# SOCIO-DEMOGRAPHIC, COMMUNITY CHARACTERISTICS AND FEAR OF CRIME AS CORRELATES OF SELF-REPORTED HEALTH STATUS IN LAGOS, NIGERIA

Samuel Ojima Adejoh Department of Social Work University of Lagos, Akoka, Nigeria sadejoh@unilag.edu.ng

**Gabriel Aunde Akinbode** 

Department of Psychology University of Lagos, Akoka, Nigeria aakinbode@unilag.edu.ng **Franca Attoh** 

Department of Sociology University of Lagos, Akoka, Nigeria fattoh@unilag.edu.ng

#### **Peter Elias**

Department of Geography University of Lagos, Akoka, Nigeria pelias@unilag.edu.ng

Ajijola Abiodun

Department of Geography University of Lagos, Akoka, Nigeria abbeyajijola@gmail.com

## Abstract

The main objective of this study was to examine the influence of socio-demographic characteristics, community characteristics and fear of crime on self-reported health status among residents in selected communities in Lagos, Nigeria. The study was conducted in four selected communities in Lagos, namely Mushin, Idi-Oro, Idi-Araba and Surulere. Cross-sectional design survey was used to select 799 respondents using stratified sampling technique. Data were analysed at univariate, bivariate and ordinal logistic regression using SPSS version 22.0. Majority of the respondents rated their self-reported health status as excellent to good. The findings show that education increases the chances of achieving excellent to good self-reported health status; that female respondent reported excellent to good self-reported health status. Safely walking alone at night/day in the community positively affected self-reported health status. Fear of crime has direct relationship with self-reported health status. Sociodemographic, community characteristics and fear of crime at individual and community levels to promote healthy individuals and communities.

Keywords: Sex, education, religion, Lagos, fear of crime, community characteristics

## Introduction

The place of self-rated or self-reported health in any population or community cannot be underestimated. Knowing peoples' health status will help in the planning, development of disease prevention strategy and health promotion programmes, health care and social services that can enhance life satisfaction, quality of life and service delivery in the workplace. Self-reported health is an assessment of health derived from individuals self-rating of their own health on a point scale and is considered as an important indicator of population health and healthy life expectancy (World Health Organization, 1996). Self-rated health or Self-reported health is a qualitative single question assessment of health (Manderbacka et al 1998). and a recognized indicator of wellbeing in both people with significant illnesses and those living in the community (Oterhals et al.2017, Bethune et al. 2018) Self-reported health serves as a global measure of health that captures functional, physical, and psychosocial factors that affect quality of life (Jylhä, 2009). The measure has also shown to be valid across racial and ethnic groups (Ferraro et al. 1997, Finch, et al. 2002). It is also predictive of mortality, decline and health care utilization (Bailis et al 2003). Furthermore, self-rated health is

the summary of individual's perception of their health condition including physical, psychological, mental, environmental and social health (Johansson et al. 2019, Ou et al 2018). A study found that better self-rated health was associated with greater education, property ownership, employment and not living with someone suffering from a chronic illness (Darker et al 2016). Other studies found that age, gender, income and education (Trachte et al. 2016); lifestyle, psychological well-being (Kuosmanen et al. 2016); Social support (Dai, Zhang, & Zhang, 2016); are associated with self-rated health.

The effects of neighbourhood crime on health have been found to be associated with a variety of negative health outcomes including all-cause mortality (Wilkinson, Kawachi, & Kennedy, 1998); coronary heart disease (Sundquist, et al. 2006); and preterm birth and low birth weight (Messer et al. 2006); and health behaviours such as lower physical activity (Go'mez, et al 2004, McDonald, 2008). Studies show that exposure to violence in the communities is also demonstrated with poorer physical and psychological health (Boynton-Jarrett et al. 2008, Fowler et al 2008). Health care access, residential factors, physiological processes, psychosocial variables, and health behaviours have been identified as contributing to negative health outcomes (Ghaed & Gallo, 2007). Other studies identified body fat, alcohol consumption and physical inactivity all contribute to health status. Unprotected sexual activity, drug use and needle sharing are determinants of health status (Rubin, Colen, Link, 2010). Other factors identified included chronic stress, social isolation, and lack of preventive care (Phelan, Link, & Tehranifar. 2010)

