The Nigerian Journal of Medical Sociology

SOCIO-CULTURAL BASIS OF LONGEVITY BETWEEN WOMEN AND MEN IN BAYELSA STATE, NIGERIA

UZOBO, Endurance*
Department of Sociology and Anthropology
Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria
enduzobo@gmail.com, endurance.uzobo@ndu.edu.ng
08065052298

MUSTAFA-SHAIBU, Maryam
Department of Sociology and Anthropology
University of Benin, Benin City, Edo State, Nigeria
maryam.mustafa-shaibu@uniben.edu, maryamustafa.m@gmail .com
08160712897
* Corresponding Author

Abstract
There are differences in health status between women and men. This has been attributed to gender-specific health and longevity-related behaviours. Hence, society and culture influence men to certain lifestyles that are increasingly detrimental to their health and life. The aim of this study is to investigate socio-cultural factors responsible for longevity among older men and women. The lifestyle theory formed the theoretical base for this study. The study generally is a quantitative cross-sectional study conducted among 344 older adults aged 50 years and above in Yenagoa city of Bayelsa state, Nigeria. Data for the study was gathered through the use of the structured questionnaire, while data analysis was done using, univariate, bivariate and multivariate statistics at 0.05 level of significance. Findings from the study showed that there is 0.52 variation of the independent variables on longevity for female respondents with F (15, 155) = 11.25, p<0.000; while that of their male counterparts is 0.34 variation of the independent variables on longevity with F (14, 158) = 5.75, p<0.000. It was thus concluded that most social factors that determine longevity differentials by gender are more favourable to men.Hence, the need for socialization and re-socialization of individuals based on their gender to shape and re-shape the biological factors for more favourable living conditions and healthy lifestyles is essential for promoting healthy well-being and further enhance longevity free from diseases or morbidity.

Keywords: Socio-cultural, longevity, men, women, life-style

Introduction

Health is not just a physical condition of an individual; it cuts across the socio-cultural conditions of people in societies as well (Uzobo, Ogbanga, & Jack, 2014). Societies with high morbidity and mortality are likely to be socially organized very differently from those

where people live longer lives and experience less morbidity and mortality (Macionis, & Plummer, 2008). Sociologists have highlighted the social factors that play a role in producing high morbidity in a population.

Earlier studies showed that lifestyles such as diet, smoking habits, and alcohol consumption are commonly identified social determinants of health especially in later life since the effects cumulate over the life course (Nakamura, & Miyao, 2008) to determine longevity. Of course, differences in health status between women and men have been attributed to gender-specific health and longevity-related behaviours. For example, according to Smith and Warner (1989) women are more likely than men to describe themselves as non-drinkers and non-smokers, though physically less active; yet they tend to be more concerned about their health and to use the health care system more frequently than men. For instance, a survival advantage has been observed by Hazzard (1986) that even though female smokers increased considerably in recent time, there is a possibility to recognize serious symptoms of illness earlier and more often than men due to their ability to consult a doctor more than men and to seek medical help. Although this may be controversial, the fact remains that there is a possibility that women recognize serious diseases in time and treat them successfully more than their men counterparts. This also results to longevity differentials between the two sexes.

Although women live longer than men in advanced modern societies, research has shown that they are sicker throughout their lives. While men tend to suffer from serious illnesses that cause early death, women live on with chronic, but not necessarily life-threatening illness (Taylor & Field 2003). Thus, women's extra years are typically not spent in good health. In terms of healthy life expectancy, that is years spent free of disability or chronic illness, women's advantage reduces to two, three or more years (Acheson Report 1998).

As Luy and Di Guilio (2006) further added, society and culture influence men to certain lifestyles that are increasingly detrimental to health and life in terms of smoking habits, alcohol consumption, diet, exercise, reckless driving among others. These behaviours subject men to greater health risks at work as well as predisposing them to environmental factors that could lead to survival disadvantages than women. Indeed, men are generally more exposed and susceptible to different kinds of social and psychological stress than their female counterparts (Luy, & Di Guilio, 2006). Also, there is an increasing male mortality due to higher propensity to consume nicotine and their predisposition to lung cancer and heart failure than women (Payne, 2001). This phenomenon may result to gender gaps in longevity between women and men in each society.

Relative to diets, some cultural practices in Nigeria have shown that it is a taboo for a pregnant woman and young children to include some foods in their diets. In some parts of Igboland women are forbidden from taken snail for fear of their children drooling saliva

(Iyun, &Oke, 2000). These practices go a long way to bring about disparity in health status and consequently leading to gender gap in longevity. Yet women still live longer than men.

Also, in the outcome of three psychosocial factors such as social support, chronic stress, and stressful life events influencing health, Cutler (1992) submitted that low levels of social integration/support can negatively affect mental and physical health. And because of women living longer than men, they are more likely to not have a partner and the consequent informal care-giving and support - both emotional and financial when alone; which has made Nakamura and Miyao (2008) to have suggested that social integration deficiency may make the women more susceptible to chronic stress and stressful life events.

