	.040	.013	.008
Nature of Ailment	.048	.010	**.798**	-.023	-.035	.016	.112	.003	-.042	.092	.050	-.053	-.046	.044
Institutn for Remedy	-.144	-.111	-.217	.047	-.273	.035	.093	.060	-.212	-.297	.341	-.005	.010	.154
Any Disability	.005	-.062	.204	.043	.031	-.029	**.866**	-.036	-.026	.129	.016	.026	-.024	.038
Nature of Disability	-.026	-.045	.193	.153	-.015	-.021	**.863**	-.039	.007	.114	-.036	.071	.017	.019
Family Doctor	-.033	.197	.191	-.030	.226	.080	.196	.183	.213	**.620**	.085	-.030	.047	-.072
Who pays Med. Bill	-.068	.020	.042	-.037	.092	.149	.153	.035	.012	**.748**	.062	.020	.030	-.044
Are you on NHIS	.057	**.847**	.032	-.092	.119	.060	.018	-.076	-.094	.119	.058	-.078	.100	.022
Duration of NHIS	.040	**.816**	.005	-.082	.161	.050	.007	-.065	-.185	.038	.023	-.058	.145	.035
Reasons not on NHIS	.215	**-.613**	.029	-.034	-.034	.024	.080	-.212	-.066	-.145	-.072	.293	.065	.092
How often is hospital visitatn	.399	.105	.192	-.096	.259	-.017	-.069	.067	.199	.405	-.119	.178	.062	.068
Present income earning Activity	-.130	.022	-.027	.027	-.043	**.863**	-.023	.028	-.056	.091	-.049	-.051	.069	.023
kind of income earning Activity	.100	.042	.014	-.057	.144	**.834**	-.108	-.134	.005	.078	.040	.007	-.106	.053
Are u a member of a Social Group	.266	.070	-.092	.093	.012	.344	.191	.223	.340	.195	-.056	-.196	.357	-.015
What type of Social Group	.150	.085	-.111	.057	.087	.367	.162	.322	.264	.273	.001	-.173	.280	-.086
What type of Recreational Act involved in	-.005	-.188	.100	-.147	.038	-.060	.103	-.220	**.598**	.052	.163	.081	.155	-.022
How often do you Recreate	-.162	.035	.096	.071	.031	.056	-.105	.031	**.722**	.126	-.068	-.116	.097	.135
How is an average day like	-.304	-.064	-.033	-.050	-.147	.414	.226	.175	.122	-.023	-.064	.043	.268	-.139
What social engagements u normally attend	.095	.094	-.113	-.330	.074	.297	.214	.182	.128	-.291	.144	.078	.171	-.339
Availability of Specialized Hospitals	**.557**	.384	-.026	-.162	.025	.092	-.022	.031	.165	-.183	-.198	.111	.011	-.140
Availability of old peoples' homes	.149	**.598**	.025	-.058	-.134	-.051	-.166	.173	.352	-.076	.107	-.067	-.054	-.085
Availability of Recreational Clubs	.382	.375	-.204	-.266	-.108	.109	.040	-.029	.167	.058	.018	-.024	-.022	-.475
How many times do you eat daily	-.122	.111	.026	.090	-.048	.019	-.050	-.070	.134	-.032	-.041	.030	**.677**	-.053
How often do you eat a balanced meal	-.413	.033	.020	.034	-.145	.074	.078	-.071	.164	.131	.015	.260	.328	-.080
Do you boil your drinking Water	.144	.137	.040	-.136	.191	.055	-.010	-.094	.005	-.001	.172	**-.764**	.071	-.091
Reason for not boiling drinking water	.179	-.186	.009	.006	.020	-.026	.089	-.118	-.071	.025	.103	**.835**	.113	.020
A. Eigen Value	3.01	2.84	2.50	2.43	2.40	2.20	2.06	1.91	1.90	1.90	1.80	1.74	1.50	1.40
B. % Variance	6.53	6.16	5.37	5.28	5.20	4.80	4.50	4.15	4.04	4.02	3.90	3.80	3.30	3.04
C. % Cumu. Variance	6.53	12.70	18.06	23.34	28.54	33.3	37.80	41.91	45.95	49.97	53.90	57.64	60.91	63.95

Source: Computation from Field Survey, 2012

Factor 8 contributes as much as 4.15% to the explanation, and an eigen value of 1.91. It has its highest loading on sex of the elderly. It is equally highly loaded on marital status of the aged. This is a measure of Demographic Factor.

