



## **Workplace Health Promotion in Selected Banks of Mushin Local Government Area, Nigeria**

**Elizabeth R. Ogungbenle<sup>1\*</sup>, Precious E. Omeonu<sup>1</sup>,  
Posi E. Aduroja<sup>2</sup> and Olasumbo B. Kukoyi<sup>1</sup>**

<sup>1</sup>Department of Public and Allied Health, Babcock University, Ilishan Remo, Ogun State, Nigeria.  
<sup>2</sup>Department of Health Promotion and Education, University of Ibadan, Ibadan, Oyo State, Nigeria.

### **Authors' contributions**

*This work was carried out in collaboration between all authors. Author ERO designed the study, wrote the protocol, and wrote the first draft of the manuscript. Author PEA performed the statistical analysis and managed the analyses of the study. Authors OBK and PEO managed the literature searches. All authors read and approved the final manuscript.*

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### **ABSTRACT**

**Aims:** To assess banker's knowledge, attitude and perception on sedentary lifestyle as a predisposing factor to hypertension together with availability of workplace health promotion towards combating hypertension susceptibility among bankers.

**Study Design:** Cross-sectional survey design.

**Place and Duration of Study:** Mushin Local Government Area of Lagos State., between January 2017 and April 2017.

**Methodology:** Study was carried out among 131 staff of 10 different banks in Mushin Local Government Area of Lagos State. A semi-structured questionnaire was used for data collection, in which the knowledge, attitude, perception, practice of sedentary lifestyle and hypertension and also workplace health promotion was measured. Data collected were analyzed using statistical package for social science (SPSS) version 21 with levels of significance set at 0.05.

**Results:** Most of the respondents had low level of knowledge (46%) on what constitute sedentary lifestyle and hypertension, where more than half of the respondent had good attitude towards sedentary lifestyle (56%), the respondents' perceived seriousness of hypertension was good

\*Corresponding author: E-mail: [ogungbenleremi90@gmail.com](mailto:ogungbenleremi90@gmail.com);

(56.83%), where the perceived susceptibility to hypertension was found to be low (49.08%) and the study also revealed that the respondents perceived benefits was good with percentage above average (64%), the study revealed that respondents' practice of physical activity was good (52.53%) but there is room for improvement. Analysis also showed that there was no stipulated workplace health promotion across the selected banks (37.2%). It was gathered that respondents knowledge of sedentary lifestyle was significantly related to their increased sedentary lifestyle ( $R^2 = 0.121$ ;  $F = 17.697$ ;  $P < 0.05$ ), Test result showed that there was a significant association between non availability of workplace health promotion and the increased practice of sedentary lifestyle among respondents ( $F = 6.542$ , R Square = 0.048;  $P < 0.05$ ).

**Conclusion:** The study concluded that knowledge of bankers on sedentary lifestyle as a risk factor to hypertension was low indicating that bankers do not have enough knowledge linking sedentary lifestyle to hypertension and non-availability of workplace health promotion contributed to the sedentary lifestyle of bankers. This is indicating that a reduction in sedentary lifestyle among bankers calls for an establishment of workplace health promotion.

*Keywords: Hypertension; sedentary lifestyle; workplace health promotion; bankers; knowledge.*

## 1. INTRODUCTION

Hypertension is a pandemic health problem that is affecting a large number of the world population. Globally, hypertension is the third leading risk factor contributing to mortality and morbidity rate, and this is over powered only by malnutrition and smoking. The African region has the highest prevalence rate of hypertension with the estimate of 46% [1]. Hypertension is said to be responsible for 45% of death due to heart disease and 51% of death due to stroke worldwide, and billions of people being affected globally [1-3]. In Nigeria, Hypertension is the most common cardiovascular disease reported, with the death rate of 13.62% per 100,000 population as at 2014 [4,5].

Sedentary lifestyle is one of the major risk factors of hypertension [6]. Thus sedentary lifestyle can be seen as a social problem that requires attention. Jobs that require mostly sitting is high and occupations have become more sedentary and less physically active over the past few decades [7,8]. bankers in the banking halls spend almost all day sitting, which include their customer service, cashiers, office assistance, and other members of staff [9], people in these occupations typically spend a great deal of the working day sitting down. In a normal 16-hour day, it's easily possible to spend over 80% of the time seated. Only 9% of public sector bankers perform gym activity regularly [10].