On the other hand, Waldron (1995) has said that social stress is another basic causal factor of increasing male excess mortality especially when it is connected with ischemic heart disease. Within this context, the earlier scholar, Jenkins (1976) who introduced the term "Type A behaviour" argued that with this type of behaviour, there is high tendency for individual for intensive striving for achievement, competitiveness, easily provoked, prone to impatience, time urgency, abruptness of gesture and speech, over-commitment to vocation or profession, and excesses of drive and hostility. In Western societies however, this type of behaviour is more prevalent among men because of its linkage with professional life and social status (Waldron, 1985). This implies that since lifestyles is generally varied by the level of social status, there is bound to be sex differentials in longevity by the fact that women and men are not equally distributed within the various social classes existing in the society (Anson, 2003). Despite the three psychosocial factors and the social stress explanations seem controversial in their arguments for the longevity differences between women and men, it is a fact that the life expectancies of women outstrip that of men in the world over.

Furthermore, health is directly affected by socio-economic status (SES) (Nakaruma, &Miyao, 2003). Socio-economic factors also help to mediate the relationship between gender and health. For example, the differential socio-economic experiences of men and women in terms of labour force participation, financial independence, and domestic responsibilities contribute to gender differences in health status throughout life (Dockery, Ware, & Ferris, *et al*., 1985). This suggests that it could also affect or result to gender gaps in longevity between women and men in a population.

Most of the arguments under the sociocultural factors combine behavioural and societal factors. Beside this group of arguments, there are also explanations exclusively based on environmental and biological factors that exert a different influence on male and female mortality and call for a more gender-oriented research design. Studies have consistently shown that that economic modernization improve the status of women more than that of men, and this led to a greater reduction in mortality among women over time. For example,

Martikanine*et al.* (2004) revealed that in welfare states like Britain, Finland and Japan there is a production of similar patterns of socioeconomic health differences among men. However, different patterns of labour-force participation and welfare provision may be associated with different patterns of socioeconomic differences in health for employed women. This suggests that disparity is bound to exist between both sexes in respect to longevity patterns.

Again,patriarchal societies such as Nigerian and Britain;a system of male dominance which sometimes advantages men and disadvantages women and traditionally operates by creating a strong gender divide,stereotypes as well as attributing certain socio-cultural and psychological characteristics to men and others to women,for example,women are physically weak,men are physically strong;women are naturally caring,men are naturally aggressive;men are competitive, women are cooperative/supportive.These features are often drawn together under the roof/umbrella terms of 'femininity 'and 'masculinity'. While feminist have strongly challenged female gender role expectations for decades, and the new discipline of men's studies is now questioning male gender role expectations, the concept of gender roles has had a very strong influence upon explanations, the concept of gender roles has had a very strong influence upon explanations of the health and health behaviours of males and females(Taylor & Field 2003).Also,both men andwomen often experience illness, howeverillness causes weakness, unlike womenwhen men are sick they still want to be seen as strong which prevent them from seeking medical care leading to the illness becoming complicated and resulting to death.Thus, could be attributed to why men die younger than women

Finally, the prevalence of poverty is another major factor that impedes the health status of people in a population. Given the fact that the poor also tend to use the health service provided at the primary health care level, it can only be used when the resources to access is available. Therefore, they are more likely to fall victim of health challenges than those who have enough resources as it applies to women and girls whose level of education, unemployment and poverty are higher than that of men and boys. Despite the socio-cultural factors influencing peoples' predisposition to health challenges and disparity, the basis for its gender gaps is not well understood. There is a need to link socio-cultural factors in order to understand the basis for the disparity in longevity between women and men.

Theoretical Framework: Health Lifestyle Theory

Because daily lifestyle practices affect health outcomes and consequently determine the lifespan (longevity) of individuals in a population or society, health lifestyle theory is adopted as the framework for this study.

Health lifestyles are a form of consumption relative to health that is produced and used for something such as a longer life, works, or enhanced enjoyment of one's physical being (Cockerham, 2000).

Moreover, health lifestyles are supported by an extensive health products industry of goods and services such as running shoes, sports clothing, diet plans, health foods, club and spa memberships promoting consumption as an inherent component of participation. Additionally, as Gochman (1997) points out, positive health lifestyle behaviors are the opposite of risk behaviors. Good nutrition, for example, is the reverse of bad nutrition.