Table 1b: Summary Table of Aging Controlling Factors in Kwara State

Controlling Factors	Variables	% Variance Contribution	Factor Description
Factor 1	Local government of Origin Duration of Marital Union Availability of Specialized Hospital	6.53	Social Wellbeing Index
Factor 2	Enrolment on the NHIS Duration of Enrolment on NHIS Reasons for Non enrolment on NHIS Availability of old peoples' home	6.16	Health Insurance Index
Factor 3	History of Ailment Nature of Ailment Hospitalization in the last 12 months	5.37	Disease Index
Factor 4	Number of children ever Born Duration of Marital Union Number of Surviving Children	5.28	Safety Net Index
Factor 5	Monthly income Occupation Highest Educational Qualification	5.20	Economic Support Index
Factor 6	Income Earning Activity Kind of Income earning Activity	4.80	Income Index
Factor 7	Any Disability? Nature of Disability	4.50	Disability Index
Factor 8	Sex Marital Status	4.15	Demographic Index
Factor 9	Frequency of Recreation Type of Recreation	4.04	Recreational Index
Factor 10	Payment of Medical Bills Availability of Family Doctor	4.02	Health Care delivery Index
Factor 11	Nature of Support Local Government of Origin	3.90	Support Index
Factor 12	Reasons for not boiling of drinking water Do you boil drinking water or not?	3.80	Personal Hygiene Index
Factor 13	Number of times food is eaten daily	3.30	Dietary Factor Index
Factor 14	Present Residence	3.04	Residential Factor Index

Source: Computation from Field Survey, 2012

Factor 9 contributes 4.04% to the explanation and an eigen value of 1.90. The Factor loaded strongly on how often the elderly recreate. It is equally strongly loaded on what types of recreational acts are involved in. It is an index of Recreational Factor. Factor 10 offered as much as 4.02% explanation to the variance. It has an eigen value of 1.90. The highest loading is on who pays medical bill. It is also strongly loaded on Availability of Family Doctors. It is a measure of Healthcare Delivery. Factor 11 offered 3.90% to the explanation with an eigen value of 1.80. It loaded strongly on the Nature of support to the elderly. It is equally loaded strongly on the Senatorial zone from where the elderly is from. It is an index of Support.

Factor 12 offered 3.80% explanation and an eigen value of 1.74. It is strongly loaded on the reasons for not boiling drinking water. It also loaded strongly on whether drinking water is boiled by the elderly before consumption. It is an index of Personal Hygiene. Factor 13 offered 3.30% to the explanation and an eigen value of 1.50. It is loaded strongly on the

number of times the elderly eat daily. It is a measure of Dietary Factor. Factor 14 contributes as much as 3.04% explanation and an eigen value of 1.40. It is strongly loaded on the present residence of the elderly. It is an index of Residential Factor. According to the above, 14 important variables underlie the pattern of aging in Kwara State. These factor variables includes: Social wellbeing, Health insurance, Diseases, Safety Nets, Economy, Income, Disability, Demography, Recreation, Healthcare delivery, Support, Personal hygiene, Dietary regime and Residence. Therefore aging in Kwara State can be summarized.

Relationship between Aging and Spatial Variables in Kwara State

The results of the factor analysis were subjected to multiple and stepwise regression analysis so as to predict the relationship between age and factors determining the pattern of Aging across the studied LGAs. The result of the multiple regression analysis (See Table 2) showed that all the 14 variables identified were important in the explanation and they contributed 54.1% explanation to the variation in aging in Kwara State. The relationship can be predicted with equation 1.