Fear of crime is related to health (Lorenc, et al 2012) and satisfaction with life (Hanslmaier, 2013). Furthermore, fear of crime and crime related anxieties may worsen mental well-being and increase avoidance behaviour and consequently less physical activity and reduced social interaction (Lorenc, et al. 2012). Another study demonstrated a direct association between fear of crime and physical health (McEwen, 1998). The impact of fear of crime on both physical and mental health has been recorded (Stafford, Chandola, & Marmot, 2007, Olofsson, Lindkvist, & Danielsson. 2012, Pearson, & Breetzke, 2014); and a relationship between fear of crime and self-reported poor health has been established Olofsson, Lindkvist, & Danielsson. 2012, Pearson, & Breetzke, 2014).

In Nigeria, there are no studies on individual level factors, community level factors and fear of crime by individuals. This study attempts to explore the extent to which socio-demographic, community level factors and fear of crime influence self-reported health as this area is still very much under-researched. This study asked the following questions: (a) what are the socio-demographic characteristics associated with self-reported health? (b) What are the community level factors associated with self-reported health? (c) Is fear of crime associated with self-reported health status?

## Methods

The data used for this paper were taken from a larger survey conducted on crime mapping in the University of Lagos College of Medicine and Idi-Araba, Lagos which included the College of Medicine. The study was conducted in four communities around the College of Medicine University of Lagos (CMUL), located at Idi-Araba neighbourhood. Idi-Araba neighbourhood is a subset of Mushin Local Government Area (LGA) of Lagos State. Mushin is one of the Local Government Areas (LGAs) that make up the Lagos Metropolis. The LGA is bounded to the west by Oshodi/Isolo LGA while it is bounded to the east by Somolu and Lagos Mainland LGAs. Mushin LGA is also respectively bounded to Ikeja and Surulere LGAs in the northern and southern parts. Mushin is generally known for industrial, commercial and transport activities. The four communities purposively selected include Mushin, Idi-Oro, Surulere and Idi-Araba. The study area is a densely populated neighbourhood which is located between Mushin and Surulere LGAs.

The cross-sectional design survey was used and a convenient sample of 800 respondents was selected with 200 from each community. The study population comprises adults residing in the four selected communities. The study adopted a combination of the quantitative and qualitative research methods in data collection. However, this paper only reported the quantitative data collected from four communities. The quantitative research method used the cross-sectional survey method with the questionnaire as instrument for

collecting information, while the qualitative method adopted the In-depth Interview (IDI) and Key Informant Interview (KII) with the interview schedule as instrument. However, 779 were used for the analysis as the remaining 21 questionnaires were incomplete.

The Department of Sociology and the Central Research Committee of the University of Lagos gave the approval for the study to be conducted. The study adhered to all ethical issues and participation was voluntary and with informed consent.

#### **Description of Variables**

## **Independent variables**

**Sociodemographic characteristics**: Measured using questions; on sex, education, employment status, marital status, ethnic group, type of marriage, religion, and period of stay in the neighbourhood.

**Community characteristics**: Three questions were used to address community characteristics: how safe is your community from crime? How safe do you feel walking alone in your neighbourhood at night? How afraid are you of becoming a victim of crime in this environment?

**Fear of crime**: Ten questions were used. Fear of crime was derived from the question: in your everyday life, how fearful, or not, are you about the following situations? Items were: (1) being approached on the street by a beggar or homeless person; (2) being cheated or conned out of your money; (3) having someone break into your house while you're not at home; (4) having someone break into your house while you're at home; (4) having someone break into your house while you're at home; (5) being attacked by someone with a weapon; (6) having your car stolen; (7) being robbed or mugged on the street; (8) having your property damaged by vandals; (9) having someone loiter near your home at night; and (10) having a group of juveniles disturb the peace near your home (Cronbach's  $a^{1}$ 40.93) [31, 32]. Participants rated each item on a Likert scale (1<sup>1</sup>/<sub>4</sub>not at all fearful, 5<sup>1</sup>/<sub>4</sub>extremely fearful), and those with an average score of three or higher (i.e., at least somewhat fearful) were categorised as fearful (n<sup>1</sup>/<sub>4</sub>275).