WHO's Global Plan of Action on Worker's Health 2008-2017, which specified that "*Health promotion and prevention of non-communicable diseases should be further stimulated in the workplace, in particular by advocating healthy*

*diet and physical activity among workers ..."*

Promoting health in the workplace increases the chances of health and well-being focused on promoting workers' health through reduction of individual risk-related behaviors such as a sedentary lifestyle [11,12].

With this in mind, sedentary behaviour is now being considered as a potential work health and safety issue [13]. It has been established that 150 minutes of at least moderate intensity aerobic physical activity throughout the week to reduce the risk of chronic disease, albeit even when individuals engage in 150 min per week of physical activity, studies suggest that what happens in the remaining approximately 6500 minutes of the waking week is important for health [14]. The longer the time spent sitting down each day, the higher the risk of dying prematurely, even if regular daily exercise is performed showing that the increase risk of mortality from time spent sitting appears to be independent of physical activity level [15].

It has been established that there is a high prevalence of sedentary lifestyle among bankers [9] putting them at high level of susceptibility to hypertension and other cardiovascular diseases established to be as a result of sedentary lifestyle and most especially prolonged sitting [16-21]. However, there are no documented efforts at reducing these behaviors among the bankers. Workplace Health Promotion has over been under explored especially in combating sedentary lifestyle and promoting physical activities. From literature reviewed, it is evident that there are no studies that have comprehensively assessed the knowledge, attitude and perception of bankers to sedentary

lifestyle and the availability of workplace health promotion promoting physical activities in Nigerian banks.

It is in light of this that this study aimed to assess banker's knowledge, attitude and perception on sedentary lifestyle as a predisposing factor to hypertension together with availability of workplace health promotion towards combating hypertension susceptibly among bankers in Mushin local government area of Lagos State.

## 2. METHODOLOGY

The study implement the cross-sectional survey design. The study was carried out among bankers from Mushin Local Government Area of Lagos state (Table 1). Individuals included in the study were only the official staff of the bank working in the banking hall including the cashiers, customer care representative, managing directors and the account officers. Marketing agents, cleaners and security agents were not eligible to participate in the research work. Mushin Local Government Area of Lagos state is a suburb of Lagos city located in the Southwestern Nigeria 10km north of Lagos city, adjacent to the main road to Ikeja. Mushin Local Government has a population of 633,009 as at 2006 Census.

**Table 1. Number of bankers in each of the banks**

Banks	Population	Respondents
Zenith bank 1	26	18
GT bank	20	16
Diamond bank	19	14
Eco bank	21	11
WEMA bank	16	13
Fidelity bank	20	11
Keystone bank	16	12
First bank	28	17
Access bank	16	12
Sterling bank	15	13
<b>Total</b>	<b>197</b>	<b>131</b>

The instrument for data collection in this study was a self-structured and developed questionnaire putting into consideration workplace health promotion indicators found in literature and construct of the PRECEDE-PROCEED framework incorporating Knowledge, attitude and perception of the bankers as Predisposing factors, practice of sedentary lifestyle and banking health promotion rules to evaluate Enabling factors.

The questionnaire was validated by ensuring that the items under each section of the questionnaire measured what the researcher intends to measure in the section. Also the questionnaire was given to the supervisor and other experts in the field of public health and their comments was taken into consideration and adjusted before administering.

Twenty (20) questionnaires were pilot tested among bankers in Babcock University Ilishan Remo Ogun state Nigeria, using respondents of the same characteristics as the study population and the data obtained was analyzed using test statistics of Cronbach's reliability score with score of 0.7436. This was done to help evaluate the reliability and validity of the instrument. Corrections were made where required, in order to pay attention to the weakness of the instruments and to ensure it was reliable enough to measure the situation of concern.

### 2.1 Data Collection

The selected banks included for the study were visited in Mushin Local Government Area of Lagos State. The bankers were informed about the study but showed no interest until the managers gave consent to administration of the questionnaire in the banking hall, this aided easy access to the bankers in filling the questionnaire. The bankers were briefed on the objectives of the study and their consent was required.

The research assistants were recruited for the study and they were trained on how to administer questionnaires to respondents in a friendly manner. Data was collected using the instruments developed and was administered by the researcher and the research assistants by giving the questionnaires to the bankers. The research assistants was from the bank that is, one of their staffs. These research assistants were trained on how to fill the questionnaire and how to direct the respondents to fill theirs too. The questionnaire was collected after it has been properly filled. Data was collected from 13<sup>th</sup> of March to 31<sup>st</sup> of March, 2017. The banks were visited more than once which was due to lack of time from the bakers.

