

Assessment of Social Behaviour Impact on Health Status: Case study of Federal Capital Territory (FCT) Nigeria

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Abstract

Social behaviours have powerful impact on health status. The impact accumulates during life, increasing chances of ill-health. This study is a descriptive survey research conducted to determine the impact of social behaviour on health status of residents of the FCT in Nigeria. Primary data collection was done using structured closed and opened ended questionnaire, and administered to 84 respondents in the six Area Councils of FCT. Results: male, 43(51.2%); female, 41(48.8%); age: 21-30, 18(21.3%); 31-40, 47(56.0%); 41-50, 13(15.5%) ; >50, 6(7.1%); Academic attainment: First School Leaving Certificate, 4(4.8%); O/Level, 12(14.3%); First Degree, 40(47.6%); Postgraduate Degree, 28(33.3%). Individual life style, cigarette smokers (0.062, 0.119), Sex in the past one year (0.911), Birth control (0.328), Social and community network (care, change in environment, safe driving culture) zones of origin (0.136) those in different locations in Abuja ; socio-economic status, occupation (0.010) financial status (0.039) negative correlation in drinking 15 cups or 3.7liters of water a day (-0.042), drinking alcohol in the past six months (-0.027), choice of birth control (-0.027), exercise (-0.184), Giri/Bwari (-0.136), educational levels (-0.248), sexually transmitted infections and HIV/AIDS education (-0.521,); health services utilisation (-0.442), regular check-ups and immunisation (-0.119). All the independent variables (determinants of health) had significant/strong correlation effect ($p < 0.5$) with the dependent variable (number of days being sick in the past one year). The negative impact of social behaviour identified in this study are; environmental degradation, lower life expectancy, mental health challenges, rape cases and suicide. Also increase number of out of school children from single parenthood, lung related diseases and increase STI.

Keywords: Assessment, Social Behaviour Impact, Health Status, FCT.

Introduction

Social circumstances including behaviours could have powerful impact on health status and such impacts accumulate during life, increasing chances of ill-health, morbidity and mortality (USA Institute of Medicine, 2006). In some places, some people do better economically, socially, physically and live longer than others (Wilkinson & Pickett, 2009). Could this be true in the Federal Capital Territory (FCT), Nigeria? The FCT is one of the busiest cities in the world with different people from different climes exhibiting different behaviours. Behavior is every action by a person that can be seen or heard and defined in a way that it is observable, measurable and describe in a concrete terms (Alberto &

Troutman, 2003). "In order for behavior to change, people must feel personally vulnerable to a health threat, view the possible consequences as severe, and see that taking action is likely to either prevent or reduce the risk at an acceptable cost with few barriers" (Nisbet & Gick, 2008: 297). Positive behaviours help promote health and prevent disease, while the opposite is true for risk behaviours (Minton & Khale, 2014). Smoking, alcohol consumption, diet, gaps in primary care services and low screening uptake are all significant determinants of poor health, and changing such behaviours should lead to positive health impacts or improved health (Minton & Khale, 2014 & Food Banks Canada 2009). Impact is any effects arising from an intervention and includes immediate short-term

outcomes as well as broader and longer term effects: could be positive or negative, planned or unforeseen and includes the broader or longer term effects of a project's or organization's outputs, outcomes and activities (WHO, 1998). According to the Center for Disease Control's Health Impact Pyramid as contained in WHO (1998), if policy makers wish to have the greatest impact on health, approaches and investments should move outside of the clinic and target the places where people live, work and age.

Health status is description and/ or measurement of the health of an individual or population at a particular point in time against identifiable standards, usually by reference to health indicators (WHO's Health Promotion Glossary, 1998). It is described as an individual's or population's overall level of health, taking into account various aspects like life expectancy, amount of disability, levels of disease risk factors (Australian Institute of Health and Welfare, 2008). Referring to the WHO Commission on Social Determinants of Health, the poor health of the poor, the social gradient in health within countries, and the marked health inequities between countries are caused by the unequal distribution of power, income, goods, and services, globally and nationally, the consequent unfairness in the immediate, visible circumstances of people's lives –their access to health care, schools, and education, their conditions of work and leisure, their homes, communities, towns, or cities –and their chances of leading a flourishing life (WHO, 2008). According to Juha & Denis (2010) and WHO (2008), the determinants of health include: age, sex, genetic factors(which determine lifespan and likelihood of developing certain diseases), individual life style factors(like diet, physical exercise, smoking, alcohol drinking and sexual behaviours), social and community network(care and supports linked to better health), socioeconomic and environmental conditions or status (which controls discretion like income determines living condition), education(health status improves with level of education creating opportunities for income and job security), physical environment(health and safety), employment and working condition(the employed are healthier), culture (customs, beliefs, tradition which affect health) and health services (access, use of services to prevent and treat diseases), all impact on health status. Also,