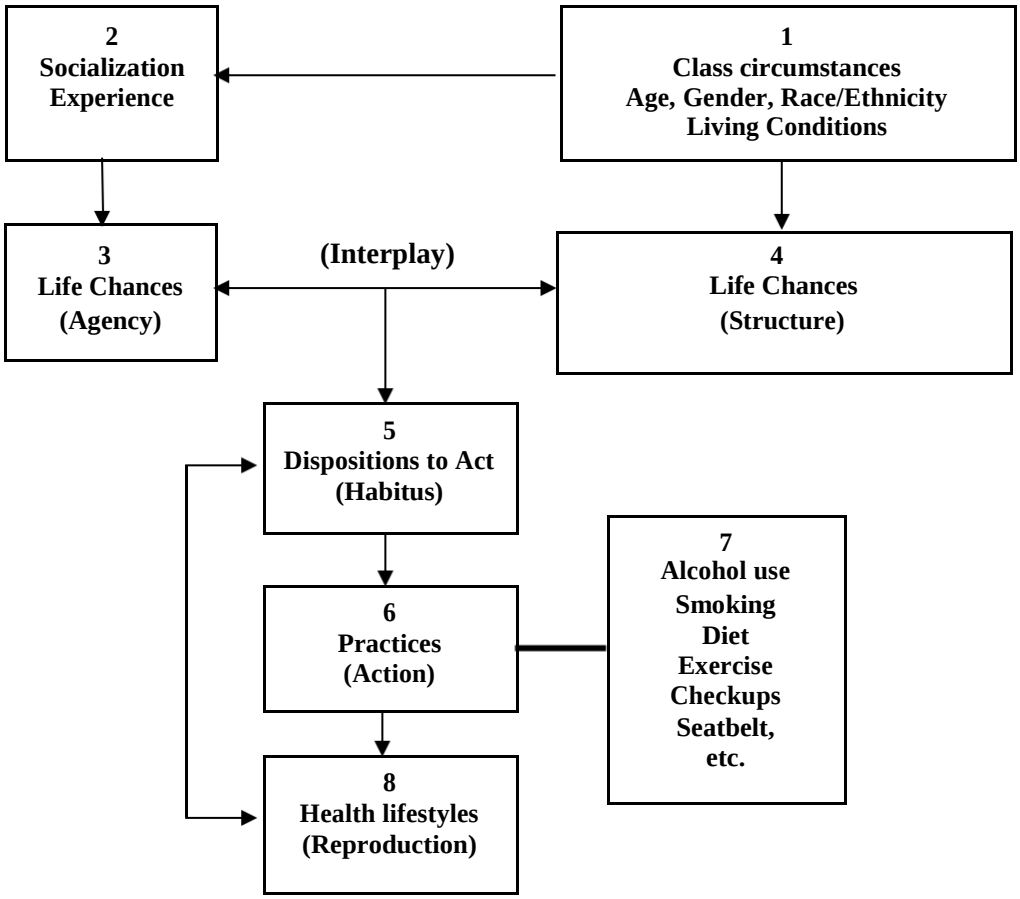
According to Cockerham (2005), while definitions and a general concept of health lifestyles exist in the literature, an overall theoretical paradigm as noted is missing. To fill this gap and further the development of health lifestyle theory, four categories of structural variables are listed that have the capacity to shape health lifestyles: (1) class circumstances, (2) age, gender, and race/ethnicity, (3) collectivities, and (4) living conditions.

Although the theory of health lifestyles strongly emphasizes on the lifestyles (behavioral) of individuals, structural influences on health lifestyle practices have been suggested to interplay with individual (agency) to determine the health outcome(Cockerham, 2005).

Again, there was an observable structural influence on health lifestyles in anti-smoking campaign in the United States when massive efforts were made to reduce cigarette smoking through educational programs on the hazards of smoking (Cockerham, 2005). This means that both individualistic approaches and structural influences contributed immensely to the cessation of smoking (Sweat and Denison, 1995). This is because their lives were severely curtailed by anti-smoking laws of structural conditions which have outweighed that of individual capabilities and capacities for the ban not to be ineffective. In other words, both agency and structure allow them to accept the cessation or modify their smoking habits by allowing the structure limiting the options of smoking available for individuals.

Figure1: Health Lifestyles Conceptual Framework
Source: Adapted from Cockerham (2005, p. 57)

Materials and Methods



This study which was conducted in Bayelsa state located at the South-south region of Nigeria adopted the cross-sectional survey research design. The choice of this design was informed by its ability to generate data quantitatively as well as providing the opportunity to carry out a study with a representative of the target population in order that generalizability can still be achieved of the entire population of study.

The population of study constituted both women and men (aged 50 and above) in Yenagoa LGA of Yenagoa, Bayelsa State. Hence, the inclusion criteria for the study were that, these age groups must have been residents of the LGA in the last 10 years.

The sample size for the study was drawn from the population of those who are 50 years old and above. For this however, and because of the unreliability of the database of those

who fall into that category of age, the Conchran'ssample size determination formula was used to calculate and arrive at 384 as the sample size used for the study.

The sampling technique adopted for this study was a cluster technique. This sampling technique was adopted based on urban-rural dichotomy of the LGA, and so the use of this residential dichotomous setting as the sampling unit is feasible. As such, those who were in these sampling units were selected based on this category. This technique was also adopted because the technique would allow for easy access of the respondents at minimum costs as well as ensuring that the two residential settings are well represented in the sampling units for the purpose of in-depth understanding of the subject of our investigation.