The data obtained from completed questionnaires was collated and analyzed using Statistical Package for Social Science (SPSS) version 21.0 using Correlation, Regression to check for the dependent and ANOVA and

Cronbach's test of reliability for testing of hypotheses and variable calculation.

### 3. RESULTS AND DISCUSSION

Mean age of respondents was given at  $30.09 \pm 7.36$  with most respondents (71%) below the age of 33 years this might be attributed to the need for younger workers in the banking industry. The respondents were made up of 64 male (48.9%) and 67 female (51.1%) bankers. It was gathered that all respondents had tertiary education, most of the respondents (49.6%) however had a BSc. Degree while 25 (19.1%) and 22 (16.8%) had Higher National Diploma and Masters degree respectively, this might not come as surprise because, this line of occupation requires a higher level of education where workers are expected to have gone to either a polytechnic or university to study relevant courses. Marital status of respondents were also given as slightly half (51.9%) were married, 59 (45%) bankers were not married and 4 (3.1%) were divorced.

It was gathered that respondents had a below average level of knowledge ( $5.60 \pm 2.23$ ) at 46.63%, this was informed by respondents low knowledge on what constitute as sedentary lifestyle ( $0.40 \pm 0.66$ ) and also low knowledge of the influence of sedentary lifestyle on susceptibility to hypertension ( $0.22 \pm 0.417$ ). However, there was an improved knowledge on the characteristics of sedentary lifestyle and its consequences.

Findings on the perceived seriousness of hypertension by respondents showed that more than half (59.5%) believed that a person is susceptible to hypertension should the individual practice sedentary lifestyle, this is evident as 61.1% of the respondents were inclined to believe that there are serious risks associated with sedentary lifestyle. Similarly, 58% of the bankers were found to have given sedentary lifestyle a thought of being a serious condition requiring serious attention for healthy life. Also, more than half of the bankers (66.5%) believed that regular physical activities is necessary in avoiding hypertension, it was also evident from data collected that a number of bankers (54.2%) participating in this study believed developing hypertension might cost them their jobs. Statistical analysis of respondents' perceived seriousness of hypertension was given at above average ( $10.23 \pm 3.44$ ) at 56.83% indicating that respondents may not see hypertension

developing as a result of sedentary lifestyle as serious.

Findings on the perceived susceptibility to hypertension due to sedentary lifestyle revealed that majority of respondents (60.3%) felt susceptible to hypertension should they not engage in physical activities or not avoid sedentary lifestyle, furthermore, it was found that 68.7% of the bankers involved in this study thought hypertension can be as a result of anything other than sedentary lifestyle. Also, more than half of the bankers (51.2%) believed they are most likely to develop hypertension due to nature of their work. Statistical analysis of respondents' perceived susceptibility to hypertension was given at below average ( $5.89 \pm 2.29$ ) at 49.08% indicating the respondents do not believe to be susceptible to hypertension due to their sedentary lifestyle.

Findings on the perceived benefits of avoiding sedentary lifestyle indicated that more respondents (73.2%) had confidence that when they avoid sedentary lifestyle and engage in physical activity they are not likely to develop hypertension, also 77.8% of the respondents believed that regular exercises is good for regulating their blood pressure. There were 106 respondents who carried out physical activity because of their understanding of how it can help their blood pressure regulation and prevention of hypertension. Only few respondents (25.2%) believed that there is nothing to be done to prevention of hypertension, it can happen to anybody. Statistical analysis showed that respondents' perceived benefits was good ( $9.60 \pm 3.25$ ) at 64% indicating that respondents believed there are benefits in preventing sedentary lifestyle.

There were more respondents (73.3%) who often do a little walk around in their offices to avoid sedentary lifestyle, this was also indicated among 41.2% of the respondents who never made use of elevator but instead use the stairs most of the time while 25 respondents (19.1%) who often used the elevator. It was also found that 46.6% of respondents rarely engage in exercises before resuming at work place while just 13 (9.9%) very often engage in exercises before resuming at work. It was also found out that 42.7% of the respondents rarely sat all day at work and 22.1% often preferred using their vehicles rather than walk. Statistical analysis showed that respondents' practice of physical activity was above average ( $7.88 \pm 2.35$ ) at

52.53% indicating that respondents' practice of physical activity is just above average (See Fig. 1).