Table 2: Multiple Regression Equation of Aging Factors in Kwara State

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	% R^2 Explained
	B	Std. Error	Beta	B	Std. Error	
1 (Constant)	2.000	.036		55.275	.000	
factor1. Social Wellbeing (Scwf)	.572	.036	.492	15.792	.000	
factor2. Health Insurance (Hein)	-.128	.036	-.110	-3.544	.000	
factor3. Diseases (Dsce)	.172	.036	.148	4.747	.000	
factor4. Safety Nets (Snet)	.103	.036	.088	2.834	.005	
factor5. Economic Factor (Econ)	-.276	.036	-.238	-7.630	.000	
factor6. Income (Incm)	-.325	.036	-.279	-8.964	.000	
factor7. Disability Factor (Dsty)	.203	.036	.175	5.598	.000	54.1
factor8. Demographic Factor (Demg)	-.036	.036	-.031	-.982	.327	
factor9. Recreational Factor (Recr)	-.117	.036	-.101	-3.225	.001	
factor10. Health Care Delivery (Htca)	.052	.036	.045	1.444	.149	
factor11. Support (Scsp)	.295	.036	.254	8.136	.000	
factor12. Personal Hygiene (Prhy)	.069	.036	.060	1.917	.056	
factor13. Dietary Factor (Diet)	.032	.036	.027	.877	.381	
factor14. Residential Quality (Abqu)	.117	.036	.101	3.227	.001	

Source: Computation from Field Survey, 2012

Y=2.000+.572Scwf-.128Hein+.172Dsce+.103Snet-.276Econ-.325Incm+.203Dsty-.036Demg-

.117Recr+.052Htca+.295Scsp+.069Prhy+.032Diet+.117Abqu……..……..…(Equation 1)

(R^2 = 54.1%; SE = 0.79848)

However, these variables were further subjected to stepwise regression analysis (See Table 3) which revealed that only ten (10) out of these thirteen (14) variables were actually important in the explanation, and they all contributed 53.4% explanation to the pattern of aging in Kwara State. By this, the variables with their individual percentage R^2 are Social Wellbeing

(24.2), Income (7.8), Support (6.5), Economic Factor (5.6), Disability (3.1), Diseases (2.2), Health Insurance (1.2), Residential Quality (1.0), Recreational Factor (1.0) and Safety Nets (0.8). This relationship can be predicted with equation 2.

Table 3: Stepwise Multiple Regression Equation of Aging Factors in Kwara State

	Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square Explained (%)	
		B	Std. Error	Beta	B	Std. Error	Individual	Cumulative
10	(Constant)	2.000	.036		55.074	.000		
	factor1. Social Wellbeing (Scwf)	.572	.036	.492	15.734	.000	24.2	24.2
	factor6. Income (Incm)	-.325	.036	-.279	-8.931	.000	7.8	32.0
	factor11. Support (Scsp)	.295	.036	.254	8.107	.000	6.5	38.5
	factor5. Economic factor (Econ)	-.276	.036	-.238	-7.602	.000	5.6	44.1
	factor7. Disability factor (Dsty)	.203	.036	.175	5.577	.000	3.1	47.2
	factor3. Diseases (Dsce)	.172	.036	.148	4.729	.000	2.2	49.4
	factor2. Health Insurance (Hein)	-.128	.036	-.110	-3.532	.000	1.2	50.6
	factr14. Residential Quality (Abqu)	.117	.036	.101	3.215	.001	1.0	51.6
	factor9. Recreational factor (Recr)	-.117	.036	-.101	-3.214	.001	1.0	52.6
	factor4. Safety Nets (Snet)	.103	.036	.088	2.824	.005	0.8	53.4

Source: Computation from Field Survey, 2012

Y=2.000+.572Scwf-.325Incm+.295Scsp-.276Econ+.203Dsty+.172Dsce-.128Hein+.117Abqu-.117Recr+.103Snet …….……..……. (Equation 2)

(R^2 = 53.4%; SE = 0.80140)

Pattern of the Factors Controlling Aging in Kwara State

Figure 2(a-n) explained the spatial pattern of the factors controlling aging among the aged in Kwara state. Factor 1 (Social Welfare) plays a dominant role in the explanation of aging in places such as Ilorin West, Ekiti, Oyun and Asa LGAs respectively, as well as many other places. However, this factor is of less importance in Baruten and Patigi LGAs (See Fig. 2a). Health Insurance (Factor 2) is important mostly in Asa, Ilorin West and parts of Oyun and Patigi LGAs. Conversely, Health Insurance is of less importance or prominence in Baruten, Ekiti and parts of Asa LGA. This could be as a result of poor orientation, unavailability and the general lack of adequate awareness about the scheme in these areas. Also, there is a dearth in institutions (Hospitals) either private or public, where such insurance facility can be accessed by most population especially in Baruten, which is why a larger proportion of their patients patronize the services of traditional healers (See Fig. 2b).

