
Perceived Influence Of Socio-Economic Factors On Health Promoting Life Style Of The Elderly In Lagos State

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Abstract: This study aimed at assessing the Influence of Socioeconomic Factors on Health Promoting Life Style of the Elderly in Ibeju Lekki Local Government Area of Lagos State. To achieve the purpose of this study, two null hypotheses were formulated and tested at 0.05 level of significance. The descriptive survey research method was adopted. A purposive sampling technique was adopted to select 200 elderlies (male and female) in Ibeju Lekki Local Government Area to participate in the study and the instrument for data collection was the Modified Health Promoting Lifestyle Profile Questionnaire (MHPLPQ). The instrument was divided into two sections. Section A focused on the demographic characteristics of the respondents while Section B was opinion questions which were subdivided into two sections: income and health-promoting lifestyle behaviour and level of education. The health-promoting lifestyle behaviour of respondents was measured using a 4-point Likert scale while inferential statistics of chi-square was used to analyse all stated hypotheses at 0.05 alpha level of significance. The significant value of ($\chi^2 = 185.760$, $\chi^2 = 231.520$, $\chi^2 = 432.40$, $\chi^2 = 27.90$) was obtained for hypotheses one and two respectively. In conclusion, the findings of this study showed that socioeconomic factors like income and level of education have a significant influence on the health-promoting lifestyles of the elderly. It was recommended that adults should have a proper posterity plan towards their ageing years by saving and having an insurance and retirement plan.

Keywords: Elderly, Health Promoting Lifestyle, Income, Socio-economic Status.

Introduction

Lifestyle is defined as normal and conventional daily activities which are accepted by people during their lives and these activities can affect the health of individuals (Delaun & Ladner, 2016). Lifestyle plays a significant role in an individual's health status; it can improve or impair health. Lifestyle includes daily routines that become habitual and affect physical and mental health. Pakseresht et al., (2017) say it includes routine and daily living activities affecting an individual's health. An individual's health is determined by genetics and lifestyle; thus, lifestyle may improve or impair health.

Lifestyles such as a healthy diet, adequate sleep, physical activity, weight control, and avoidance of smoking and alcohol consumption constitute a health-promoting lifestyle (Mehri et al., 2015). An unhealthy lifestyle is one of the main risk factors for chronic diseases and premature death and it is one of the leading causes of ill health. Improvement in lifestyle leads to satisfaction, success at work, and physical health. A health-promoting lifestyle profile consists of six dimensions as

follows: physical activity, nutrition, health responsibility, spiritual growth, interpersonal relations, and stress management (Savarese et al., 2018). An unhealthy diet and low physical activity are reported as one of the dimensions of an unhealthy lifestyle among the elderly (Tran, Dingley & Arenas, 2020). Excessive consumption of carbs, low physical activity, irregular sleep pattern, and smoking are among the unhealthy behaviours that negatively affect seniors' health (Calamidas & Crowell, 2018).

By selecting a health-promoting lifestyle, an individual tries to maintain and promote his/her health and avoid diseases through having a proper diet, rest, physical activities, exercising, controlling body weight, not smoking, drinking alcohol and immunizing the body against diseases; this set of activities constitutes the health-promoting lifestyle (Phipps & Sands, 2003). The importance of lifestyle is to a large extent due to its effect on the quality of life and disease prevention, it is essential to promote and correct lifestyle to maintain and promote health (Potter & Perry, 2016). Also, an inappropriate lifestyle is one of the influential factors for the emergence of chronic diseases like colon cancers, hypertension, chronic obstructive pulmonary diseases, liver cirrhosis, AIDS and cardiovascular diseases. Non-contagious diseases are closely related to lifestyle; in other words, lifestyle is one of the important determining factors in the health and disease of individuals (Tashiro, 2012). Obviously, with no modification in lifestyle, there will be irreparable consequences in future.