## **Dependent Variable**

Self-Reported Health Status: Self-reported health is an assessment of health derived from individuals selfrating of their own health on a point scale and is considered as an important indicator of population health and healthy life expectancy (WHO, 1996). It is a qualitative single question assessment of health (Manderbacka et al. 1998) and serves as a global measure of health that captures functional, physical and psychosocial factors that affect quality of life (Jylha, 2009). In this study, self-reported health was assessed with one question of five response options. 'How would you rate your health status? Excellent, very good, good, fair and poor. The options were recategorized into two categories of excellent to good and poor. Previous studies have used this recategorization (Zajacova, & Dowd, 2011, Idler, & Benyamini, 1997, Von dem Knesebeck, & Geyer, (n.d).

## **Data Analysis**

## **Model and Estimation Method**

For this study, the household's health status position is specified as a function of socio-demographic characteristics, community characteristic and fear of crime, all in a vector form to mitigate the effects of omitted variables. The empirical specification is stated functionally as:

$$hs_i = f(sdc_i, cmc_i, fc_i) \tag{1}$$

Where: hs denotes self-reported health status; sdc represents a vector of socio-demographic characteristics (like sex, education, employment status, marital status, ethnic group, types of marriage, religion, and periods of stay in the neighbourhood); cmc is a vector of community characteristic (measured by how safe individuals are from crimes in neighbourhood, safety while walking alone at night/daytime, and chances of not becoming a victim of crime); fc is a vector of fear of crime (measured by people not being fearful of: being approached on street by a beggar or homeless person, being cheated or conned out of your money, having someone break

into your house when not at home, having someone break into your house while you are at home, being attacked by someone with a weapon, having your car or property stolen, being robbed or mugged on the street, having your property damaged by vandals, having someone loiter near your home at night, and having a group of juveniles disturb the peace near your home); and i indicates respondents. Mathematically, the model is stated as:

$$hs_i = \phi + \varphi s dc_i + \gamma cmc_i + \pi f c_i + \mu_i$$
<sup>(2)</sup>

The description of variables remained as earlier discussed while  $\phi, \phi\gamma, \pi$  parameters, and  $\mu$  is disturbance term. As the outcome variable of this study is numerical and ordinal with high values relating to greater level of health status, the appropriate estimator is an ordinal logistic regression condition that evaluate the effects of a set of control variables (numerical or categorical) on the logarithms of the probability such that the outcome variable takes on small values rather than high values. As the ordinal outcome variable is denoted by Z distinct values, its relationship with the control variables X, is expressed as:

$$\log\left[\frac{p(Z \le Y/X)}{p(Z > Y/X)}\right] = \sigma_y - \sum_{j=1}^J \overline{\sigma}_j X_j = \sigma + \overline{\sigma} X$$
(3)

Assuming z varies between 1 and Z-1, where the intercepts  $\sigma_y$  showing the probability that Z variable takes on low values instead of high values in case of nullity of all the control variables, and  $\sigma$  representing the log(odds) change corresponds to a unit increase of X variables; positive values of  $\sigma$ , parameters correspond to higher probabilities that the outcome variable takes on high values, and vice versa.

#### Results

Table 1 presents the descriptive statistics of the survey data. The overall percentage of households that rated their health status as excellent and good was 92.26% while the remaining 7.74% rated theirs as poor. The result also depicted that 53.1% are male and 46.9% are female. Among the 779 respondents, only 3.49% have no formal education whereas about 11.41% have primary school education. A large percentage of the respondents have secondary education amounting to about 52.22%, while 10.87% are undergraduates and 16.24% are graduates. In addition, 1.34% are running their post-graduate programmes and 4.43% have other educational qualifications. Concerning the employment status, 72.54% of the total respondents are selfemployed, 3.42% are in the public sector, and 12.7% are working in private organizations. Also, 1.09% are full housewives while 5.74%, 2.73% and 1.78% represent respondents that are full-time students, part-time students and retired from work respectively. The ethnic group results showed that large percentage of the respondents are Yoruba (64.84%), followed by Igbo (20.65%), Hausa (8.63%) and others (5.88%). The descriptive statistics revealed that many of the interviewers are in monogamy type of marriage (89.1%) while 10.9% are in polygamous marriage. As regards the religious practices of the respondents, higher percentage practiced Christianity (57.54%), afterwards Islam with 42.2% and few practiced African traditional religions (0.26%). The question relating to periods of stay in their neighbourhood showed that 29.034% stayed for more than 20 years, followed by 1-5 years (23.44%), 5-10 years (17.31%), 10-15 years (12.78%), and 15-20 years (12.25%) respectively.