Factor 3 (Diseases) especially the history of ailments suffered and hospitalizations by respondents plays dominant roles in the explanation of pattern of the causes of aging in all the six LGAs. Cases of ailments such as Diabetes, Eye problems and Aches and Pains are the commonest nature of ailments found in the state, which accounted for more than 40% of reported cases of ailments amongst respondents. However, diseases are less prominent reasons for accelerated aging in few areas around Asa, Ilorin West, Baruten, Ekiti and Oyun LGAs (See Fig. 2c). Safety Nets (Factor 4), is also one of the most important aging controlling factors among the elderly in the state. This is because it is a major coping strategy employed by majority of the aged population. This traditional safety net (an important

customary duty) especially through intergenerational remittances between parents, offspring and spouses is important in caring and enhancing their individual wellness and wellbeing. This factor is more prominent in Kwara North (Baruten and Patigi). It is equally important in parts of Asa, Ilorin west, Ekiti and Oyun respectively (See Fig. 2d).

Economic Support (Factor 5), especially the ability of the seniors to individually cater for themselves, which is enhanced mostly through acquired level of education, occupation and the ability to generate income is equally an important aging controlling factor in the state. This factor is mostly prominent in Ilorin West and Ekiti LGAs. This could be due to the high level of participation of the elderly in economic activities, which enhances their lifestyles and proportion of income generated. Moreover, the need for monetary security is higher in these areas, especially Ilorin West which is an urban environment and rely more on cash economy (See Figure 2e). Factor 6 (Generated income) the amount of income earned periodically by the aged is equally a crucial aging controlling factor in the state. This factor is mostly prominent in Baruten and Ekiti LGAs. It is equally important in parts of Asa, Ilorin West and Oyun (See Figure 2f).

Disability (Factor 7) amongst the aged population is very prominent in Asa, Ilorin West and parts of Baruten LGAs. However, it is of lesser prominence in Patigi, Ekiti and Oyun LGAs (See Figure 2g). Demography (Factor 8), i.e gender, and nature of the marital unions entered into by the aged, exert some positive influence on the wellbeing and care the elderly population, especially when care giving is forthcoming and regular. However, this factor is very prominent in almost all the LGAs. Conversely though, it is not so prominent in parts of Patigi and Oyun LGAs (See Figure 2h). Recreation (Factor 9) the need regular recreation by the elderly, needed for sound body and mind is noted. This is very prominent in Asa, Ilorin West, and Baruten LGAs. This might be due to the higher level of stress faced especially amongst city dwellers (Ilorin West) and Asa (which has a higher proximity to the city); thus, need for recreation is enjoined. However, it plays a less prominent role in Ekiti, Patigi and parts of Baruten LGAs. Reasons could be that majority of are still involved in physical activities such as farming and long distance trekking, biking etc. Also, majority of their diets are lesser in cholesterol which thereby reduces cases of obesity and cardiac ailments (See Figure 2i).

Factor 10 (Health Care Delivery); Access to health care which is aided by the aged ability to pay bills and access to personal physician while ill, plays a very prominent and important role in the explanation of aging in Baruten, Ilorin West and Oyun. Reasons for this in Baruten, might be because of fewer medical personnel and institutions practicing the act of care giving. Also, the ratio of available health personnel/institution to population is very low, due to higher rate of urbanization and the tendency for higher immigration into the city, as may be seen in Ilorin West and parts of Oyun. However, health care delivery plays a less prominent role in explaining aging in Patigi, and parts of Ekiti LGAs (See Figure 2j). Factor 11(Domestic support) The need for domestic aid by the elderly plays a more prominent role in aging in Ilorin West, Asa and Patigi LGAs, while it is of lesser prominence in Baruten, Ekiti and Oyun LGAs (See Figure 2k).