Results showed that 55% of respondents never had meetings done standing while just 7 (5.3%) very often have meeting standing up. Also, 61.8% of respondents rarely had photocopiers and printers far from their desks translating to reduce or no need standing up to get print outs of documents. Furthermore, majority of respondents, 34.4% and 15.3% rarely and never

had the office gave them a minute break to stretch at intervals respectively. There were 46.6% of respondents who often had office encouraging send emails than face-to-face communication also lastly, more respondents (33.6%) never had office demand use of stairs instead of elevators. Statistical analysis showed that respondents' workplace health promotion was very low ( $5.58 \pm 2.42$ ) at 37.2% indicating that workplace health promotion in banks is very low (See Fig. 2).

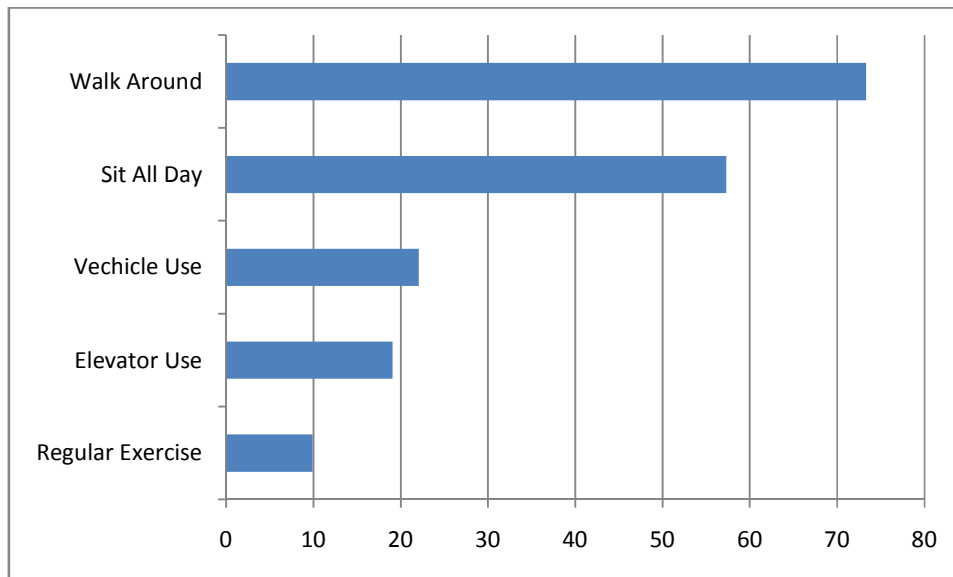


Fig. 1. Physical activity among respondents

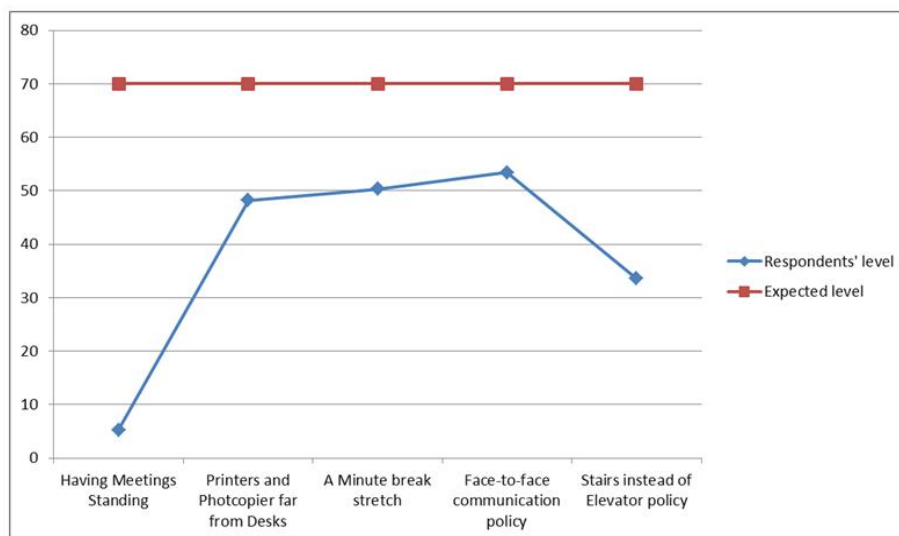


Fig. 2. Workplace health promotion in selected banks as against expected level

#### 4. DISCUSSION

Major findings from this study show that knowledge of bankers on sedentary lifestyle as a risk factor to hypertension was below average (46.63%) indicating that bankers do not have enough knowledge linking sedentary lifestyle to hypertension, especially their knowledge of what constitute as sedentary lifestyle and the influence sedentary lifestyle has on susceptibility to hypertension was very low, this finding is however contrary to the findings by [22] who found out that bankers had a good level of knowledge of hypertension (98%) and (80.4%) poor knowledge on the risk factors related. Also, [23] revealed that despite the high knowledge of risk factor to hypertension by bankers, the sedentary nature of their job however still puts them at risk of hypertension indicating an absent correlation and relationship between level of knowledge and hypertension of bankers however, this was contrary to the findings of this study where the level of knowledge was found to influence their practice of sedentary lifestyle ( $F = 17.697$ ,  $R \text{ Square} = 0.121$ ;  $P < 0.05$ ) which was determined to be negative showing their low level of knowledge leads to poor sedentary lifestyle among bankers.

Further findings showed that despite bankers' attitude towards sedentary lifestyle as a risk factor to hypertension being above average, there were more than half of the bankers who were not worried about developing hypertension this was similar to finding by [24] who found that attitude towards hypertension was highly negative owing to their negative attitude to preventive measures like engaging in physical activities, also similar was findings by [25] who also revealed a negative attitude to treatment and their sedentary lifestyle was said to be high. Findings also revealed that bankers' attitude did not have any association with their practice of sedentary lifestyle.

Perception of bankers towards sedentary lifestyle as a risk factor to hypertension was also assessed where it was found that bankers' perceived seriousness of hypertension was above average ( $10.23 \pm 3.44$ ) and this was determined to lead to improved lifestyle to reduce susceptibility to hypertension ( $t = 1.023$ ,  $\beta = 0.094$ ). Perceived benefit of bankers of avoiding sedentary lifestyle was determined to be good ( $9.60 \pm 3.25$ ) and this was identified as the strongest associate to improvement of lifestyle to combat hypertension ( $t = 5.184$ ,  $\beta =$