Jackson (2009); Scott-Samuel, Stanistreet & Cranshaw, (2009); Evans & Kantrowitz (2002) & Barker, Forsen et al (2001), added that environmental factors like heat, noise, dirty surroundings, violence, lack of maintenance culture and unforgiveness are also determinants of poor health status.

Social services wherever it is available provide assistance to those with needs, serves as a safety net or insurance for circumstances beyond a person's control, creates opportunities for individual development, enabling such individuals achieve their potentials and protection, or minimise consequences of anti-social behaviours of such individuals (not only in FCT but also in other climes where) social services are available (Juah, & Denis, 2010). This could further strengthen public health which refers to "the science and art of preventing disease, prolonging life and promoting human health through organized efforts and informed choices of society, organizations, public and private, communities and individuals" (Winslow,1920:183). Therefore, the aim of the study, to assess the social behaviour impact on health status of FCT populace is very crucial. The result of the research study is expected to serve as empirical data for informed decisions for public health intervention policies and programs.

Methodology

A descriptive survey and case study design was used in this research. According to Naliaka and Namusonge, (2015:96), "A descriptive research design determines and reports the way things are" and is used if data was collected for describing persons, organizations, settings/phenomena" (Naliaka and Namusonge, 2015). Federal Capital Territory (FCT) in Nigeria has all the ethnic groups being in all the six (6) Area Councils, thereby allowing all the classes of citizens to be taken randomly.

Inclusion Criteria: The inclusion criterion was based on all individuals who were 18 years and above, and living in the study area.

Exclusion Criteria: The exclusion criterion was based on all individuals who were less than 18 years and NOT living in the study area.

Ethical Approval: Ethical approval was obtained from Federal Capital Territory Administration.

Informed Consent: The informed consent of all the individuals who participated in this was duly obtained.

Data Collection Instrument: The primary data collection instrument in this study was structured closed and open-ended questionnaires created based on six main determinants of health (age and sex, individual life style, social and community networks, socioeconomic, environmental status, income and education) with the Epi-Info software version 7 based on the research objectives of this study and administered to the 84 respondents. While the secondary data were collected from research study related literature.

Validity and Reliability of Data: Expert opinion and positive criticism of the study by my colleagues used to ascertain the content validity and reliability of the data collection instrument used.

Statistical Analysis Method: Data analysis is the processing of making the collected data meaningful or to give important information (Sounders, Lewis & Thornbill, 2009). The Epi-Info software version 7 was used in analysing the data. Then the results were presented in tables.

Results

The result is as presented in tables 1 to 8 below. The frequency distribution by sex: male, 43(51.2%) and female, 41(48.8%) (table1). Frequency distribution by age in years: 21-30, 18(21.3%); 31-40, 47 (56.0%); 41-50, 13 (15.5%); >50, 6 (7.1%) and it is believed that they were all matured adults. Academic attainment frequency distribution: First School Leaving Certificate, 4(4.8%); O/Level, 12(14.3%); First Degree, 40(47.6%); Postgraduate Degree, 28(33.3%) (Table 2) and portrayed that the respondents were well educated (table3). The linear regression analysis of the dependent variable (number of times of being sick in last one year weighted against Independent variable (individual life style) of the studied population indicated positive correlations: in cigarette smokers (Correlation Coefficient: 0.062, 0.119); those who had sex in the past one year (0.911); making decision of whether or not to use birth control (0.328). Implying that, as value of such individual life styles increases, mean number of being sick in the past one year increases. Also, negative correlation was noticed in drinking 15 cups or 3.7liters of water a day (-0.042); drinking alcohol in the past six months (-0.027); choice of

type of birth control to use during sex (-0.027); engaging in exercise (-0.184). Implying that, as value of such individual life styles decreases, mean number of being sick in the past one year decreases. The independent variables had significant/ strong correlation effect ($p < 0.5$) with the dependent variable (Table4).