This study adopted a structured questionnaire to gather quantitative data from the respondents. Three hundred and eighty-four copies of structured questionnaire were administered to the respondents using the technique stated above. The structured questionnaire was structured in such a way that quantitative data could be gathered from the respondents in a close-ended format.

In addition to this, the structured questionnaire was designed to capture the objectives of the study whereby categorizing them into sections. The section A of the instrument was designed to elicit demographic information of the respondents; section B was used to gather information about biological determinants of longevity between women and men; while section C was basically on information pertaining to the sociocultural determinants of longevity differentials between women and men in a population.

The quantitative data that was collected for the study was analysed using Statistical Package for Social Sciences (SPSS) software version 20.0. Specifically, the data were analysed based on univariate and bivariate.

The univariate statistical procedure: This method of analysis was based on the analysis of data with one variable with the use of frequency distribution table and simple percentages. The variables that were most analysed with this statistical analysis are socio-demographic characteristics of the respondents such as gender, age, income, marital status, religion

The bivariate statistical procedure: The bivariate statistical procedure is a method of analysis adopted in the study to determine the likely association that could exist between two variables whether they are statistically significant or not. This however, employed cross-tabulation at p-value < 0.05.

The multivariate statistical procedure: The multivariate statistical procedure is a method of analysis used to predict the effects of the independent variables on the dependent

variables. The dependent variable of this study is a continuous variable which is the age of the respondents (ordinal variable) with the likelihood of longevity among the study population. The independent variables are all socio-demographic variables, biological factors and sociocultural factors that influence differentials between women and men in a population. A multiple regression analysis was used to test the relationship between these factors at various levels called models.

The validity and reliability of instruments of this study was given utmost attention. Validating the instrument was undertaken by experts and pre-test of the instrument with 10 per cent of sampled population for necessary adjustment. Face validity was also adopted to validate the instrument used for data collection. The reliability of the data was at Cronbach's alpha α 0.6, which showed that the instrument used for the study was reliable as well as internally consistent with what it purported to measure.

To keep with the ethical standard involve in conducting research, the following are the ethical considerations observed for this study:

Respect for persons: All research respondents were informed of the nature of the study and their consents sought before the administration of the instruments used for the study, while also assuring them of their anonymity otherwise the study was strictly based on confidentiality. Hence, the participation of all respondents was voluntary, and no respondent was induced in any form to respond to the questions provided on the questionnaire. Should any respondents feel so uncomfortable with some questions, there was absolute freedom of withdrawal without any form of intimidation.

Non-maleficence: All respondents were informed that there would be no risk of harm involved during or after the study. Also, all respondents were assured of no harm in the course of responding to the questions on the questionnaire.

Beneficence: It is also very essential that should there be any benefits of the research outcome to the respondents, they were all informed that no respondents would be exempted. On the other hand, should there be no direct or material benefits to the respondents after the study, this was equally explained to the respondents in detail with emphasis on policy related issues rather than direct benefits to the respondents.

Justice: All respondents were rest assured of fairness in their treatment in the course of the study. Should there be cases of gender issues, the researcher ensured that gender sensitivity was maintained.

Results

The presentation of data has been thematically arranged according to the study objectives. A total of 384 copies of structured questionnaire were administered to the respondents,

about 344 copies of the structured questionnaire were retrieved which showed 89.6% response-retrieval rate. Hence, the analysis of the study was based on 344 copies of structured questionnaire returned and found useful for the analysis of the study.

Socio-Demographic Characteristics of the Respondents

This section of the study shows the analysis of socio-demographic profiles of the respondents as demonstrated by age, ethnic group, marital status, educational qualification, occupation, average income of the respondents, family type, religion and residence. Table1 reveals that 42.1% of the female respondents whose ages were between 50-59 years had the highest percentage, followed by 30.4% whose ages were between 60-69 years, and those whose ages were between 80-89 years (11.7%).The table further shows that 31.8% of their male counterparts whose ages were between 60-69 years had the highest percentage of respondents, followed by 20.8% whose ages were between 50-59 years, and 16.2% of those whose ages were between 70-79 years respectively. This implies that there are more female respondents whose ages were between 50-59 years when compared to their male counterparts.

On the ethnic group of the respondents by gender, the table shows that the highest percentage of the female respondents (56.7%) are from Ijaw ethnic group, followed by those from Epie ethnic group (21.1%), and those from Ogbia (12.3%) respectively. While that of their male counterparts show that the highest percentage of ethnic group were from Epie (53.8%), followed by those from Ogbia (16.8%), and Ijaw with 14.5% respectively. This suggests that there are more female respondents from Ijaw ethnic group than their male counterparts despite Ijaw ethnic group dominating the domicile of the study.

