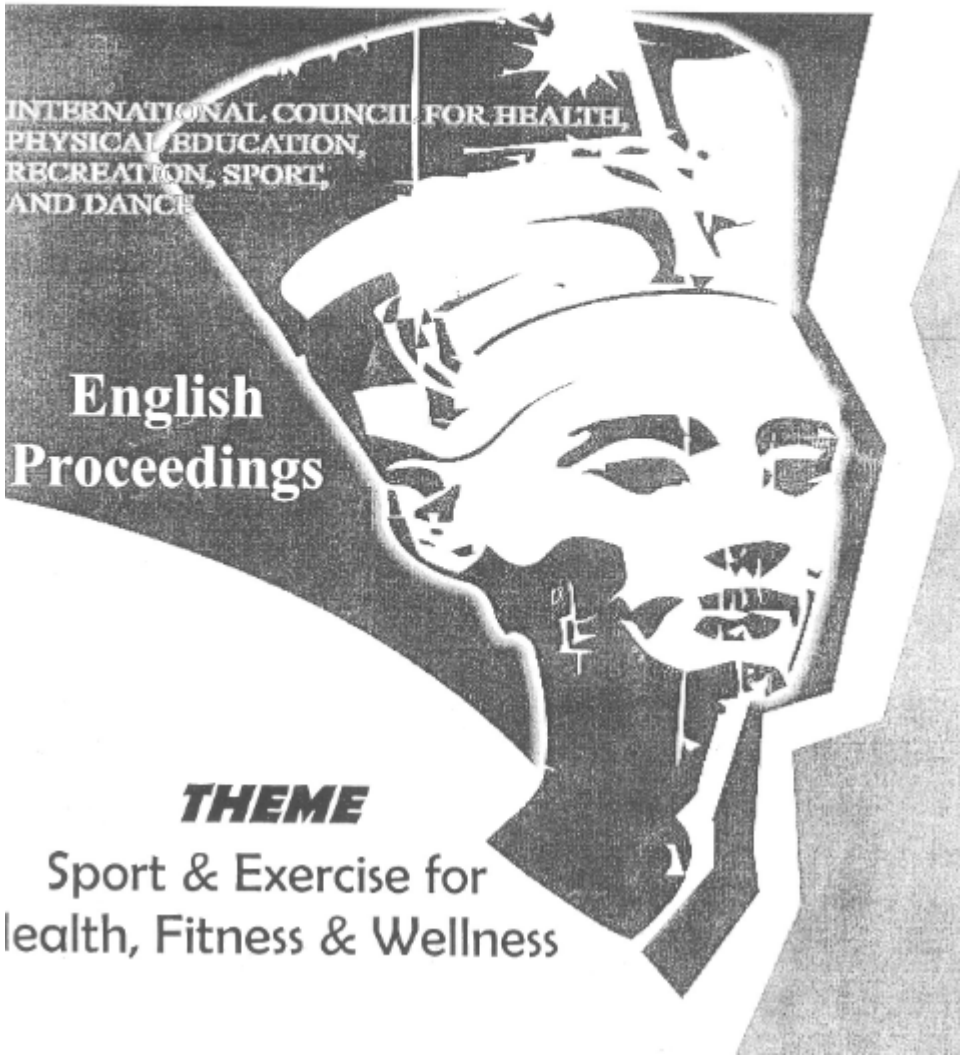
The 53rd ICHPER·SD Anniversary World Congress

Dec 19 - 22, 2011

Fairmont Nile City Hotel
Cairo, Egypt



THEME

Sport & Exercise for
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PREFERRED ANTI-AGING STRATEGIES AMONG THE OGUS AND AWORIS IN A SUBURBAN AREA OF LAGOSSTATE, NIGERIA

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Abstract

Ageing is inevitable; some of its effects on individuals can be slowed down however. These prevention strategies involve interventions to improve health and wellness in the event of illness. They also involve efforts to reduce the risk of disability and decline in functions. This study investigated the preferred strategies for slowing down the effects of ageing processes among the Ogus and Aworis in a suburban area of Lagos State, Nigeria. Variables selected for the study were use of diet, nutritional supplements, herbal remedies, exercise and combination of exercise and diet. A total of 1277 respondents that were sampled via purposive technique participated in the study. The descriptive survey research design was adopted and a self-developed and validated Adults Anti-ageing Strategy Preference Questionnaire (AASPQ), with reliability value of 0.68 was used to generate data for the study. Simple percentage, chi square and Cramer's V coefficient were used for data analyses and inferences were made at 0.05 level of significant. Findings show that the Ogu and Awori people of suburban area in Lagos State, Nigeria preferred the use of herbal remedies, nutritional supplements and diet to exercise, and combination of exercise with diet as strategies for slowing down the effects of ageing process.