The linear regression analysis of number of times of being sick in last one year (Dependent Variable), weighted against Social Community Networks (Independent Variables: like care, change in environment, safe driving, culture), of the studied population indicated positive correlations in geo-political zone of origin (0.136) and those in different locations in Abuja. Implying that, as value of such social and Community Networks increases, mean number of being sick in the past one year increases. Also, negative correlation was noticed only in Giri/Bwari (-0.136). Implying that, as value of such social and community networks like care, change in environment, safe driving, culture decreases, mean number of being sick in the past one year increases. Again, the independent variables had significant/ strong correlation effect ($p < 0.5$) with the dependent variable (Table5). Linear regression analysis of number of times of being sick in last one year (Independent Variables) weighted against socio economic status (Dependent Variable: like what the individuals do for a living and their financial situation) of the studied population indicated positive correlations in what they do for living (0.010) and in their financial situation (0.039). Implying that, as value of the socio-economic status is dependent on mean of number of being sick in the past one year. Here, the independent variables had no significant/ strong correlation effect ($p > 0.5$) with the dependent variable mostly on regular health check-ups (Table6). Linear regression analysis of number of times of being sick in last one year (Dependent Variable) weighted against educational attainment (Independent Variables) of the studied population indicated negative correlation noticed in educational levels (-0.248, sexually transmitted infections educations and -0.521, HIV/AIDS education). Implying that, as value of such educational attainments like the various levels education decreases, mean number of being sick in the past one year increases. Again, the independent variables had significant/ strong correlation effect ($p < 0.5$) with the dependent

variable (Table7). Linear regression analysis of number of times of being sick in last one year (Dependent Variable) weighted against health services utilisation (Independent Variables) of the studied population indicated negative correlation noticed in the health services utilisation (regular check-ups, -0.442 and immunisation, -0.119). Implying that, as value of

such health services use like the regular check-ups and immunisation decreases, mean of number of being sick in the past one year increases. Also, at the independent variables had significant/strong correlation effect ($p < 0.5$) with the dependent variable mostly on regular health check-ups (Table8).

