The 52nd ICHPER-SD Anniversary
World Congress
May 8 - 12, 2010
Grand Regency Hotel & Convention Center
Doha, Qatar

Hosted by the Qatar Olympic Committee

PROCEEDINGS

THEME
"Quality Physical Activity Education and Science for All: A Gateway to Health and Olympic Caliber Performance"
Opening Ceremony

H.E. Sheikh Saoud Bin Abdulrahman Al-Thani
President, WCOC’2010
(Doha World Congress Organizing Committee)
and
Secretary General
The Qatar Olympic Committee
"Since the beginning of our organization in 1958, we have organized and delivered 32 World Congresses, 29 Regional Congresses and over 70 forums and conferences throughout the world in a sustainable and consistent timely fashion."

"Because of our firm belief: Through these congresses, our dimension of knowledge is highlighted and expanded, our search for wisdom advanced, our depth increased, and our inquiries in science answered."

"Through these congresses, we are in a better position to serve our stakeholder and beneficiaries: our children and students, student and elite athletes, global citizen for all age-groups, our profession and institutions in HPERSD including the Olympic Movement."
Health Education: An Essential Ingredient for Healthy Living
by Ademiju Patience Oyenwo
Michael Otedola College of Primary Education
Noforiya, Epe, Lagos State, Nigeria

Abstract

The purpose of this study was to find out if there is a relationship between health education and a healthy lifestyle. The population of the study was 690 people drawn from the surrounding environment. The instrument used for collection of data was a questionnaire. The data collected were analyzed using statistical tools of frequency, percentage and chi-square (x²). The findings in this study revealed that health education plays an important role in healthy living. Based on the findings, health education should: 1) be a core subject in the school curriculum and 2) be organized in the form of health talks in public places; religious worship centers, motor parks, market places and schools.

Introduction

Our health is the pivot on which our life goals and endeavour rotates. For health to serve as the pivot, it must be maintained, cherished and protected by living a healthy life style that will help to reduce health challenges with manifestation of a happy and productive individual. Nevertheless, health is sometimes abused through intentional or unintentional unhealthy behavioral lifestyle emanating from individual and socio-cultural factors that sometimes manifest into diseases/illnesses, injuries, disabilities, mental illness and occasionally death.

Human behavior plays a significant part in the etiology and management of all diseases; education is needed to persuade people to behave appropriately. The expansion of health facilities, the regular training of medical and health personnel without giving adequate attention to health education in order to create awareness on the need for a change in behavior from detrimental lifestyle, affects both personal and community hygiene. The result is the attainment of minimal health or the incidence of illness. It is in this regard that health education becomes an appropriate alternative for the empowerment of community and individual behavior (Gbefwi, 2004). In the same vein, Ikponwosa, (1984) stated that most human health problems are amenable to health education measures, thus they require not only hospital and maternity blocks, medicines, and treatment, but also modification of behavior. Health behaviors are things people do or do not do to promote their health and prevent disease (Blonna & Watter, 2005). It includes adopting health enhancing behavior (e.g., daily physical activity, use of seat belts, and healthy eating) and stopping health-risk behaviors (e.g., smoking and non-use of condoms).

Health related behaviors are the main goals of health education – ranging from sensible drinking, adoption of safe sex practices, hygiene behaviors, reduction in smoking, behaviors associated with prevention of a range of infectious diseases such as malaria, guinea worm, diarrheal disease and accident prevention and other related issues. Health education is any intentional activity which is designed to achieve healthy or illness related learning, i.e., some relatively permanent change in an individual’s capability or disposition. Effective health education may produce changes in knowledge, understanding, or ways of thinking, influence or clarify values to bring some shift in belief or attitudes, and facilitate the acquisition of skills and effect changes in behavior or lifestyle (Tonnes & Tifford, 1994, 2001).

The 1991 Geneva Consultation Conference proposed that schools and communities are natural partners in health promotion and disease prevention. It encouraged the development of school-community projects which could provide learning opportunities for the children and could also be designed to involve, inform and facilitate education of parents, family members and others in the community (WHO/UNESCO/UNICEF, 1992). Ignorance in health matters is not restricted to the illiterate people but it goes through all sections of society (Lucas & Grill, 2003). Health education is mostly concerned with bringing about changes in behavior in a positive direction. That is, to make people replace unhealthy behavior with healthy behavior. Therefore, through various
Components of health education such as nutrition education, safety education, physical education, consumer education, and sexuality education, peoples' health behavior will be influenced to adopt healthy behavior.