On the other hand, health-promoting behaviour, as a key factor in the concept of health promotion, has attracted the wide attention of studies and programs (Plank, 2017). The definition of an individual from health is placed in the centre of his/her viewpoint toward health-promoting behaviour (Plank, 2017). At this level, health is defined as using some positive qualities recommended by World Health Organization. Health is the fulfilment of human potential, maintenance of balance and goal orientation in the environment (Dunn et al., 2011).

Many factors have been linked to the health-promoting lifestyle of an individual. Behaviours that have consistently been shown to improve blood pressure control including taking prescribed medicines, monitoring blood pressure regularly, maintaining a low sodium diet, exercising, maintaining a healthy weight, limiting alcohol use, and not smoking (Ogunbamowo and Oladipupo, 2019). Growing evidence has linked socio-economic factors to physical and emotional health. Socio-economic factors are social and economic factors such as income, educational level and employment status. There is evidence connecting economic inequality and poor health (Friedli, 2019). Experience of socioeconomic disadvantage, including unemployment, low income, poverty, debt and illiteracy is consistently associated with health impairing lifestyle (Silva et al., 2016). A low socioeconomic status is known to be associated with more frequent health problems (Safran & Mays, 2019). People of the lowest socio-economic status are estimated to be two to three times more likely to have the emotional disorder than those with the highest socio-economic status (Safran & Mays, 2019). This is generally explained by the theory that stress responses result from demand-resource imbalance (Lazarus, 2016). Those individuals with low socio-economic status face greater demands from exposures that threaten health and survival but are endowed with fewer resources to cope with such challenges (Elizabeth et al., 2017).

It is well documented that people of low socio-economic status suffer a disadvantage, not only socially and economically, but also in terms of poorer health outcomes. Socioeconomic status refers to the income, education, and social standing of a person or group of people. The disadvantaged are often less healthy throughout their lives and die younger than those of higher socio-economic status (Phelan, 2016). Socio-economic status is known to play a large role in affecting lifestyle because it influences living conditions, behaviours and ultimately health conditions. For instance, Everson *et al.*, (2012) stated that in relation to emotional health, the stress

of living in a situation of prolonged economic hardship puts individuals at a higher risk for mental illness. Investigations on factors affecting health-promoting lifestyles have been carried out in many countries, especially high and middle-income countries. (Olasunbo & Ayo, 2013; Joseph-Shehu & Irinoye, 2015). These reports revealed poor adherence to healthy lifestyles with poverty, poor education and lack of awareness as associated factors. Unfortunately, most of these studies did not specifically focus on senior citizens except for Olasunbo & Ayo, (2013). Even then the investigation by Olasunbo & Ayo, (2013) did not substantially cover how socioeconomic factors can affect the health-promoting lifestyle of the elderly. The researcher observed that Ibeju Lekki Local Government is populated with elderly who practice unhealthy lifestyle (poor diet, being sedentary, poor stress management) that has a negative effect on their health. To address this issue, there is a need to understand the socio-economic factors that contribute to this negative lifestyle that impairs their health. Against this background, this study seeks to assess the socio-economic factors affecting the health-promoting lifestyle of the elderly in Ibeju Lekki area of Lagos State.

Hypotheses

The following hypotheses were formulated and tested for the study:

- i. Income will not have any significant influence on the health-promoting lifestyle of the elderly in Ibeju Lekki Local Government Area of Lagos State.
- ii. Education will not have any significant influence on the health-promoting lifestyle of the elderly in Ibeju Lekki Local Government Area of Lagos State.

Method Materials

This study adopted the survey research design and the population for this study consisted of all elderly (male and female) in Ibeju-Lekki Local Government of Lagos state. A purposive sampling technique was adopted to select 200 Elderly (male and female) in Ibeju-Lekki to participate in the study. Data were collected with the use of a modified health-promoting lifestyle profile Questionnaire (MHPLPQ). Modified Health-promoting lifestyle profile (MHPLP) is widely used to measure and evaluate the lifestyle or daily activities of individuals. The questionnaire was divided into two sections A and B. Section A focused on the demographic information of respondents while Section B was opinion questions: income and health-promoting lifestyle behaviour and level of education.