Table 1: Summary Statistics									
Variables	Measurements	%age	Kurtosis	Skewness	Obs.				
<b>Outcome Var</b>	iable								
Health status (	hs)	92.26%	8.0598	-3.1684	762				
Socio-Demographic Characteristics									
Sex	Male(male)	53.10%	-1.9898	-0.1243	759				
	Female	46.90%	-1.9898	0.1243	759				
Education	No formal education(nfe)	3.49%	23.8579	5.0788	745				
	Primary education(pry)	11.41%	3.9278	2.4326	745				
	Secondary education(sec)	52.21%	-1.9975	-0.0889	745				
	Undergraduate(ugrad)	10.87%	4.3567	2.5189	745				
	Graduate(grad)	16.24%	1.3681	1.8343	745				
	Post-graduate(pgrad)	1.34%	69.991	8.4736	745				
	Others(edoth)	4.43%	17.749	4.4386	745				
Employment	Public sector employee(pusw)	3.42%	24.491	5.1404	732				
Status	Private sector employee(prsw)	12.70%	3.0455	2.2444	732				
	Self-employed (semp)	72.54%	-0.9782	-1.0122	732				
	House wife(hwfe)	1.09%	87.113	9.4274	732				
	Full time student(fts)	5.74%	12.583	3.8143	732				
	Part time student(pts)	2.73%	31.853	5.8109	732				
	Retired(rtd)	1.78%	51.686	7.3175	732				
	Married(mard)	54.75%	-1.9686	-0.1911	769				
Marital Statius	Separated(sepd)	0.91%	105.56	10.358	769				
	Divorced(divd)	1.04%	91.739	9.6695	769				
	Widowed(widd)	2.86%	30.188	5.6665	769				
	Single(sing)	40.44%	-1.8525	0.3903	769				
Ethnic Group	Yoruba(yor)	64.84%	-1.6165	-0.6227	765				
1	Igbo(igbo)	20.65%	0.1106	1.4527	765				
	Hausa(haus)	8.63%	6.7371	2.9529	765				
	Others(etoth)	5.88%	12.150	3.7574	765				
Type of	Monogamy(mono)	89.10%	4.3672	-2.5192	413				
Marriage	Polygamy(poly)	10.90%	4.3672	2.5192	413				
Religion	Christianity(chrst)	57.54%	-1.9116	-0.3057	756				
U	Islam(islam)	42.20%	-1.9048	0.3167	756				
	African traditional religion(aftr)	0.26%	375.49	19.4035	756				
Periods of stay	Less than 1 year(hlln1)	5.19%	14.415	4.0468	751				
in the	1-5 years(hlln2)	23.44%	-0.4217	1.2568	751				
neighbourhood	15-10 years(hlln3)	17.31%	1.0009	1.7315	751				
C	10-15 years(hlln4)	12.78%	2.9974	2.2337	751				
	15-20 years(hlln5)	12.25%	3.3328	2.3074	751				
	Above 20 years(hlln6)	29.03%	-1.1457	0.9259	751				
	Safe	74.67%	-0.7092	-1.1370	766				
How safe is yo	our neighbourhood from crime? Unsafe	25.33%	-0.7092	1.1370	766				
How safe do y	ou feel walking alone in your Safe	72.36%	-0.9988	-1.0019	767				
neighbourhood	l at night/daytime? Unsafe	27.64%	-0.9988	1.0019	767				
How afraid are	e you of becoming a victim of Safe	52.97%	-1.9910	-0.1193	757				
crime in this e	nvironment? Unsafe	47.03%	-1.9910	0.1193	757				
Fear of Crime									
Being approac	hed on the street by a beggar or homeless	67.96%	-1.4087	-0.7714	746				
Being cheated	or conned out of your money (% of	43.55%	-1.9372	0.2608	744				