In terms of the marital status of the respondents, most respondents were married compared to other categories of respondents with the female respondents having the highest percentage of respondents being married (91.2%) and 78.0% of the male respondents being married. On the educational qualification of the respondents, there seems to be more no formal education among the respondents when compared to other categories of educational attainment. About 41.5% of the female respondents had no formal education, followed by 34.5% with primary education, 18.7% with secondary school education and 5.3% with tertiary education. For their male counterparts, about 49.1% had no formal education, followed by 41.6% who had primary school education, 8.1% with secondary school certificate and none with tertiary education. This is by implication that female respondents had more formal educational attainment when compared to their male counterparts. Indeed, it also means that only few of those who had attained to the age of 50 and above had opportunity to attend higher degree programmes before they attained their current age.

Occupationally, the table reveals that majority of the respondents (both female and male respondents) were engaged in farming and fishing activities as depicted by 49.1% female and 48.0% male respondents. While 30.4% of the female respondents showed that they

engaged in trading/business, followed by 7.6% who engaged in security, 5.3% said banking, 5.2% indicated that they were retirees, 4.1% signified that they were civil service and 3.5% said they were company worker. For the male respondents on the other hand, there seems to be more retirees than their female counterparts as indicated by 23.1%, followed by those in civil service (11.0%), trading/business (8.1%), security (8.1%) and company worker (1.2%).

Table1: Distribution of respondents by socio-demographic characteristics (*n=344*)

Demographic variables	Gender	
	Female (*n=171*)	Male (*n=173*)
Age		
50-59	72 (42.1)	36 (20.8)
60-69	52 (30.4)	55 (31.8)
70-79	16 (9.4)	28 (16.2)
80-89	20 (11.7)	25 (14.5)
90-99	11 (6.4)	29 (16.8)
Ethnic group		
Ijaw	97 (56.7)	25 (14.5)
Ogbia	21 (12.3)	29 (16.8)
Nembe	15 (8.8)	9 (5.2)
Epie	36 (21.1)	93 (53.8)
Others	7 (4.1)	17 (9.8)
Marital status		
Single	1 (0.6)	5 (2.9)
Married	156 (91.2)	135 (78.0)
Widowed/widower	8 (4.7)	24 (13.9)
Divorced/separated	6 (3.5)	9 (5.2)
Education		
No formal education	71 (41.5)	85 (49.1)
Primary	59 (34.5)	72 (41.6)
Secondary	32 (18.7)	16 (9.2)
Tertiary	9 (5.3)	-
Occupation		
Farming/fishing	84 (49.1)	83 (48.0)
Civil service	7 (4.1)	19 (11.0)
Trading/business	52 (30.4)	14 (8.1)
Banking	6 (3.5)	-
Company worker	9 (5.3)	2 (1.2)
Security (army, police & paramilitary)	13 (7.6)	14 (8.1)
Retirees	10 (5.2)	40 (23.1)
Average income per month (in Naira)		
<20000	65 (38.0)	88 (50.9)
20000-39999	43 (25.1)	10 (5.8)
40000-59999	25 (14.6)	49 (28.3)
60000-79999	29 (17.0)	-
80000-99999	8 (4.7)	18 (10.4)
100000 and above	1 (0.6)	8 (4.6)
Family type		
Monogamy	145 (84.8)	111 (64.2)
Polygamy	26 (15.2)	62 (35.8)
Religion		
Traditionalist	23 (13.5)	28 (16.2)
Christianity	111 (64.9)	119 (68.8)
Moslem	6 (3.5)	18 (10.4)
Residence		
Rural	80 (46.8)	70 (40.5)
Urban	91 (53.2)	103 (59.5)

*percentages in parenthesis

Although there seems to be less percentage of respondents in the civil service when compared to other categories of occupation, this may be attributed to the fact that they must have attained the age of retirement and they are more likely to engage in non-formal activities than those in younger ages.

In addition, the table shows the reports of average income of the respondents on monthly basis in naira. It was revealed that the highest percentage of the female respondents earned <N20000 (38.0%), followed by 25.1% who received between N20000-39999, and 17.0% who earned between N60000-79999. In respect of their male counterparts, the highest percentage earned <N20000 (50.9%), followed by 28.3% who earned between N40000-59999, and 10.4% who received between N80000-99999. This means that majority of the respondents (both female and male) earned more than N18000 minimum wage of the federal government of Nigeria.

On the family type of the respondents, majority of the female respondents (84.8%) were monogamous family type while the corresponding male respondents is 64.2% as compared to those who indicated polygamy 15.2% and 35.8% for both female and male respectively. This implies that although there was more percentage of female respondents in monogamous family type than that of the male counterparts, there are more percentages of the polygamous family type in male respondents than the female respondents.

On religious affiliation, more than half of the respondents (both female and male) were Christians (female 64.9%; male 68.8%) when compared to other categories of religions. This suggests that Christianity dominates the religious affiliation of the respondents among the study population. On the residence of the respondents, more than half of the female and male respondents were from urban centre (53.2%; 59.5%) when compared to those in rural areas (46.8%; 40.5%) respectively. This means that more of the targets age groups were from the urban population.