The questionnaire was a closed-ended type designed in line with the modified four-point Likert Scale consisting of Strongly Agree (SA), Agree (A), Disagree-(D) and Strongly Disagree, (SD). The instrument was validated by the three experts in the Department of Human Kinetics, Sports and Health Education for content and construct related validity. All suggestions and corrections made were affected. The reliability of the instrument was carried out using the test-retest method. A total of 10 elderly men and women who were not part of the population were selected for the reliability test. The data collected were analyzed with Pearson's Product Moment Correlation Coefficients [PPMCC] which yielded 0.82 coefficient after computation. Two hundred (200) questionnaires were distributed to the respondents and collected by the researcher on the spot with the help of two trained research assistants, data collection lasted for four weeks at Ibeju Lekki Local Government Area of Lagos State. Copies of the administered questionnaire were checked to ensure that they were well completed before leaving the study area. The researcher monitored the process of data collection throughout. Daily review meetings were held at the beginning and end of each day with the research assistants. Data collected was analyzed using descriptive statistics of frequency count and percentage while inferential statistics of chi-square was used to

analyze all stated hypotheses at 0.05 alpha level of significance. The statistical package for social science (SPSS) version 23 was used for analyzing the data collected.

Results and Discussion of Findings

Table 1: demographic variable of Respondents

Demographic variables (N = 200)		Frequency	Percentage
Sex	Male	117	58.6
	Female	83	41.4
Age	65 – 69 years	92	46.2
	70 -74 years	75	37.8
	75 – 89 years	33	16.0
Education	Non formal	8	4.4
	FSLC	39	19.6
	SSCE	41	20.4
	First degree	92	46.0
	Postgraduate	20	9.6
Religion	Christianity	98	69.0
	Islam	76	38.0
	Others	26	13.0
Income status	Low income	87	43.4
	Medium income	92	46.0
	High income	21	10.6

117(58.6%) of the respondents were male and 83(41.4%) were female. This shows that there are more male respondents than female respondents in the study. 92(46.2%) of the respondents were between the age of 65-69years, 75 (37.8%) of the respondents were between 70-74 years of age while 33(16.0) of the respondents were between 75-89 years of age. 8 (4.4%) of the respondents had no formal education,39(19.6%) had a first school leaving certificate, 41(20.4%) had a senior secondary school certificate, 92 (46.0%) had first degree while 20 (9.6%) had a postgraduate degree. 98 (69.0%) were Christians, 76(38.0%) were Muslims and 26(13.0%) choose others which constitute other religions. 87 (43.4%) were low-income earners, 92(46.0%) were medium-income earners and 21(10.6%) were high-income earners.

Hypothesis One

Income will not have any significant influence on the health-promoting lifestyle of the elderly in Ibeju Lekki Local Government Area of Lagos State.

Table 2: Chi-square Result of Influence of Income on Health Promoting Lifestyle of Elderly

	Observed	Expected	Mean	df	X ²	Sig
SD	10	50.0	3.58			
D	10	50.0				
A	52	50.0		3	185.760	0.01
SA	128	50.0				
Total	200					

Table 2 presents the result of the chi-square analysis on the influence of income on the health-promoting lifestyle of the elderly. From the table, it could be observed that income significantly

$\chi^2 = 185.760$, P-value = $0.001 > 0.05$, influenced the health-promoting lifestyle of the elderly in Ibeju Lekki.

Income simply means how much a person earns in a month. The more the income the more an individual can afford necessities that can improve their health. People with lower incomes typically have less money to spend taking care of themselves, whether paying for visits to the doctor, medicine, or healthy food. The quality and quantity of food eaten by elderlies are determined by their level of income. High-income earners can afford vegetables and fruits, afford expensive medical care and are likely to exercise regularly. Also, the elderly with high income can buy their medication and manage stress.

Hypothesis Two

Education will not have any significant influence on the health-promoting lifestyle of the elderly in Ibeju Lekki Local Government Area of Lagos State.