Nutrition education is the process by which belief, attitude, and understanding lead to practices that are scientifically sound, practical, and consistent with individual needs and available food resources (Akinrele, 2006). Safety education is a process of imparting and acquiring skills of accidents prevention in our environment. It involves the application of health knowledge, attitudes and skills for safe and effective living (Onuzi, 2003). Consumer education, according to Akinola (1993), is a formal educational program designed to help the consumer to acquire the knowledge and skills to protect his or herself against the activities of quacks. It is a program that is meant to help the consumers understand the unwanted effects of consumer products, especially foods, beverages, drugs and cosmetics, and the methods by which quacks operate to deceive them to buy the product. Sexuality education is a planned process of education that fosters the acquisition of factual information, the formation of positive attitudes, beliefs and values, as well as the development of skills to cope with the biological, psychological, socio-cultural and spiritual aspects of human sexuality from the cognitive domain (information), affective domain (feelings, values, and attitudes), and psycho-motor domains (communication and decision-making skills). (Action Health Incorporated, 2003).

Statement of Problem
Health is the foundation of life that enables individuals and communities to achieve sets of goals. Therefore, health should be measured through the exhibition of healthy behavior that will lead to low diseases, injuries and death, with resultant effect of happy and productive citizens. In order to have healthy people, health education should be made available to the people to enable them to exhibit healthy behavior.

Hypotheses
The following null hypothesis were generated and tested at 0.05 level of significant:

i. Nutrition education will not significantly be an essential ingredient for healthy living.
ii. Safety education will not significantly be an ingredient for healthy living.
iii. Physical education will not significantly be an essential ingredient for healthy living.
iv. Consumer education will not significantly be an essential ingredient for healthy living.
v. Sexuality education will not significantly be an essential ingredient for healthy living.

Methods
Participants
The population for this study comprised of primary school teachers in Lagos State, Nigeria. The sampling for the study was 600 primary school teachers randomly selected from the 20 Local Governments areas in Lagos State, Nigeria.

Research Instrument
A self-developed validated questionnaire with a reliability of 0.68 was used to collect responses from the primary school teachers. It was a 23-item Likert-type (strongly agreed, agreed, disagreed and strongly disagreed) questionnaire covering the following areas: nutrition education, safety education, physical activities, consumer education, and sexuality education.

Data Analysis
Data collected were analyzed using frequency, percentage and Chi-square(x2) was used to test the five hypotheses for the study.
Results

Table 1 reveals that 50.43% of the respondents strongly agreed and 39.10% of the respondents disagreed that nutrition education was an ingredient for healthy living, while 4.41% and 6.06% of the respondents disagreed and strongly disagreed respectively that nutrition education was an ingredient to health living. Furthermore, the result of the hypothesis test shows a critical/table value of 21.02, which is less than the calculated value of 84.30. Therefore, the null hypothesis is rejected that nutrition education will not significantly be an essential ingredient for healthy living. The result reveals that nutrition education is a significant ingredient for healthy living.

Table 1.
Chi-Square ($X^2$) Table of Nutrition Education as An Essential Ingredient for Healthy Living

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency Count</th>
<th>Percentage</th>
<th>df</th>
<th>$X^2_{crit}$</th>
<th>$X^2_{cal}$</th>
<th>Decision</th>
<th>Level of Significance</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agreed</td>
<td>348.0</td>
<td>50.43</td>
<td>12</td>
<td>21.02</td>
<td>6</td>
<td>Reject</td>
<td>$H_o$</td>
<td>0.05</td>
</tr>
<tr>
<td>Agreed</td>
<td>269.8</td>
<td>39.10</td>
<td>12</td>
<td>84.03</td>
<td></td>
<td></td>
<td>$H_o$</td>
<td>Sig</td>
</tr>
<tr>
<td>Disagreed</td>
<td>30.4</td>
<td>4.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagreed</td>
<td>41.8</td>
<td>6.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>690.0</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that 36.06% respondent strongly agreed and 42.87% of the respondents agreed that safety education is an ingredient to healthy living, while 10.23% of the respondents disagreed and 10.84% of the respondents strongly disagreed that safety education is an ingredient to healthy living. The test of hypothesis showed that the critical/table value is less than the calculated value (21.02 < 84.30) at 0.05 significant. Therefore, the null hypothesis that safety education will not significantly be an ingredient to healthy living is rejected. The results indicate that safety education is an ingredient to healthy living.