Personal Hygiene (Factor 12), amongst the aged, and especially in the type of water for drinking and domestic needs, and whether it is boiled or portable for drinking is not very prominent in Baruten and parts of Ilorin West. Reasons being that, although there are no public utility water lines especially in Baruten, the provision of boreholes, and wells in short distances coupled with more hygienic environment/lower population densities, enhances access to clean and portable water. However, personal hygiene is very essential and prominent in Asa, Ilorin West, Patigi, Oyun and Ekiti. Reasons could be due to urbanization (poor sanitation around most residential environments). Also, although Patigi LGA is a riverine area, the tendency for water borne ailments is equally very rife (See Figure 2l). Factor 13 (Dietary pattern) is important in the explanation of aging in all the six LGAs. This is so, because majority of the aged and by extension the populace, eat at most three square meals daily. Also, it is an unequivocal fact that food is very essential for proper and sustained living.

However, the number of times food is consumed is of less importance to aging explanation in parts of Ilorin West, Ekiti and Oyun LGAs because, there is higher level of stress and cost of living around the urbanized localities than the rural areas, where there is an higher possibility of subsistent farming especially around Baruten, Asa and Patigi LGAs (See Figure 2m). Factor 14 (Residential Pattern) Ownership and status of residency amongst the elderly plays a very prominent role in the explanation of aging in Patigi, Baruten, Asa, Ilorin West and ekiti LGAs. However, it plays a less prominent role in Oyun LGA. Also, in parts of Patigi, Asa and Ilorin West LGAs. As explained earlier, majority of the aged either resides in their personal homes or family houses, which often time guarantees sustained care and companionship from nuclear and extended relatives, and by extension, old age will be less problematic and boring for most elderly persons (See Figure 2n).

Key: Baruten…….. (1 – 89) Patigi ……..... (90 - 133) Asa ……... (134 - 202)
Ilorin West……..… (203 - 412) Ekiti ……..… (413 - 442) Oyun …….. (443 - 488)