Table 3: Chi-square Result of Influence of Education on Health Promoting Lifestyle of Elderly

	Observed N	Expected N	Mean	df	X²	Sig
SD	4	50.0	3.59			
D	14	50.0				
A	42	50.0		3	231.520	0.02
SA	140	50.0				
Total	200					

Table 3 presents the result of the chi-square analysis on the influence of education on the health-promoting lifestyle of the elderly. From the table, it could be observed that education significantly $\chi^2 = 231.520$, P-value = $0.002 > 0.05$, influenced the health-promoting lifestyle of the elderly in Ibeju Lekki.

Educated people understand the importance of physical activity and proper nutrition, therefore can make informed decisions about their health. Also, they are aware of the importance of interpersonal relationships and taking responsibility for their health. There is an iterative relationship between education and health. While poor education is associated with poor health due to income, resources, healthy behaviours, healthy neighbourhoods, and other socioeconomic factors, poor health, in turn, is associated with educational setbacks and interference with schooling through difficulties with learning disabilities, absenteeism, or cognitive disorders.

Discussion of Findings

Hypothesis one revealed that income significantly $\chi^2 = 185.760$, P-value = $0.001 > 0.05$, influenced the health-promoting lifestyle of the elderly in Ibeju-Lekki Local Government Area. Income simply means how much a person earns in a month. The more the income the more an individual is able to afford necessities that can improve their health. People with lower incomes typically have less money to spend taking care of themselves, whether paying for visits to the doctor, medicine, or healthy food. The quality and quantity of food eaten by elderlies are determined by their level of income. High-income earners are able to afford vegetables and fruits, afford expensive medical care and are likely to exercise regularly. Also, the elderly with high income can buy their medication and manage stress. The result of this study corroborates the report of Joseph-Shehuetal., (2019) which stated that socio-economic status like income level has a significant influence on the health-promoting lifestyle of University workers in Nigeria. Similarly, Pirincci, et al (2018) in their study on the factors affecting health-promoting behaviours in academic staff,

reported that income level has a positive relationship with health-promoting lifestyle. Joseph-Shehu & Irinoye, (2015) also agreed that socio-economic status (income) has a significant positive effect on the health-promoting lifestyle of individuals. Zeng, et al. (2022) agree that income improvement is associated with health-promoting lifestyles. Money and resources can affect health in several ways, an individual requires a certain level of income to be able to sustain/ maintain a health-promoting lifestyle. Liu, et al., (2021) concluded that poor income can increase the possibility of developing unhealthy body weight which can in turn lead to an increased health risk for non-communicable diseases. The result of this study corroborates the report of Joseph-Shehu, et al., (2019) which stated that socio-economic status like income level has a significant influence on the health-promoting lifestyle of University workers in Nigeria. Similarly, Pirincci et al (2018) in their study on the factors affecting health-promoting behaviours in academic staff, reported that income level has a positive relationship with health-promoting lifestyle. Joseph-Shehu & Irinoye, (2015) also agree that socioeconomic status (income) has a significant positive effect on the health-promoting lifestyle of individuals. Zeng, et al., (2022) agrees that income improvement is associated with health-promoting lifestyles. Money and resources can affect health in several ways, an individual requires a certain level of income to be able to sustain/ maintain a health-promoting lifestyle. Liu, et al., (2021) concluded that poor income can increase the possibility of developing unhealthy body weight which can in turn lead to an increased health risk for non-communicable diseases.

Hypothesis two observed that education significantly $\chi^2 = 231.520$, P-value = $0.002 > 0.05$, influenced the health-promoting lifestyle of the elderly in Ibeju-Lekki Local Government Area in Lagos State. Educated people understand the importance of physical activity and proper nutrition, therefore can make informed decisions about their health. Also, they are aware of the importance of interpersonal relationships and taking responsibility for their health. There is an iterative relationship between education and health. While poor education is associated with poor health due to income, resources, healthy behaviours, healthy neighbourhoods, and other socioeconomic factors, poor health, in turn, is associated with educational setbacks and interference with schooling through difficulties with learning disabilities, absenteeism, or cognitive disorders. The result of this study is consistent with previous studies. For instance, (Chafjiri et al., 2017) reported that education has a significant influence on the health-promoting lifestyle of the elderly. Also, Mehdipour *et al.*, (2015) concluded in their study, that the effect of the educational program on the increase in mean scores of physical activity, mental health, and interpersonal communication in the experimental group was positive and significant. Heidari *et al.*, (2013) showed that there is a significant difference between the mean scores of life-promoting health in the experimental group before and after the education intervention.