Socio-Cultural Determinants of Longevity Differentials Between Female and Male

The analysis of the socio-cultural determinants of longevity differentials between the two sexes is presented in this section. As table 2 indicated, it was revealed that there are differentials between the two sexes in most of the indicators of the socio-cultural determinants of longevity. And as a matter fact, significant association existed between most indicators by gender ranging from "*work(ed) long ago, stressful", "vegetables/fruits intake"," engagement in sport activities"," smoking status", "living without spouse but with others", "discussing critical issues with spouses", "discussing critical issues with children", "received financial supports from eldest sons/daughters",* and *"doing things in common with co-worshippers".* This also implies that social supports are essential ingredients of socio-cultural determinants relative to longevity differentials between the two sexes.

Table 2: Association between socio-cultural determinants and gender

Variables	Gender		X^2	*P-value*
	Female (*n=171*)	Male (*n=173*)		
Work(ed)never or long ago, no stress				
No	90 (52.6)	96 (55.5)	0.28	0.600
Yes	81 (47.4)	77 (44.5)		
Work(ed)long ago, stressful				
No	144 (84.2)	128 (74.0)	5.43	0.002*
Yes	27 (15.8)	45 (26.0)		
Working/recently stopped working, stressful				
No	108 (63.2)	122 (70.5)	2.1	0.150
Yes	63 (36.8)	51 (29.5)		
Vegetables/fruits intake				
Not at all	22 (12.9)	22 (12.7)		
Not regularly	40 (23.4)	74 (42.8)	15.64	0.000**
Regularly	109 (63.7)	77 (44.5)		
Engagement in sport activities				
Not at all	56 (32.7)	1 (0.6)		
Not regularly	51 (29.8)	16 (9.2)	109.82	0.000**
Regularly	64 (37.4)	156 (90.2)		
Smoking status				
Currently smoking	12 (7.0)	60 (34.7)		
Smoked in the past	16 (9.4)	75 (43.4)	131.16	0.000**
Never smoked	143 (83.6)	38 (22.0)		
Living with spouse only				
No	139 (81.3)	131 (75.7)	1.58	0.210
Yes	32 (18.7)	42 (24.3)		
Living with spouse and children				
No	94 (55.0)	103 (59.5)	0.73	0.390
Yes	77 (45.0)	70 (40.5)		
Living with spouse and children				
No	131 (76.6)	132 (76.3)	0.005	0.940
Yes	40 (23.4)	41 (23.7)		
Living with grandchildren only				
No	155 (90.6)	148 (85.5)	2.13	0.150
Yes	16 (9.4)	25 (14.5)		
Living without children but neighbours				
No	163 (95.3)	163 (94.2)	0.21	0.650
Yes	8 (4.7)	10 (5.8)		
Living without spouse but with others				
No	165 (96.5)	173 (100.0)	6.18	0.001**
Yes	6 (3.5)	-		
Living alone				
No	171 (100.0)	173 (100.0)		
Yes	-	-		
Discussing critical issues with spouse				
Not at all	20 (11.7)	-		
Not regularly	55 (32.2)	62 (35.8)	21.5	0.000**
Regularly	96 (56.1)	111 (64.2)		
Discussing critical issues with children				
Not at all	20 (11.7)	-		
Not regularly	31 (18.1)	54 (31.2)	26.22	0.000**
Regularly	120 (70.2)	119 (68.8)		
Received financial supports from eldest son/daughter				
Not at all	51 (29.8)	84 (48.6)		
Not regularly	22 (12.9)	22 (12.7)	13.88	0.001**
Regularly	98 (57.3)	67 (38.7)		
Discuss or share life experiences with friends and neighbours				
Not at all	24 (14.0)	26 (15.0)		
Not regularly	63 (36.8)	66 (38.2)	0.19	0.910
Regularly	84 (49.1)	81 (46.8)		
Doing things in common with co-worshippers				
Not at all	19 (11.1)	5 (2.9)		
Not regularly	73 (42.7)	90 (52.0)	9.935	0.001**
Regularly	79 (46.2)	78 (45.1)		

$p<0.01$** $p<0.05$* X_2= Chi square; percentages in parenthesis

While table 2 shows the association between socio-cultural determinants of longevity and gender, table 3 shows the actual results of the regression analysis of the relationship between socio-cultural factors and longevity differentials between the two sexes. As the table reveals however, there is 0.52 variation of the independent variables on longevity for female respondents with F (15, 155) = 11.25, p<0.000; while that of their male counterparts is 0.34 variation of the independent variables on longevity with F (14, 158) = 5.75, p<0.000, which suggests that the predictor variables of longevity for female is explained by 52.0% when compared to that of male with 34.0%.