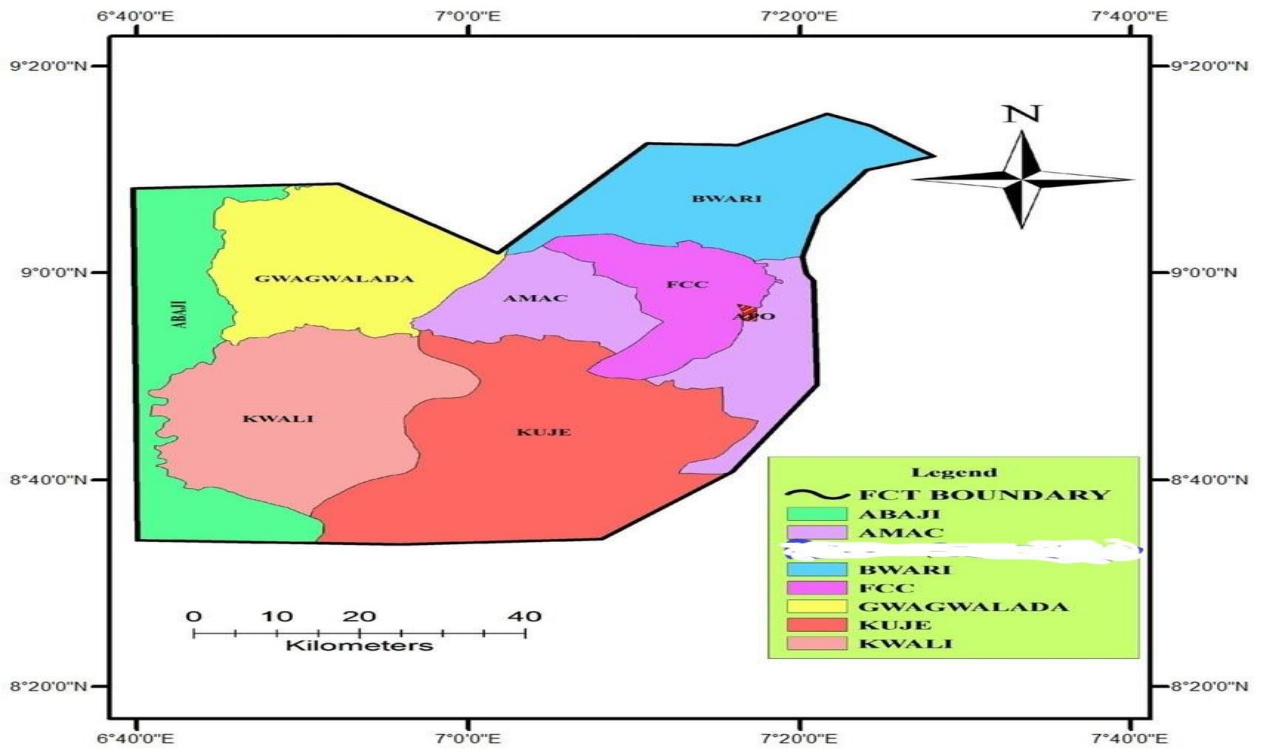


Figure 1. Map of Federal Capital Territory (FCT), Abuja, Nigeria

Tables 1-8: Frequency Distribution and Linear Regression Results:

Table 1. Gender Frequency Distribution

Gender	Frequency	Percent
Male	43	51.19 %
Female	41	48.81 %
Total	84	100.00 %

Source: Research Study, 2019

Table 2. Age Frequency Distribution

Age(years)	Frequency	Percent
21-30	18	21.43 %
31-40	47	55.95 %
41-50	13	15.48 %
>50	6	7.14 %
Total	84	100.00 %

Source: Research Study, 2019

Table 3. Academic attainment Frequency Table (Source Research Study, 2019).

Academic Attainment	Frequency	Percent
FSLC	4	4.76 %
O/Level	12	14.29 %
First Degree	40	47.62 %
Postgraduate Degree	28	33.33 %
Total	84	100.00 %

Source: Research Study, 2019

Table 4. Linear Regression Analysis of Number of Times of Being sick in Last One Year Weighted against Socio-economic status (Source, Research Study, 2019)

Independent Variable (Socio-Economic Status)	Coefficient	95% Confidence	Limits	Std Error	F-test	P-value (p<0.5)
What do you do for a living	0.010	-0.171	0.191	0.091	0.0111	0.916494
My financial situation	0.039	-0.189	0.267	0.115	0.1151	0.735401
Constant	1.900	1.031	2.768	0.436	18.9891	0.000041

Correlation Coefficient: $r^2 = 0.00$

Source	df	Sum of Squares	Mean Square	F-statistic	p-value
Regression	2	0.1556	0.0778	0.0585	0.9433
Residuals	75	99.7932	1.3306		
Total	77	99.9487			

Source: Research Study, 2019

Table 5. Linear Regression Analysis of Number of Times of Being sick in Last One Year Weighted Against Social and Community Networks (Source: Research Study, 2019)

Independent Variable (Social and Community Networks)	Coefficient	95% Confidence	Limits	Std Error	F-test	P-value (p<0.5)
In which location do you live in FCT (Garki/ Bwari)	1.318	-0.313	2.949	0.818	2.5974	0.111602
In which location do you live in FCT (Giri/ Bwari)	-0.136	-2.605	2.334	1.238	0.0120	0.913065
In which location do you live in FCT (Gwagwalada/Bwari)	0.480	-0.854	1.814	0.669	0.5157	0.475094
In which location do you live in FCT (Gwarimpa/Bwari)	2.136	-0.334	4.605	1.238	2.9764	0.088966
In which location do you live in FCT (Kubwa/Bwari)	1.025	-0.305	2.356	0.667	2.3650	0.128657
In which location do you live in FCT (Kuje/Bwari)	1.600	0.197	3.003	0.703	5.1731	0.026053
In which location do you live in FCT (Kwali/Bwari)	0.136	-2.334	2.605	1.238	0.0120	0.913065
In which location do you live in FCT (Lugbe/Bwari)	1.589	0.263	2.915	0.665	5.7139	0.019565
In which location do you live in FCT (Nyanya/Bwari)	0.027	-1.530	1.585	0.781	0.0012	0.972379