Raghupathi, (2010) proposed that the relationship between education and health is attributable to three general classes of mediators: economic; social, psychological, interpersonal; and behavioural health. Economic variables such as income and occupation mediate the relationship between education and health by controlling and determining access to acute and preventive medical care. Social, psychological, and interpersonal resources allow people with different levels of education to access coping resources and strategies social support and problem-solving and cognitive abilities to handle ill-health consequences such as stress. Mahnaz, (2021) agreed that educational interventions promote health responsibility in the intervention group. Shokefe et al., (2018) observed that educational intervention changed health-promoting behaviours in nurses at Babol University and change in health-promoting behaviour will lead to lifestyle changes. The result of this study is consistent with previous studies. For instance, Joseph-Shehu & Irinoye, (2015) reported that education has a significant influence on the health-promoting lifestyle of the elderly.

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Conclusion

Based on the findings of this study, it was concluded that:

Income significantly influenced the health-promoting lifestyle of the elderly in Ibeju Lekki Local Government Area. There was a significant effect of education on the health-promoting lifestyle of the elderly in Ibeju Local Government Area.

Recommendation

Based on the conclusions from the study, it was recommended that:

1. Adults should have a proper posterity plan towards their ageing years by saving/ having an insurance/retirement plan.
2. Family members should ensure they provide financial, emotional and geriatric care services and support to their elderly loved ones.
3. Philanthropists, Health Maintenance Organizations (HMO), the National Health Insurance Scheme (NHIS) and other Government agencies should provide subsidized health care and health-promoting services for elderly people to encourage them in living a healthy lifestyle.

References

- Calamidas, G & Crowell, T., (2018). A content analysis of college students' health behaviors. *American Journal of Health Education* 49(8):1-14.
- Delaun, S& Lander, P.,(2016). *Fundamental of nursing*. Australia: W. B. Delmar co
- Dunn, W., (2011). *Best practice occupational therapy for Children and Families in community settings* (second ed) thorofara, NJ slack, inc.
- Elizabeth, C. Laura, S., Catherine, K., Ettman, S. Abdall, M., Kimberly, D., Sandro, G& Kelvin, J.(2017).*Financial hardship and health risk behaviour during COVID-19 in a large US national sample of women*. *SSM-population health* 13(21).
- Everson, S.A., (2012). Epidemiologic evidence for the relationship between socioeconomic status and depression, obesity and diabetes. *Journal of Psychosomatic Research* 53(2012) 891-895.