Table 3: Multiple regression results of the relationship between socio-cultural factors and longevity differentials between female and male (*n=344*)

Predictor variables	**Gender**	
	Female *(n=171)*	**Male (*n=173*)**
	β (t-value)	**β (t-value)**
Nature of work	0.16 (2.05)*	0.44 (4.38)**
Vegetables/fruits intake	-0.02 (-0.40)	-0.15 (-1.80)
Engagement in sport activities	0.21 (3.46)**	0.18 (2.18)*
Smoking status	-0.22 (-3.13)*	-0.35 (0.24)**
Social supports		
Living with spouse only	0.07 (0.91)	0.12 (1.13)
Living with spouse and children	0.13 (1.26)	-0.10 (-0.70)
Living with spouse and grandchildren	0.22 (2.22)*	0.11 (0.75)
Living with grandchildren only	0.45 (5.40)**	-0.45 (-2.66)
Living without children but with neighbours	-0.01 (-0.12)	-0.68 (-4.53)**
Living without spouse but with others	0.35 (5.12)**	-
Living alone	-	-
Discussing critical issues with spouse	0.17 (1.47)	-0.34 (-1.82)
Discussing critical issues with children	-0.04 (-0.48)	-0.86 (-5.20)**
Received financial supports from eldest son/daughter	0.02 (0.22)	0.18 (1.83)
Discuss or share life experiences with friends and neighbours	0.27 (3.29)**	-0.07 (-0.79)
Doing things in common with co-worshippers	-0.002 (-0.03)	-0.03 (-0.34)
R Square	0.52	0.34
F	(15, 155) = 11.25, p<0.000	(14, 158) = 5.75, p<0.000

p<0.001**
p<0.005*
β=Beta
t-value in parenthesis

Furthermore, it is observable that while there nature of work, engagement in sport activities, smoking status, living with spouse and grandchildren, living with grandchildren only, living without spouse but with others and discussing or sharing life experiences with friends and neighbours were significantly related with longevity for female respondents, only nature of work, engagement in sport activities, smoking status, living without children but with neighbours and discussing critical issues with children are significantly related with longevity for male respondents. Even though some of the predictor variables concurrently and significantly related with longevity in both sexes, there are also significant differences in the magnitudes of the variations as presented in the table. This suggests that disparity existed in the socio-cultural determinants of longevity between the two sexes.

Discussion of Findings

This study focuses on the socio-cultural basis for longevity differentials between female and male in Bayelsa State. Among the socio-demographic factors of the respondents however, it was found that although there were more female (84.8%) in monogamous family type than their male counterparts (64.2%); the reverse is the case for the polygynous family type for the respondents where more than double of the male respondents (35.8%) engaged in polygynous marriages when compared to their female counterparts. This may have profound implications on lower survival of polygynous males as confirmed by the experiment of Clutton-Brock and Isvaran (2007) on larger animals that polygynous males spend less time feeding than female as well as more predisposed to greater risk of predation due to the rigorous conditions they are exposed for the requirement of territorial defence than their female counterparts. While this negatively affects the survival of the males, Gowaty, Kim and Rawlings *et al.* (2010) submitted that it has potential benefits for females due to continuous sperm supply which contains protein that tends to reduce the risk of mortality.

Findings on socio-cultural determinants of longevity differentials between the two sexes revealed that there is statistically significantly association between socio-cultural determinants of longevity differentials and gender such that "*work(ed) long ago, stressful", "vegetables/fruits intake"," engagement in sport activities"," smoking status", "living without spouse but with others", "discussing critical issues with spouses", "discussing critical issues with children", "received financial supports from eldest sons/daughters",* and *"doing things in common with co-worshippers"* were found significantly associated with gender. It was also found out that socio-cultural variables related with longevity are more significant at 0.52 R square in female than that of their male counterparts with 0.34. This means that while biological variables are more favourable to men, socio-cultural variables are more favourable to women. These findings corroborate Luy and Di Guilio (2006) earlier findings that society and culture has greater influence on men to certain lifestyles than women which may be very detrimental to health and life in terms of smoking habits, alcohol consumption, diet and all the likes. It is also

observable that social support which promotes social integration is more prevalent among women than men. This buttressed Nakamura and Miyao's (2008) work that social integration reduces the risks of women's susceptibility to chronic and stressful life events that may predispose them to shorter life span.

Literature has also shown that it is impossible to explain longevity differentials between the two sexes without considering social factors. As Luy and Di Giulo (2006) earlier submitted, it becomes so difficult when estimating the impact of biological factors and socio-cultural factors when treated differently. Therefore, findings from this study have revealed that significant relationship exists between socio-cultural determinants with significant differentials in longevity between female R square of 0.75 and F (24, 146) = 17.05, $p<0.000$, compared with male R square of 0.65 and F (23, 149) = 12.01, $p<0.000$. These factors when put together is found in tandem with the works of Luy and Di Giulo (2006) that for female respondents explained the dependent variables by 75.0% while of the male is by 65.0%. In other words, female has about 10.0% explanation when compared to that of the male. These relationship and differentials in longevity also affirmed Waldron (1983) assertion that both behavioural and biological factors are essential in estimating for mortality in men and women because they are both subjected to differing environmental influences in determining their longevity patterns.

Conclusion

Having explored the socio-cultural basis of longevity differentials between female and male in the study population, it is evidenced that the health lifestyles of individuals based on the socio-cultural factors impact significantly on their well-being and consequently on their longevity relative to their life span. It is also indicative that most social factors that determine longevity differentials by gender are more favourable to men.