people not at all fearful)				
Having someone break into your house while you are	29.51%	-1.1931	0.9001	742
not at nome (% of people not at all fearful)				
Having someone break into your house while you are at home (% of people not at all fearful)	26.85%	-0.9061	1.0471	745
Doing attacked by compose with a weepon (0/ of people				
not at all fearful)	23.79%	-0.4796	1.2336	744
Having your car or property stolen (% of people not at				
all fearful)	31.13%	-1.3367	0.8166	742
Being robbed or mugged on the street (% of people not	27 8 4 0/	1.0216	0.0005	717
at all fearful)	27.84%	-1.0210	0.9903	/4/
Having your property damaged by vandals (% of people	20 8204	1 2107	0.8324	713
not at all fearful)	30.8270	-1.3107	0.6324	743
Having someone loiter near your home at night (% of	25 570/	1 6205	0 6040	715
people not at all fearful)	55.57%	-1.0393	0.0040	743
Having a group of juveniles disturb the peace near your	20 0 10/	1 7044	0 1507	711
home (% of people not at all fearful)	38.84%	-1./944	0.4387	/44

Source: Field survey (2019).

Furthermore, the summary statistics of variables relating to community characteristics are presented in Table 1. The respondents considered their neighbourhood safe from crime with 74.67% while 25.33% are not safe in their areas. Similarly, about 72.36% felt safe while walking alone in their neighbourhood during the day or night whereas 27.64% opined otherwise. Meanwhile, the ratio of those that are not afraid of becoming a victim of crime in their environment dropped with 52.97% feeling safe and 47.03% unsafe. As regards questions on fear of crime, the result only has a higher percentage (67.96%) of people not at all fearful when they are being approached on the street by a beggar or homeless person. Not close to 50% are not at all fearful of being cheated or conned out of their money i.e. 43.55% are not fearful. The results of people that are fearful of someone breaking into their house while not at home (70.49%), breaking into their home while they are at home (72.15%), being attacked by someone with weapon (76.21%), car or property being stolen (68.87%), being robbed or mugged on the street (72.16%), having property being damaged by vandals (69.18%), someone loitering around their house at night (64.43%), and a group of juveniles disturbing the peace near their home (61.1.6%). The correlation coefficients of the variables revealing the chances of not having multicollinearity problem are presented in Appendix 1a-b.

Table	2:	Ordinal	logistic	regression	result:	The	effects	of	socio-demographic,	community
characteristics and fear of crime on self-reported health status										

	<b>Dependent Variables:</b> Health Status ( <i>hs</i> )								
Variables	1	2	3	4	5	6	7		
	Wald/Exp (B)	Wald/Exp (B)	Wald/Exp (B)	Wald/Exp (B)	Wald/Exp (B)	Wald/Exp (B)	Wald/Exp (B)	8	
Sex: Male	-0.526*(0.296)	-0.181(0.395)			-0.509*(0.300)	-0.426(0.319)	-0.124(0.376)	-0.012(0.319)	
Education:									
Primary	0.535(0.662)				0.619(0.623)	0.367(0.724)			
Secondary	0.790(0.600)				0.924*(0.538)	0.860(0.645)			
Undergraduate	-0.027(0.711)				0.156(0.672)	-0.026(0.770)			
Graduate	2.361**(0.919)				2.411***(0.884)	3.014**(1.19)			
Postgraduate	0.642(1.322)				0.720(1.393)	0.756(1.415)			
Others	0.110(0.785)				0.096(0.748)	0.072(0.881)			
<b>Marital Status:</b>									
Married	-0.835**(0.36)				-0.907**(0.377)	-0.693*(0.37)			
Separated	-1.769*(0.925)				-1.837**(0.919)	-1.294(1.036)			
Divorced	-0.741(1.186)				-0.491(1.276)	-0.606(1.077)			
Widowed	-1.262*(0.723)				-1.208(0.741)	-0.724(0.742)			
Ethnicity:									
Yoruba	0.285(0.520)				0.189(0.537)	0.260(0.544)			
Igbo	0.743(0.619)				0.635(0.636)	0.907(0.663)			