Introduction

There are evidences that Africa is the continent with the youngest population in the world [Kalasa, 2001], but it does not, however, mean that its population is not on transition to the

ageing process. In fact, with declining fertility and mortality, it is estimated that Africa will be one of the continents with the fastest growing elderly population in the world by 2050. It is important to recognize that the ageing of population is inevitable. According to [Kasala, 2001], ageing of individuals may be measured in many ways including chronological age, degree of physical or mental functioning or performance of given social roles. Thus, perceptions of old age vary greatly between societies, conditions of life (favorable or unfavorable), life expectancy, poverty and other factors. Ageing has been viewed as the steady decline of organic functions and body systems. It was also described by Gavrilov (2002) as a summary term for a set of processes that contribute to health deterioration and ultimately to death with the passage of time.

According to Gothelf (2008), ageing cannot be avoided but how fast people age varies from one person to another and depends on such factors as genetic make-up, environmental influences and lifestyle.

Although ageing is inevitable, some of its effects can be slowed down and evenprevented [Okuneye, Idowu & Abiola, 2009]. These prevention strategies involve interventions to improve in the event of the occurrence of an illness and include efforts that reduce the risk of disability and decline in function. In later life, the goals of prevention also include maintaining function, vitality and quality of life. Seventy percent of longevity has been attributed to lifestyle factors. According to Gothelf (2008), seven health practices to a long healthy life were identified in a research of 7000 individuals. These seven health practices that promote good health and increase average length of life are; sleeping seven to eight hours at night, weight control andexercise, limited alcohol consumption, not smoking; eating breakfast and seldom snacking. Good diet had been variously commended as a key to good health, but Grossman and Jones (2007) observe that essential minerals and micronutrients have been depleted in foods due to civilization to the extent that foods consumed today are the processed and packaged types which had been loaded with carcinogenic chemicals, preservatives and dyes or are simply devoid of adequate nutritional value while nutritional value of cultivated foods is at an all-time low.

Nutritional supplementation is also recognized as a strategy in slowing the ageing process and the use had been widely reported. The reason is unconnected with the fact that to get complete nutrient value from foods, an exorbitant amount of the right types of foods has to be consumed at every meal that seems impracticable [Jones, 2007]. Therefore, to protect the body, nutritional supplements containing high levels of anti-oxidants are being recommended. Gothelf (2008) submitted that to slow down the ageing process, a comprehensive proactive anti-ageing strategy focusing on nutritional supplementation with other scientifically designed processes is necessary. Haastrup and Adeogun (2005) observe that the use of nutrient supplementation is very high in Nigeria today and these supplements come in various brands and packages with enticing marketing mix, promising to give good health. For the dangers associated with taking mega doses of nutrient supplements, Haastrup and Adeogun (2005) are of the opinion that taking a balanced diet everyday and eating three times a day will give all the minerals and vitamins the body needs to function effectively without necessarily resorting to the use of nutrient supplements.

The use of herbal remedies has long been in existence and is widely documented. In records kept in ancient China, India and Egypt, they have been found to effective and efficient compared to conventional modern medicine (Fajimi and Taiwo, 2005). According to Saxena (2001), an estimated 80% of the world's population living in developing countries still relies on herbal remedies for health care. In view of the large dependence on traditional medicine and practices, the World Health Organization (WHO) recognized the implicit role of herbal medicine and approved the use of these natural products. The medicinal properties of certain herbs in Nigeria have been reported (Odukoya, Idika & Odugbemi, 1993, Sofowora, 1993, Irobi, 1992 & Iwu, 2004).

Exercise has also been commended and recognized as one of the effective tools recognized globally in maintaining a healthy body [Onifade, Dansu, Williams & Adefuye, 2009; Okuneye & Dansu, 2007; Okuneye, 2002], and slowing the ageing process and reducing the effect of ageing (Ogundipe, 2008). As explained further, exercise has been shown to be an important means of

preventing cardiovascular diseases, falls, depression and other degenerative diseases that are related to ageing [Okuneye & Dansu, 2007; Okuneye, 2002].