Geo political Zone of origin	0.136	-0.061	0.332	0.099	1.8924	0.173378
Constant	0.729	-0.563	2.021	0.648	1.2657	0.264479

Correlation Coefficient: $r^2 = 0.26$

Source	df	Sum of Squares	Mean Square	F-statistic	p-value
Regression	10	28.0887	2.8089	2.4596	0.0141
Residuals	69	78.7988	1.1420		
Total	79	106.8875			

Source: Research Study, 2019

Table 6. Linear Regression Analysis of Number of Times of Being sick in Last One Year Weighted against Individual Life Style

Independent Variable (Individual Life Styles)	Coefficient	95% Confidence	Limits	Std Error	F-test	P-value(P<0.5)
Doyou drinkupto15cups 37Litersofwateraday	-0.042	-0.887	0.802	0.417	0.0104	0.919337
During the past six months how often did you drink alcohol	-0.027	-0.201	0.147	0.086	0.1020	0.751258
Have you ever smoked a cigarette	0.062	-0.341	0.464	0.199	0.0960	0.758473
During the past month how many cigarettes have you smoked on an average day	0.119	-0.232	0.470	0.173	0.4756	0.494859
I have had sex in the past one year	0.911	-1.525	3.348	1.202	0.5753	0.453106
When I had sex in the past year the type of birth control method used consist:	-0.027	-0.174	0.120	0.072	0.1394	0.711077
When you had sex in the past year who usually made the decision about whether or not to use birth control	0.328	-0.069	0.724	0.196	2.8026	0.102777
At least once a week I engage in regular exercise such as jogging cycling, etc.	-0.184	-0.993	0.625	0.399	0.2129	0.647264
Constant	1.164	-1.165	3.492	1.148	1.0276	0.317496

Correlation Coefficient: $r^2 = 0.13$

Source	df	Sum of Squares	Mean Square	F-statistic	p-value
Regression	8	6.1996	0.7749	0.6522	0.7289
Residuals	36	42.7782	1.1883		
Total	44	48.9778			

Source: Research Study, 2019

Table 7. Linear Regression Analysis of Number of Times of Being sick in Last One Year Weighted against Educational Attainment

Independent Variable (Education Attainment)	Coefficient	95% Confidence	Limits	Std Error	F-test	P-value (P<0.5)
Academic Attainment	0.140	-0.233	0.513	0.187	0.5588	0.457174
Do you know where to get good information about Sexually Transmitted Infections	-0.248	-0.831	0.334	0.292	0.7216	0.398424
Do you know how to keep from getting the AIDS Virus HIV	-0.521	-2.008	0.966	0.746	0.4876	0.487232
Constant	1.776	0.604	2.949	0.588	9.1160	0.003504

Correlation Coefficient: $r^2 = 0.03$

Source	df	Sum of Squares	Mean Square	F-statistic	p-value
Regression	3	3.4652	1.1551	0.7992	0.4983
Residuals	72	104.0611	1.4453		
Total	75	107.5263			

Source: Research Study, 2019

Table 8. Linear Regression Analysis of Number of Times of Being sick in Last One Year Weighted against Health Services (Source, Research Study, 2019)

Independent Variable (Health Services)	Coefficient	95% Confidence	Limits	Std Error	F-test	P-value (P<0.5)
I have regular health checkup	-0.442	-0.982	0.097	0.271	2.6718	0.106329
Have you received any immunization	-0.119	-0.785	0.547	0.334	0.1272	0.722308
Constant	2.306	1.925	2.686	0.191	145.3967	0.000000

Correlation Coefficient: $r^2 = 0.04$

Source	df	Sum of Squares	Mean Square	F-statistic	p-value
Regression	2	4.1458	2.0729	1.4751	0.2353
Residuals	75	105.3926	1.4052		
Total	77	109.5385			

Source: Research Study, 2019

Discussion

Referring WHO's Health Promotion Glossary, (1998), health status is 'a description and/ or measurement of the health of an individual or population at a particular point in time against identifiable standards, usually by reference to health indicators.' From tables 4,5 and 8, health indicators identified that impact on health status of FCT populace were: individual life styles like alcohol drinking, smoking, sexual behaviors, choice of birth control, decision to use birth control, driving without license, not being immunized, not going for health check-up and not indulging in regular exercise. Also, independent

variables (individual life styles), had significant/ strong correlation effect ($p < 0.5$) with the dependent variable (number of being sick in the past one year). This agreed with the work of Tarasuk, (2009) who reported that life style had impact on health status. No wonder WHO (2008) viewed that, there is emphasis on social determinants of health because it has direct impact on health, predict the greatest proportion of health status variance (health inequity), structure health behaviors and interact with each other to produce health.