Hausa	0.749(0.773)				0.624(0.772)	0.813(0.770)		
Employment								
Status:								
Public sector		1.715(1.344)						
Private sector		1.688(1.117)						
Self employed		1.161(0.756)						
Housewife		0.652(1.473)						
Part-time								
student		-1.980(1.727)						
Marriage Type	e: Monogamy	-0.951(0.766)					-1.154(0.819)	
Religion: Islam	1	17.8**(1.31)					14.85**(1.198)	2.820*(1.618)
Christianity		18.1**(1.36)					15.19**(1.192)	2.943*(1.606)
Periods of stay	in the neighbor	urhood						
1-5 years		1.023(1.191)					0.367(1.171)	-0.225(1.114)
5-10 years		0.052(1.139)					-0.380(1.102)	-0.641(1.124)
10-15 years		0.944(1.397)					0.200(1.257)	-0.185(1.202)
15-20 years		-0.523(1.144)					-0.712(1.092)	-1.434(1.086)
Above 20 years	5	-0.243(1.103)					-0.949(1.057)	-1.652(1.076)
Community C	haracteristics							
Safety of neight	bourhood from c	rime	-0.325(0.415)		-0.197(0.447)		-0.333(0.596)	
Safety while walking alone at night/daytime $0.918^{**}(0.41)$					0.874**(0.421)		1.461**(0.55)	
Chances of not becoming a victim of crime -0.304(0.302)					-0.340(0.310)		-0.401(0.414)	
Fear of Crime								
Being approach	ed on street by a	beggar or home	less person	-0.224(0.314)		-0.045(0.351)		-0.040(0.328)
Being cheated o	or conned out of y	your money		0.870**(0.34)		0.670*(0.352)		0.553*(0.326)
Having someon	e break into your	house when no	t at home	-0.217(0.454)		-0.503(0.490)		-0.083(0.434)
Having someon	e break into your	house while yo	u are at home	-0.591(0.587)		-0.584(0.694)		-0.557(0.595)
Being attacked I	by someone with	a weapon		-0.084(0.670)		-0.106(0.729)		0.073(0.676)
Having your car	or property stol	en		-1.09**(0.44)		-0.995**(0.46)		-0.88**(0.43)
Being robbed or	r mugged on the	street		0.357(0.745)		0.575(0.793)		0.293(0.836)
Having your pro	operty damaged b	oy vandals		1.046(0.691)		0.988(0.737)		1.038(0.743)
Having someone loiter near your home at night				0.219(0.474)		0.115(0.581)		-0.072(0.453)
Having a group of juveniles disturb the peace near your home				0.099(0.512)		0.132(0.594)		0.189(0.507)
Constant	2.21***(0.746)	-15.9**(2.02)	2.27**(0.35)	2.399**(0.25)	1.989**(0.809)	1.914**(0.859)	-11.67***(1.81)	0.459(1.891)
Wald chi <sup>2</sup>	21.91	16.72	10.02	17.96	32.95	47.29	247.33	36.49
Prob.	(0.000)	(0.000)	(0.018)	(0.000)	(0.011)	(0.003)	(0.000)	(0.000)
Log pseudo			· ·			- · ·		
likelihood	-187.15	-114.13	-201.68	-188.42	-181.54	-168.93	-111.05	-168.78
Observations	711	369	749	709	698	663	376	667

**Note:** Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, and \* p<0.10. Variables benchmarked to avoid dummy trap are stated in parenthesis as follows: sex (female), education (no formal education), employment status (full time student), type of marriage (polygamy), religion (African traditional religion), periods of stay in neighbourhood (less than 1 year), and community characteristics (unsafe).

In Table 2, the empirical results of the relationship between socio-demographic, community characteristics, fear of crime and self-reported health status is brought to forefront. The first two columns presented the findings relating to the relationship between socio-demographic and health status. Column 3 reports to the results relating to the association between community characteristics and health status, and the findings of how fear of crime impacted on health status is presented in column 4. The last four columns show the empirical results of how the augmented covariates (socio-demographic, community characteristics and fear of crime) impacted on health status.

From the table, it is evident that education had a significant impact on health outcomes. Specifically, as the number of respondents who are graduates increases, the odd of individuals in excellent to good self-reported health status increases. However, other educational levels are not statistically different from those with no formal education about their impact on individual self-reported health status. The statistical insignificance of postgraduate education can be likened to its small numbers in the total observations. The benchmark category of marital status classification was single and its mean was 2.21. By contrast, for those who were married, separated and widowed, the average self-reported health status was lowered by about 0.835, 1.769 and 1.262 respectively.

As regards sex, the results showed that the odd of male self-reported health status decreases as the ratio of male to female increases. Compared with the average self-reported health status that was 2.21, the average self-reported health status of respondents who are male decreases by about 0.526. However, the differential slope of the benchmark was found to be statistically significant at 10%. It indicates that female gender experienced improved self-reported health status more than the male counterpart. Concerning religion, the study found Christianity and Islam exerting greater influence on health status than those that practices the African traditional religion. Meanwhile, the differences in ethnicity, employment status and periods of stay in the neighbourhood have no significant impact on self-reported health status.