This study was designed to investigate the preferred strategies for slowing down the ageing process among the Ogus and Aworis in a suburban area of Lagos State, Nigeria. The Ogu and Awori are two of the three major ethnic groups that are natives of Lagos State. The Ogus dominate Badagry Local Government Area [LGA] of the State and some parts of Ojo LGA, while the Aworis can be found majorly in three of the five main geo-political divisions of Lagos State — Badagry, Ikeja and Lagos. The study specifically focused on whether:

i. diet alone will be the preferred strategy in slowing down the effects of ageing process

ii. nutritional supplements will be the preferred strategy in slowing down the effects of ageing process

iii. herbal remedies will be the preferred strategy in slowing down the effects of ageing process;

iv. exercise alone will be the preferred strategy in slowing down the effects of ageingprocess; or

v. combination of exercise and diet will be the preferred strategy in slowing down the effects of ageing process.

Methods

Participants

The population for this study comprises all adult residents in Badagry Local Government Area of Lagos State. The sample, selected purposively [from ten communities] for this study comprised of 1277 male and female adults whose ages ranged between 35 and 66 years. Of these

participants, 17% had no formal education, 32.4% went elementary school, while 30.7% obtained post-primary school certification. The rest of the participants [19.9%] studied in higher institutions.

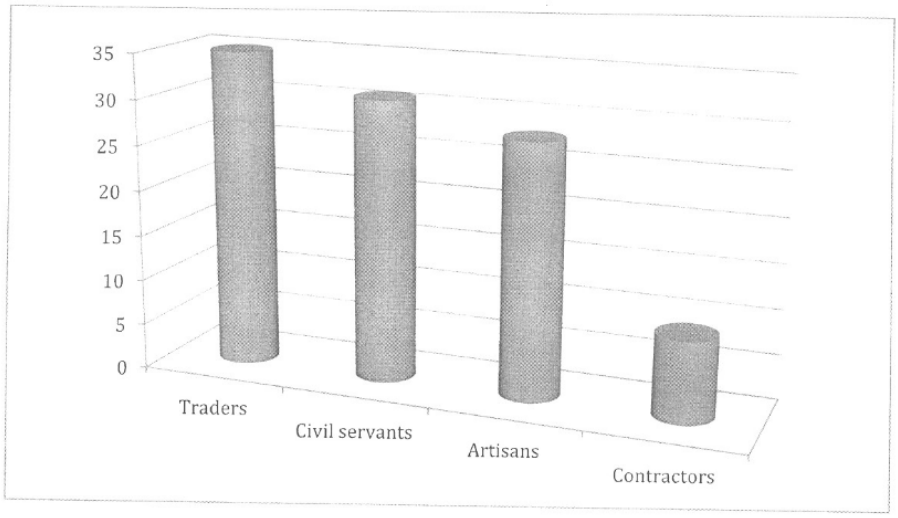

Figure 1: Component bar chart of participants' occupation

Percentage distribution in figure 1 show that the traders recorded the highest percentage among the participants, while the contractors had the lowest.

Instrumentation

The descriptive survey research design was adopted for the study. A self-developed and validated Adults Anti-ageing Strategy Preference Questionnaire (AASPQ) designed in line with the variables of diet, diet and supplements, herbal remedies, exercise and exercise and diet were used to generate data for the study. The questionnaire was divided into Part A and B. Part A measured demographic information such as gender, age, educational background, occupation and religion while Part B contained 20 item statements designed in line with the modified Likert four point scales. Respondents were required to indicate their level of agreement or disagreement to the supplied statements in the following order-Strongly Agree (4), Agree (3), Disagree (2) andStrongly Disagree (1) for positive statements and in ascending order for negative statements. The instrument was validated by two independent research fellows and

subjected to test-retest method of reliability on 25 young and middle adults in Amuwo area of Lagos State. Pearson's Product Correlation Coefficient (PPMC) was used to determine the reliability of the instrument which gave a value of 0.68 on computation.

Administration of Instrument

Administration of the instrument was done by the researchers and three research assistants who retrieved completed copies of questionnaires on the spot. Those that could not be completed instantly were retrieved at a later day not exceeding three days from the day of distribution. In all, distribution and collection took about four weeks. One thousand, three hundred [1300] copies of the questionnaire were administered, and 98.2% retrieval rate was recorded.