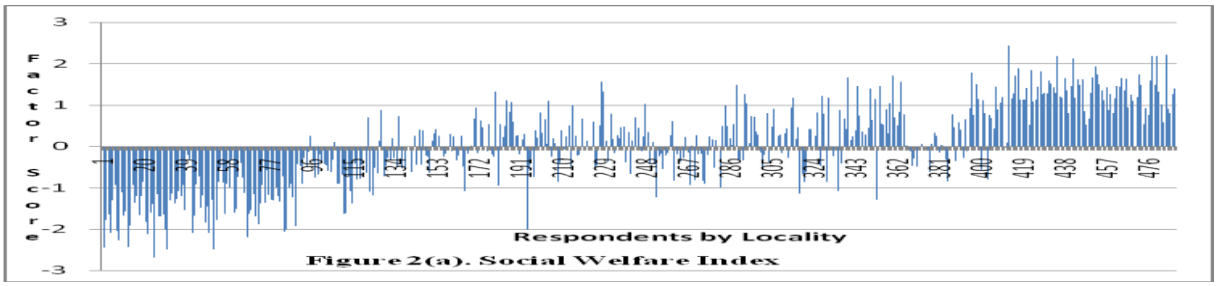

Figure 2(a). Social Welfare Index

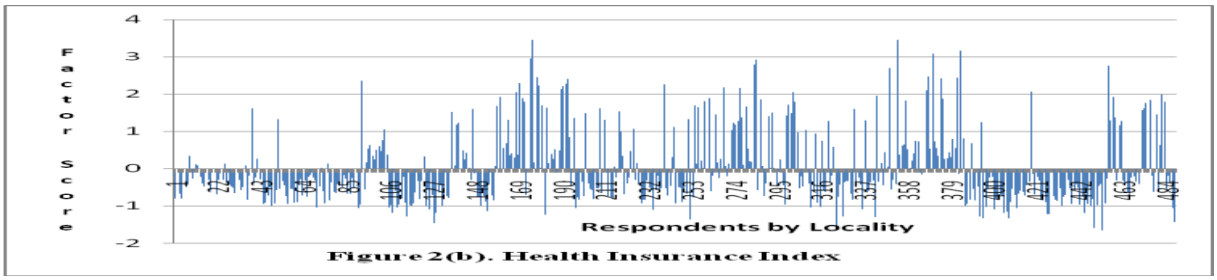

Figure 2(b). Health Insurance Index

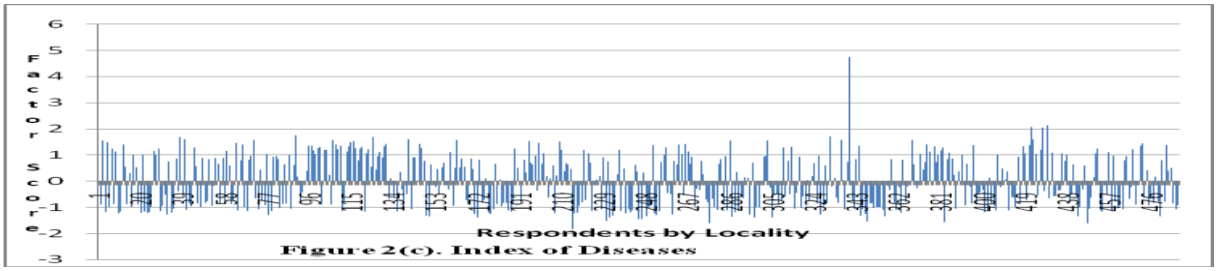

Figure 2(c). Index of Diseases

Figure 2(d). Index of Safety Nets

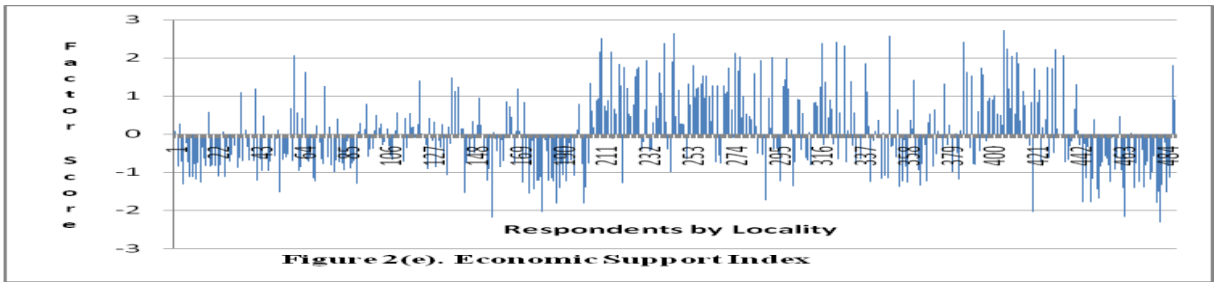

Figure 2(e). Economic Support Index

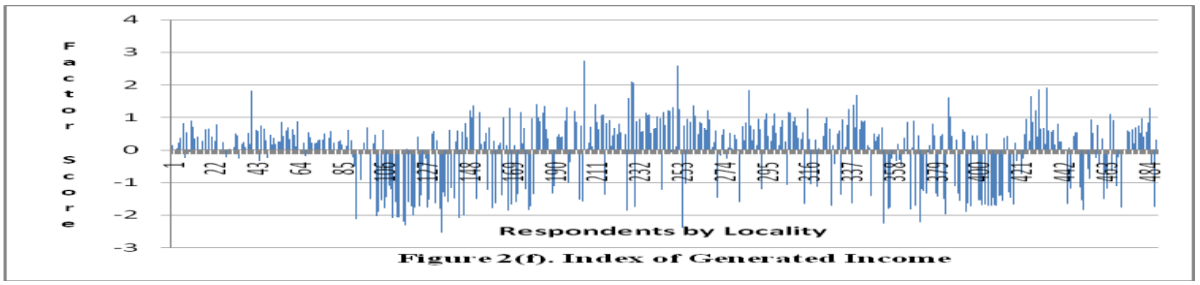

Figure 2(f). Index of Generated Income

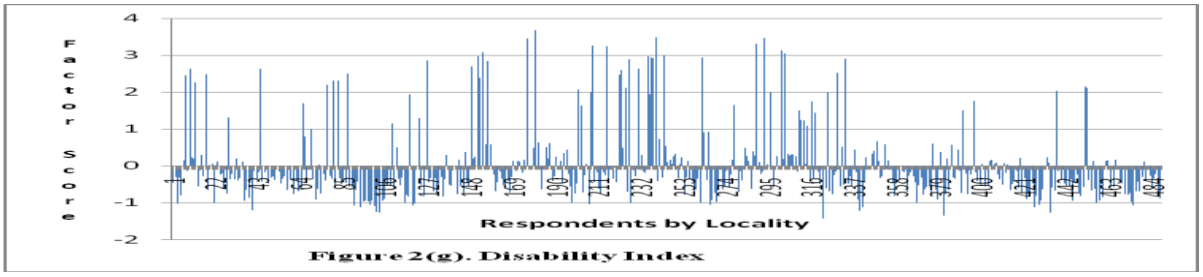

Figure 2(g). Disability Index

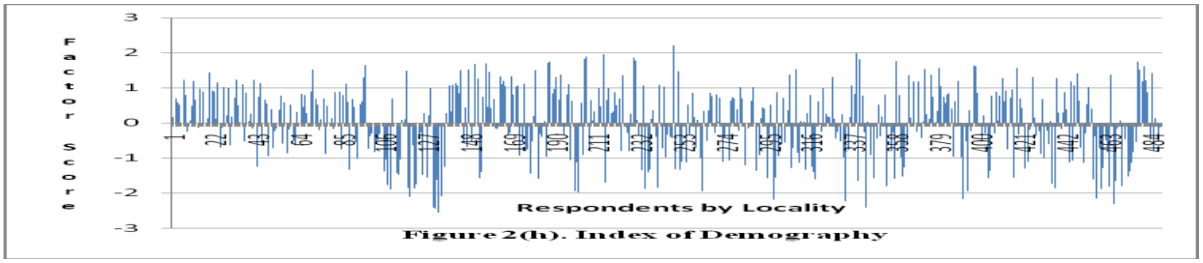

Figure 2(h). Index of Demography

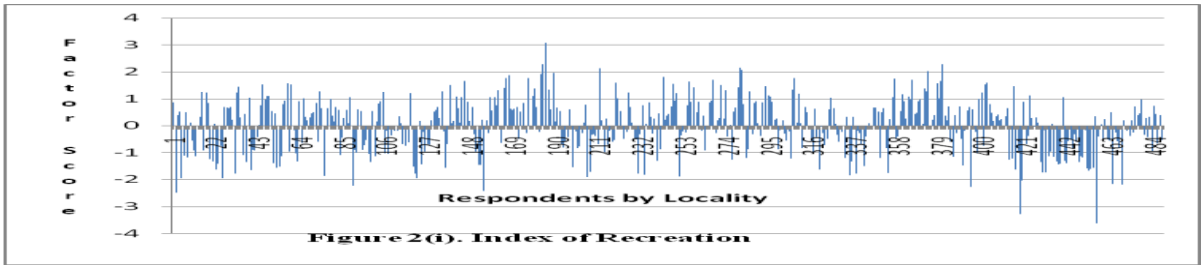

Figure 2(i). Index of Recreation

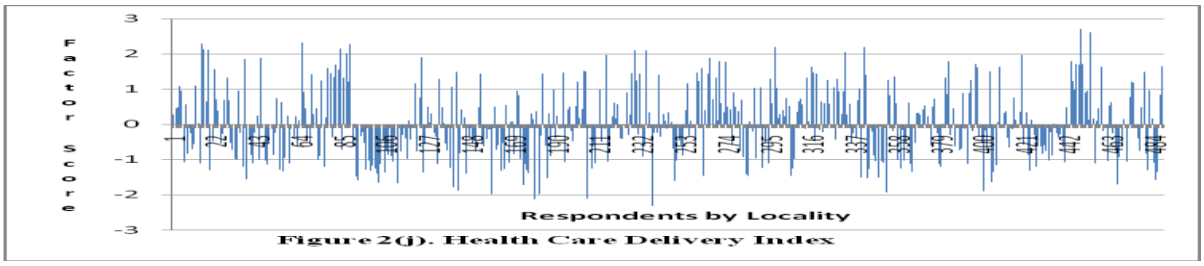