0.478). However, respondents' perceived susceptibility was low ( $5.89 \pm 2.29$ ) and was determined to have a negative relationship with bankers' lifestyle, making them engage in sedentary lifestyle.

Sedentary lifestyle at work was determined to be average ( $7.88 \pm 2.35$ ) and this has been a cause of major public problem of concern [26] especially prolonged sitting at work. And this can be attributed to the poor health promotion programs in the banking industry as evident in the findings of this study ( $5.58 \pm 2.42$ ), findings further suggested that there was a significant relationship between workplace health promotion and practice of sedentary lifestyle ( $F = 6.542$ ,  $R \text{ Square} = 0.048$ ;  $P < 0.05$ ) and further indicating that an improved workplace health promotion leads to improved lifestyle choice.

#### 5. CONCLUSION

In Nigeria, hypertension is the most common cardiovascular disease reported, with the death rate of 13.62% per 100,000 population as at 2014, its causes as since been traced to sedentary lifestyle as one of the risk factors. Bankers have been shown to be at risk of developing hypertension due to their sedentary nature especially with their prolonged sitting at work. This has prompted the need for a functional workplace health promotion aimed at educating and creating an enabling environment for improved health behavior among bankers, however findings from this study indicated that there are no workplace health promotion put in place for this purpose despite the positive associate that has been established between the workplace health promotions and improve healthy behavior. This can be said to have led to increased sedentary lifestyle and also increase bankers' susceptibility to hypertension.

Hypertension is a major public health problem of concern and there have been several intervention towards its control and prevention, bankers are at risk of developing hypertension due to their practice of sedentary lifestyle and designing of a workplace health promotion programs is the way of controlling and preventing prevalence and incidence of hypertension among this community of people. Health promotion intervention directed towards corporate industries should therefore be implemented under the umbrella of workplace health promotion which will not only serve as an enabling factor but also reinforce intended behavioral change.

## ETHICAL APPROVAL

The study pursued its ethical approval from the ethical committee of the university–babcock university health research and ethics committee (buhrec). Informed consent was acquired from each respondent before the instrument was administered. All respondents were informed that their participation is voluntary. Data from research were made confidential and a report of the results and findings might be communicated back to the participants if necessary. It was also mentioned as blatant that there are no risks associated with the study just as there are no rewards or compensations for participating.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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