Furthermore, the results from the community characteristics showed that safety of individuals while walking alone at night/day positively affected self-reported health status at 5% significance level. It means that the people feeling safe to move around freely during the day or at night play a major role in their self-reported health status. However, the study does not find significant relationship between health status and safety from crime and the likelihood of not becoming a victim of crime at the conventional level.

In Table 2, the findings relating to fear of crime indicators showed that lesser fear of not being cheated or conned out of money has direct and statistical impact on health status. By implications, it means that a society that is free from fraudulent activities which lessen the chances of people being swindled of their hard-earned money has the tendency of having individuals with improved health status. Meanwhile, people with fear of losing their car or property to theft have a low health status. The coefficients are statistically significant at 5% all through. However, the study does not find statistical support to other fear of crime variables (such as fear of being approached by beggar or homeless person, burglar into home, weapon attach, robbery attack, property damage to vandals, loitering around house and juveniles' disturbances around home) of having a significant impact on household health status.

## Discussion

The study explored the influence of sociodemographic characteristics, community level factors and fear of crime on self-reported health status of residents in selected communities in Lagos, Nigeria. The findings show that sociodemographic characteristics of educational attainment, sex and religion play major role in self-reported health status. As demonstrated in this study, poor self-reported health status is associated with lower educational attainment, as graduate educational qualification has significant relationship with excellent to good self-reported health status. Education could be regarded as one of the pathways through which social condition could be improved and hence it impacts the health status of individuals. Those with higher educational attainment are likely to have better, improved and regular income, compared with those with lower educational qualification. Educational attainment does predict one's socioeconomic position in the society and this will affect their health status. The finding of this study on the role of educational attainment is supported by other studies, especially those that found a positive relationship between education and lifelong health (Luo, & Waite, 2005, Phelan, Link, & Tehranifar, 2010). and on how education impacted on health (Rogot, Sorlie, & Johnson, 1992, Van der Meer, & Mackenbach, 1998). On sex and self-reported health status, the finding demonstrates that female respondents reported excellent to good health status when compared with their male counterpart. This might be explained by the fact that women visit the hospital more than men do. When a woman has any complaint she quickly visits the physician and could be considered to be in a better position to care within the context of Nigeria. They are the home makers and are expected to care for every member of the family.

The finding shows that religion, especially Christianity and Islam has significant association with selfreported health status. Religious rituals could help in improving adherents' health, for example fasting in both religions helps in detoxification of the body system. Religion also preaches cleanliness, and the need to avoid drug and alcohol abuse, sexual immorality and domestic violence. All these could impact health negatively.

On community characteristics, the results show that ability to walk alone at night positively affected selfreported health status. In essence, the community where people are not afraid to freely move at night, individuals in such a community will report an excellent to good health status. A free community without assault, harassment, drug use and drinking places will likely reduce anxiety or fear of being attacked either during the day or at night.

On fear of crime, the study found that those with lesser fear of not being cheated or conned out of their money reported excellent to good health status. Also, respondents who were afraid of losing their car or property to theft have poor self-reported health status. The mere thinking of someone stealing another person's property is enough to cause psychological distress for such an individual. This finding is supported by existing studies that found that fear of crime rather than crime rate was associated with poor physical and mental health outcomes (Pearson et al. 2014); that fear of crime affects people's subjective wellbeing (Hanslmaier, 2013, Lane, et al 2014).

## Limitation

Although the study was conducted in four different communities that are in close proximity and may not be a true reflection of the entire population in Lagos, generalizing the findings to the whole of Lagos should be done with caution as the study was cross-sectional in design. However, the study is exploratory in nature and hence more studies are needed.

#### **Conclusion and Recommendations**

In conclusion, educational attainment, sex and religion influence self-reported health status. In addition, the community where people can walk freely at night or during the day creates the environment for excellent to good self-reported health status. Lastly, where individuals are afraid of losing their properties in the community, poor self-reported health status will abound. The study recommends that there is need to invest in education of the people so as to empower them for a better social wellbeing. Equally, government should put in more apparatus to safeguard the communities so that people can feel safe in their communities.

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