Figure 2(j). Health Care Delivery Index

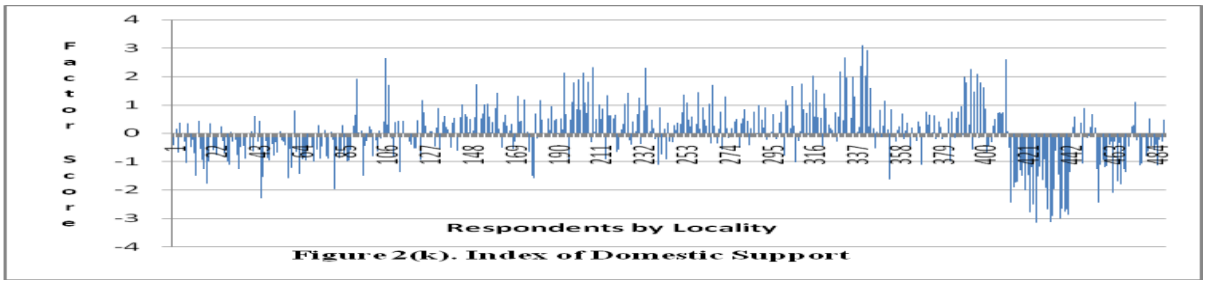

Figure 2(k). Index of Domestic Support

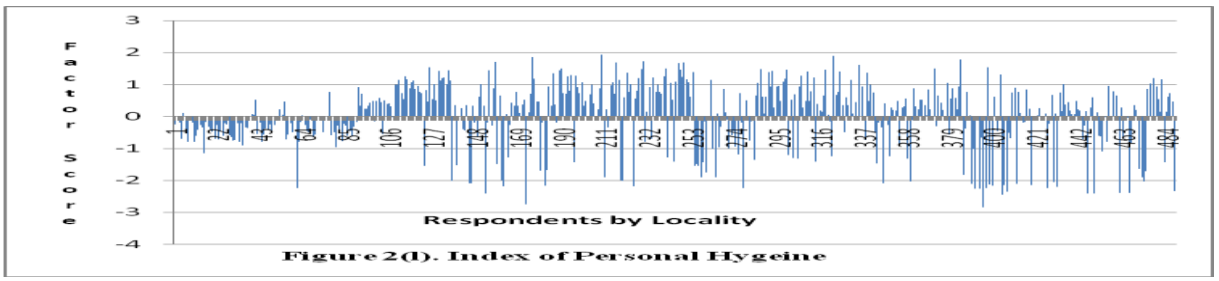

Figure 2(l). Index of Personal Hygeine

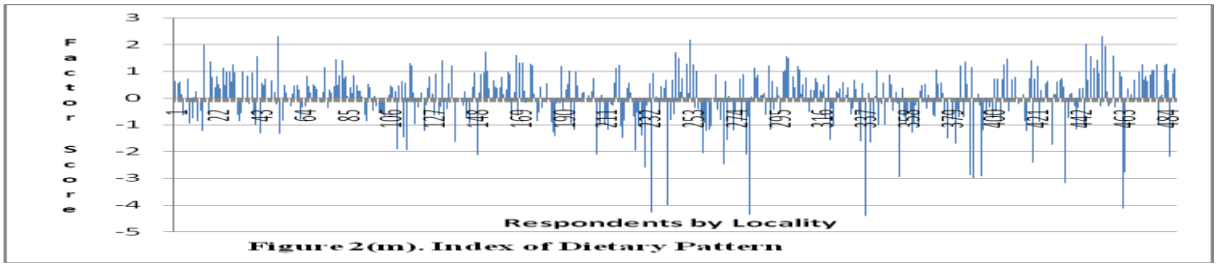

Figure 2(m). Index of Dietary Pattern

Figure 2(n). Index of Residential Pattern

CONCLUSION

The world as a whole and developing countries and Nigeria in particular, are moving through a demographic transition to 'greater' societies. The challenge however is to promote healthy and productive aging in these added later years of life, and to adjust societal practices and structures to include older people as contributors to society. Aging should be viewed as a natural part of the life course and populations aging as a transition not crisis, in that older people are active and productive rather than 'a burden' upon society and will continue to play a valuable role in the future. Hence, the analysis of the aging population or the elderly in selected settlements in Kwara State has been done, and the characteristics as well as factors which exert significant influence on its dynamic pattern established. However, the need for the establishment and enhancement of pro-elderly social wellbeing and empowerment schemes is therefore recommended.

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