- Friedli, L.C, (2019). Mental health, resilience and inequality. <https://apps.who.ints/iris/handle/10665/107925>.
- Irinoye, O. Sagua, E. O & Ogundije, O. T., (2019). Sustainable health care system in Nigeria: Vision strategies and challenges *Journal of Economics and Finance*. 5(2): 28-39.
- Iyalomhe, G. B. S & Iyalomhe, S. I., (2012). Health-seeking behaviour of rural dwellers in Southern Nigeria: Implications for healthcare professionals. *International Journal of Tropical Disease & Health*, 2(2), 62-71.
- Joseph-Shehu, E.M., Ncama, B.P, Irinoye, O & Sibanda, W., (2015). Assessment of health-promoting lifestyle behaviour (HPLB) of University workers in Nigeria. *Research Journal of Health Sciences*.7(4)322-332.
- Lazarus, J.V, (2016). Beyond viral suppression of HIV-the new quality of life frontier. *BMC med* 14(94).
- Liu, Q., Huang, S., Qu, X & Aitian, Y., (2021). The status of health promotion lifestyle and its related factors in Shandong province, China. *BMC public health* 21(1), 1-9,
- Mahnaz, S., Farbid, E., Fard, A., Mina, M & Saeede K., (2021). The effect of an education intervention on health-promoting lifestyle. *Journal of Education and Health Promotion* 9(1):169.
- Mehri, S., Solhi, G.H., Nadrian, F & Sighaldehy, S., (2016). "Health-promoting lifestyle and its determinants among university students in Sabzevar, Iran," *International Journal of Preventive Medicine*, 7, (1), 65.
- Ogunbamowo, W.B. & Oladipupo, B.O., (2019). Impact of health beliefs change model strategy on the risk factors of hypertension among Nigerian Armed Forces personnel in Lagos State. *Journal of Human Kinetics and Health Education*, 2(1), 131-141.
- Olasunbo, O. I. & Ayo, D. S., (2013). Health seeking behaviour, food habit and nutritional assessment of an elderly group in Ile Ife, Nigeria. *Journal of Community Medicine and Health Education*, 3(5): 1-5.
- Pakseresht, S K. Rezaei, A., Pasha, E. KazemNejad, L& F. Hasandoost. (2017). "Health-promoting lifestyle among students at Guilan University of medical sciences," *Journal of Holistic Nursing and Midwifery*, 27, (1), 19–26.
- Phelan, G., Pestian, J. P., Brexonnell, C. K., Meyers, G., Richey, L. A., Matykiewicz, P & Sorter, M.T., (2016). *A controlled trial using natural language processing to examine the language of suicidal adolescent in the emergency department suicidal and life- behaviour*, 46(2) 154-159.
- Pirincci, E., Rahman S., Durmu, A&Erdem, R., (2009). Factors affecting health-promoting behaviours in academic staff. *Public health*, 122; (11): 1261-3.
- Phipps, W. J& Sands, J.K., (2003). *Medical surgical nursing & clinical practice e*; New York: Mosby Co; pp. 55–227.
- Plank, C.L., (2011). *Determination of health- promotive behaviour*. A review of current research. *NursClin North*. 26, 815–32.

- Potter, P & Perry, A.G. (2016). *Fundamentals of nursing*. Elsevier, chats woods, NSW.ISBN.
- Raghupathi, V. & Raghupathi. W., (2020). The influence of education on health: an empirical assessment of OECD countries for the period 1995-2015. *Arch public health* 78,20.
- Safran, S., Zirui, S., Ji, Y., Dana, G., Micheal, E &Chernew, D., (2019).“Health care spending utilization and quality 8 years into global payment”. *New England Journal of Medicine* 381(3) 252-263.
- Savarese, G, L. Carpinelli, P&Cavallo, M. P., (2018). “*Italian psychometric validation of the multidimensional students’ health-promoting lifestyle profile scale,*” *Health*, 10(11), 1554–1575.
- Silva, A, Pereira, B & Souza, S, (2019). Impact of a healthy lifestyle intervention program during pregnancy on women and newborns: Study Protocol for a quasi-experimental study. *Porto Biomed J.* ,4(2): 29.
- Shokofe, D., Fatemeh, E., Meimant, H., Jamshid, Y. C., & Parvaneh V., (2018). Effect of health promotion intervention on Nurses' healthy lifestyle and health-promoting behaviour: RCT study. *J Adv Pharm Edu Res*, 8(1):108-114.
- Tashiro, M. & Adachi, K., (2012). *Deployment of death conference and nurse’s mind. The nursing association*,55 550 551. <http://jglobal.jst.go.jp/en/details/jGLOBAL-id=201202226647221608>.
- Tran, T.D., Dingley, C & Arenas, R., (2020). *Perception and beliefs regarding cardiovascular risk factors and lifestyle modifications among high-risk college students*.53(2).<https://doi.org/10.1177/0844562119899310>.
- Zeng, X., Xue, Y., Dong, F., Shi, L., Xiao, S., Xue, B., Qian, Y & Man, Q., (2022). *The Association between health-promoting lifestyles, and socioeconomic, family relationship, social support, health-related quality of life among older adult in china: a cross-sectional study*.