Data analysis

Demographic information of respondents was analyzed using descriptive statistical tool of frequency counts and percentages while inferential statistical tool of Chi-square (X2) was used to determine the preference of the respondents in relation to the variables tested at 0.05 alpha level. Cramer's [V] coefficient was used to determine relative strength of association between variables measured. Pictorial analysis was also used for further description of results. The results are however, presented in table 1 and figure 2.

Results

Table 1: Percentage, chi-square and Cramer's V-coefficient results on aging and tested variables

VARIABLE	SA [%]	A [%]	D [%]	SD [%]	X^2	V
Diet Alone	412.66	383.02	312.66	168.66	*111.24	0.30
	[32.3]	[30.0]	[24.4]	[13.2]		
Nutritional Supplement	432.31	401.76	285.72	157.21	*147.14	0.34
	[33.9]	[31.4]	[22.4]	[12.3]		
Herbal Remedies	509.51	434.65	120.47	212.37	*305.31	0.49
	[39.9]	[34.0]	[9.4]	[16.6]		
Exercise Alone	307.67	286.66	332.46	350.21	7.35	0.08
	[24.9]	[22.5]	[26.1]	[27.5]		
Exercise & Diet	344.09	279.01	299.10	354.80	12.23	0.10
	[26.9]	[21.9]	[23.4]	[27.8]		

X^2-cri = 21.03[P<0.05] 41=12

Results presented in table 1 shows that a high percentage of responses indicated that herbal remedies [73.9%], nutritional supplements [65.3%], and diet alone [62.3%] are the preferred strategies for slowing down the effects of the ageing process. Exercise and diet [48.8%], and exercise alone [47.4%] recorded lower percentages of acceptance as strategies for slowing down the effects of the ageing process. Further analysis shows that herbal remedies with chi square

value of 305.31 [P<0.05], and Cramer's V coefficient value of [0.49] indicates a significant acceptance strategy for slowing down the effects of the ageing process. Similarly, nutritional supplements [X^2=147.14, P<0.05; V=0.34] and diet alone [X^2=111.24, P<0.05; V=0.34] are also significantly accepted as strategies for slowing down the effects of the ageing process among the participants. Exercise and diet [X^2=12.23, P>0.05; V=0.10], and exercise alone [X^2=7.35, P>0.05; V=0.08] are not significantly accepted as strategies for slowing down the effects of the ageing process.

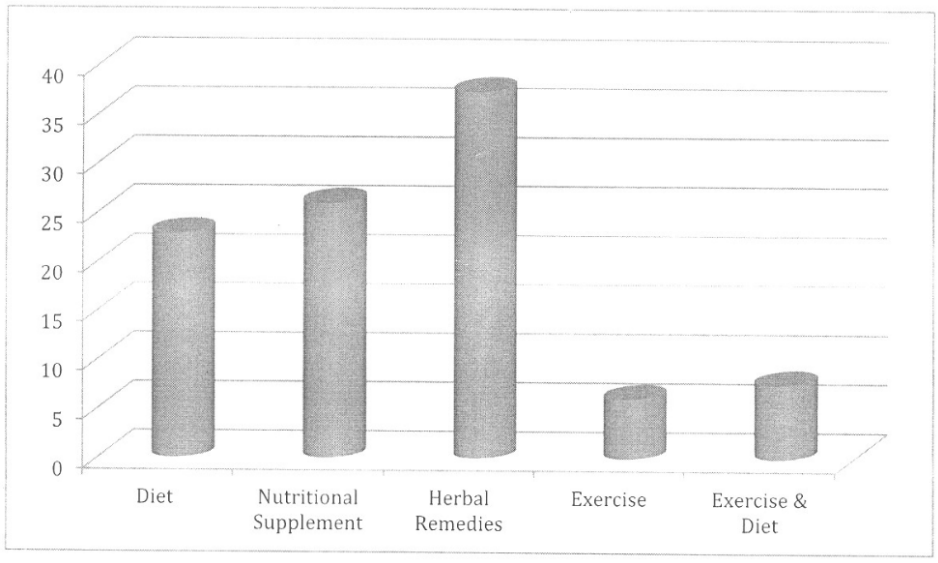

Figure 2: Component bar chart on percentage ranking of variables

Results in figure 2 shows that herbal remedies ranked the highest as strategy for slowing down the effects of ageing process among the participants. This is followed by nutritional supplement and diet alone, while exercise alone, and exercise combined with diet ranked low as strategies for slowing down the effects of ageing process.