This research study revealed existing social behaviours that require behavioural change interventions for health promotions in FCT,

Nigeria. For instance, in the results of this study: alcohol drinking, smoking, sexual behaviors, choice of birth control, decision to use birth control, driving without license, not being immunized, not going for health check-up and not indulging in regular exercise as well as poor awareness for sexually transmitted infections and HIV/AIDS, remain the social behaviors that require behavioral change intervention. This is because, as value of individual life styles (independent variables) decreases, mean of number of being sick in the past one year increases and same independent variables (individual life styles), had significant/ strong correlation effect ($p < 0.5$) with the dependent variable (number of being sick in the past one year). Again, this result agreed with the work of Minton & Khale (2014) & Food Banks Canada (2009), who reported that smoking, alcohol consumption, diet, gaps in primary care services and low screening uptake are all significant determinants of poor health, and changing such behaviours should lead to improved health. But disagreed with the works of Jackson (2009); Scott-Samuel, Stanistreet & Cranshaw, (2009); Evans & Kantrowitz (2002); Barker, Forsen *et al* (2001) who added that environmental factors like heat, noise, dirty surroundings, violence, lack of maintenance culture and unforgiveness are also determinants of poor health status. To achieve this according to the Center for Disease Control's Health Impact Pyramid as contained in WHO (1998), policy makers that wish to have the greatest impact on health, would not only approach and invest outside of the clinic but also, target the places where people live, work, and age. Certain social behaviours impact on health negatively. From the results of this work, as in tables 4,5, 6,7 and 8 social behaviours like alcohol drinking, smoking, sexual behaviors, choice of birth control, decision to use birth control, driving without license, not being immunized, not going for health check-up and not indulging in regular exercise, impact on health negatively. To support from this study, as value of individual life styles (independent variables) decreases, mean number of being sick in the past one-year increases. This supported the work of Minton and Khale (2014), who reported that positive behaviours help promote health and prevent disease, while the opposite is true for risk behaviours. According to Bryant (2009), health authorities and health policymakers must direct

attention to existing inequities in access to health care and identify and remove barriers to health care. Therefore, this research study by the strength of the presented results contains reasonable information for policies reviews/activities for public health promotion.

Conclusion

This study revealed that individual life styles like alcohol drinking, smoking, sexual behaviors, choice of birth control, decision to use birth control; driving without license, not being immunized, not going for health check-up and not indulging in regular exercise were the health indicators identified that impact on health status of FCT populace. Equally, the value of social and community networks like care, change in environment, safe driving, culture; and absence of sexually transmitted infections (STIs) information centre in the Federal Capital Territory, Nigeria were the health indicators identified that also impact on health status of FCT populace. Referring to the Diffusion Innovation Theory, behavior would change when new innovations are believed to be better than old ones (relative advantage) and are consistent with existing values, experiences and needs of the potential adopters (compatibility), when they are easy to understand (complexity), testable through limited trials (trialability) and their results, visible (observability) (Nisbet and Gick (2008). Social services wherever it is available provide assistance to those with needs, serves as a safety net or insurance for circumstances beyond a person's control, creates opportunities for individual development, enabling such individuals achieve their potentials and protection, or minimise consequences of anti-social behaviours of such individuals (not only in FCT but also in other climes where) social services are available (Juah, & Denis, 2010). According to Wilkinson & Pickett (2009), this could be why some people do better economically, socially, physically and live longer than others. Therefore, Government, local authorities and all stakeholders is to work hard and scale-up social services and address these issues on social behaviour impacts on health as presented in this study. This if achieved could strengthen interventions and policies reviews/activities for public health promotion.

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