Therefore, the need for socialization and re-socialization of individuals based on their gender to shape and re-shape the biological factors for more favourable living conditions and healthy lifestyles is essential for promoting healthy well-being and further enhance longevity free from diseases or morbidity.

Recommendations

Based on the findings of this research, the following recommendations are suggested for improving healthy lifestyles that attracts longevity by gender:

1. To enhance positive lifestyles for men and women in the society should be enhanced. This will be achieved by committing more efforts that will enlighten men on the need to inculcate positive consumption patterns free from unhealthy feeding habits. Also, frequent use of health facility should be encouraged.
2. Since the nature of work for both gender are found significantly related to longevity, every human especially the men should be encouraged to imbibe the habit of engaging in less stressful work conditions.

3. Bearing it in mind that the socio-cultural factors within the social environment shape and re-shape the biological factors that influence longevity in both genders, there should always be continuous orientations for both genders on the need to care for their social environment using various forms of institutions to disseminate such information.

References

Anson J. (2003). Sex differences in mortality at the local level: an analysis of Belgian municipalities. *European Journal of Population,* 19, 1-28.

Clutton-Brock, T. H., &Isvaran, K. (2007). Sex differences in ageing in natural populations of vertebrates. *Proceedings of the Royal Society B: Biological Sciences*, 274, 3097–3104.

Cockerham, W. C(2000). Health lifestyles in Russia. *Social science & medicine,* 51 (9), 1313-1324.

Cockerham, W. C.(2005). Health Lifestyle Theory and the Convergence of Agency and structure. *Journal of Health and Social Behavior,* 46, 51-67.

Cutler, R. G. (1992). Genetic and evolutionary molecular aspects of aging. In J. L. Dall, M, Ermini, P. L. Herrling, U. Lehr, W. Meier-Ruge, &H. B. Stahelin (eds), *Prospect in Aging*(pp. 23-58). London: Harcourt Brace Jovanovich.

Dockery, D. W., Ware, J. H., &Ferris, B. G. Jr., *et al*. (1985). Distribution of forced expiratory volume in one second and forced vital capacity in healthy, white, adult, never-smokers in six U.S. cities. *Am Rev Respir Dis.*, 131, 511–520.

Gochman, D. S. (1997). Provider determinants of health behavior. In *Handbook of Health Behavior Research II* (pp. 397-417). Springer, Boston, MA.

Gowaty, P. A., Kim, Y. K., &Rawlings, J., *et al*. (2010). Polyandry increases offspring viability and mother productivity but does not decrease mother survival in Drosophila pseudoobscura. *Proceedings of the National Academy of Sciences of the United States of America*, 107, 13771–13776.

Hazzard, W. R. (1986). Biological basis of the sex differential in longevity. *Journal of the American Geriatrics Society*, 34(6), 455-471.

Iyun, B.I.F., &Oke E.A (2000), Ecological and cultural barriers to treatment of Children diarrhea in riverine areas of Ondo state. *Science and medicine*.

Jenkins C. D. (1976). Recent evidence supporting psychologic and social risk factors for coronary Disease. *The New England Journal of Medicine*, 294(19), 1033-1038.

Luy, M., &Di Guilio, P. (2006). The impact of health behaviors and life quality on gender differences in mortality. *MPIDR Working Paper WP 2006-035*.Germany: Max Planck Institute for Demographic Research.

Macionis, J.J., &Plummer, K. (2008). *Sociology: A Global Introduction*, 4th edition, England, Pearson prentice Hall.

Martikainen, P. *et al*. (2004). A comparison of socioeconomic differences in physical functioning and perceived health among male and female employees in Britain, Finland and Japan. *Social Science and Medicine*, 59, 1287-1295.

Nakamura, E., &Miyao K. (2003). Further evaluation of the basic nature of the human biological aging process based on a factor analysis of age-related physiological variables. *J GerontolA Biol Sci Med Sci*., 58, 196–204.

Payne, S. (2001). 'Smoke like a man, die like a man'? A review of the relationship between gender, sex and lung cancer. *Social Science and Medicine*, 53, 1067-1080.

Smith, D. W., & Warner, H. R. (1989). Does genotypic sex have a direct effect on longevity? *Exp Gerontol.*, 24, 277–288.

Sweat, M. D., & Denison, J. A. (1995). Reducing HIV incidence in developing countries with structural and environmental interventions. *Aids*, *9*, S251-7.

Uzobo, E., Ogbanga, M. M., &Jack, T.C.B. (2014). Socio-Cultural Factors and Attitudes Affecting the Health Status of Rural Communities: A Study of Danmusa, Katsina State, Nigeria. *International Journal of Science and Research (IJSR)*, 3(3), 837-844.

Waldron, I. (1983). Sex differences in illness incidence, prognosis and mortality: issues and evidence. *Soc Sci Med*., 17, 1107–1123.