Discussion

Findings of this study shows that the most preferred strategy for slowing down the effects of the ageing process among the target population is the use of herbal remedies. This finding is in line with the report of the World Health Organization [WHO, 2011] that in some Asian and African countries, 80% of the population depends on traditional medicines and herbal remedies. Similarly, Tsoa, Meldrum, Kim and Jacob (2006) in a related study on treatment preferences forcomplementary alternative medicine in children it was reported that 60% and 80% of patients with a diagnosis of fibromyalgia and arthritis respectively preferred complementary alternative medicine to any form of treatment. Although, high levels of potency are reported for herbal remedies [Native Remedies, 2011], the WHO [2011] identifies some of its challenges. Not many countries have national policies for traditional medicine. Regulating traditional medicine products, practices and practitioners is difficult -due to variations in definitions and categorizations of traditional medicine therapies. On safety, quality and effectiveness, WHO [2011] posits that scientific evidence from tests done to evaluate the safety and effectiveness of traditional medicine products and practices is limited. While evidence shows that some herbal medicines and some manual therapies are effective for specific conditions, further study of products and practices is needed.

The findings of this study also showed that nutritional supplements are also preferred as a strategy for slowing down the effects of the ageing process among the studied population [see table 1 and figure 2]. This agrees with the observation of Haastrup and Adeogun (2005) that the use of nutrient supplementation is very high in Nigeria as found in many parts of the world, but The Herbal Resource [2006] notes that nutritional supplements are not controlled by regulatory boards like pharmaceutical medications; since the active ingredients are what cause the effects associated with the herbs, it is important to know how much of the active ingredients are in each supplement. The issue with nutritional supplements is that because there are no regulations on the herbal claims it is hard to determine what is true and what is hype. The Herbal Resource [2006] observes that most companies that produce herbal supplements are

reputable and only use what they list, however their label claims may be exaggerated or worded in a deceptive manner.

This study found that the use of diet as a strategy for slowing down the effects of the ageing process is significant. This finding agrees with the position of Haastrup and Adeogun (2005) that because of the dangers associated with taking mega doses of nutrient supplements, taking a balanced diet everyday and eating three times a day will give all the minerals and vitamins the body needs to function effectively without necessarily resorting to the use of nutrient supplements. According to Roberts [2011], food eaten can have a polluting effect on the body, and for this reason there is a need for healthy eating. Individuals must learn how to eat foods that will help them age well and avoid age-related disease as well as which foods are needed to be cut down on or to be avoided completely. Cleary [2010] also identified healthy diet among strategies for living longer and youthful appearance.

The findings of this study show that the use of exercise alone, and its combination with diet as strategies for slowing down the effects of the ageing process is not significant among the participants [see table 1 and figure 2]. This is an indication of poor knowledge and practice of exercise and [probably] good nutritional behavior. Atkins (2002) notes that combining diet with exercise is the best antidote to body cells degeneration. In the same vein, Cleary [2010] identifies some benefits of exercise in relation to slowing down the ageing process, and these include increased energy, improved muscle tone, increased metabolism, lowered blood pressure, reduced risk of heart attack, and reduced stress levels. According to Gothelf (2008), 70% of longevity is related to lifestyle and therefore controllable, anti-ageing strategies designed to retard the ageing process should focus on a comprehensive and proactive strategies of diet and exercise, with other strategies with positive scientific evidences.

Conclusion and Recommendation

Based on the findings of this study, it is concluded that the Ogu and Awori people of suburban area of Lagos State, Nigeria preferred the use of herbal remedies, nutritional supplements and

diet to exercise, and combination of exercise with diet as strategies for slowing down the effects of the ageing process. It is therefore recommended that more public health education is needed in the area to further sensitize the people of the importance of good food, balanced diet and regular exercise as means to enhancing optimal health, reduce age related diseases and ensure longevity. Individuals in the communities should be motivated via relevant programs to embrace a combination of diet and exercise as a working combination for leading a good life and slowing down the effects of ageing process.

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