Table 2.
Chi-Square ($X^2$) Table of Safety Education as An Essential Ingredient for Healthy Living

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency Count</th>
<th>Percentage</th>
<th>df</th>
<th>$X^2_{crit}$</th>
<th>$X^2_{cal}$</th>
<th>Decision</th>
<th>Level of Significance</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agreed</td>
<td>248.0</td>
<td>36.06</td>
<td>12</td>
<td>21.02</td>
<td>6</td>
<td>Reject</td>
<td>$H_o$</td>
<td>0.05</td>
</tr>
<tr>
<td>Agreed</td>
<td>95.8</td>
<td>42.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$H_o$</td>
<td>Sig</td>
</tr>
<tr>
<td>Disagreed</td>
<td>70.6</td>
<td>10.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagreed</td>
<td>74.8</td>
<td>10.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>690.0</td>
<td>100.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3 reveals the respondents’ response on physical activity as an ingredient for health living. The results show that 38.21% respondents indicated strongly agreed and 41.40% respondents indicated agreed. By contrast, 14.21% and 10.68% of the respondents disagreed and strongly disagreed respectively that physical activities was an essential ingredient for healthy living. In the test of the null hypothesis, the result shows that the critical/table $X^2$ value is 12.592 and the calculated $X^2$ value is 85.05. Since the critical/table $X^2$ value is less that the calculated value, the null hypothesis is rejected that physical activities will not significantly be an essential ingredient for healthy living. Therefore, physical activity is a significant ingredient for healthy living.

**Table 3.**

**Chi-Square ($X^2$) Table of Physical Activities as An Essential Ingredient for Healthy Living**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency Count</th>
<th>Percentage</th>
<th>df</th>
<th>$X^2_{cal}$</th>
<th>$X^2_{crit}$</th>
<th>Decision</th>
<th>Level of Significance</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agreed</td>
<td>263.67</td>
<td>38.21</td>
<td>6</td>
<td>12.59</td>
<td>2</td>
<td>Reject $H_0$</td>
<td>0.05</td>
<td>Sig</td>
</tr>
<tr>
<td>Agreed</td>
<td>285.67</td>
<td>41.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagreed</td>
<td>67.60</td>
<td>9.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagreed</td>
<td>73.66</td>
<td>10.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>690.00</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of testing hypothesis 4 are listed in Table 4, revealing that 55.02% of the respondents strongly agreed and 30.24% agreed that consumer education was an ingredient to healthy living, while a lower percentage 6.14% and 7.60% of the respondents disagreed and strongly disagreed respectively that consumer education was an essential ingredient to healthy living. Furthermore, the test of the hypothesis shows that the calculated $X^2$ value is 377.59 while the critical/table $X^2$ value is 24.996. Therefore, since calculated $X^2$ value is larger than the critical/table $X^2$ value (377.59>24.996), the null hypothesis is rejected that consumer education will not significantly be an essential ingredient for healthy living. The result of the research showed that consumer education plays an important role in healthy life.

**Table 4.**

**Chi-Square ($X^2$) Table of Consumer Education as An Essential Ingredient for Healthy Living**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency Count</th>
<th>Percentage</th>
<th>df</th>
<th>$X^2_{cal}$</th>
<th>$X^2_{crit}$</th>
<th>Decision</th>
<th>Level of Significance</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agreed</td>
<td>386.50</td>
<td>56.02</td>
<td>15</td>
<td>24.99</td>
<td>6</td>
<td>Reject $H_0$</td>
<td>0.05</td>
<td>Sig</td>
</tr>
<tr>
<td>Agreed</td>
<td>208.67</td>
<td>30.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagreed</td>
<td>42.33</td>
<td>6.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagreed</td>
<td>52.50</td>
<td>7.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>690.00</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5 reveals that 50.62% and 33.01% of the respondents strongly agreed and agreed respectively that sexuality education was an ingredient to healthy living, while 7.03% and 9.34% of the respondents disagreed and strongly disagreed respectively that sexuality education was an essential ingredient to healthy living. The test of the hypothesis further shows that the calculated \( \chi^2 \) value (220.38) is greater than the critical/italic \( \chi^2 \) value (16.92). Hence, the null hypothesis is rejected that sexuality education will not significantly be an essential ingredient for healthy living. The result thus revealed that sexuality education is an essential ingredient for healthy living. The result of the study showed that the provision of sexuality education is an essential ingredient for healthy living.

### Table 5.

**Chi-Square (\( \chi^2 \)) Table of Sexuality Education as An Essential Ingredient for Healthy Living**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency Count</th>
<th>Percentage</th>
<th>( df )</th>
<th>( \chi^2_{\text{calc}} )</th>
<th>( \chi^2_{\text{tab}} )</th>
<th>Decision</th>
<th>Level of Significance</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agreed</td>
<td>349.25</td>
<td>50.62</td>
<td>9</td>
<td>16.91</td>
<td>9</td>
<td>Reject ( H_0 )</td>
<td>0.05</td>
<td>Sig</td>
</tr>
<tr>
<td>Agreed</td>
<td>227.75</td>
<td>33.01</td>
<td></td>
<td>220.3</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagreed</td>
<td>48.50</td>
<td>7.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagreed</td>
<td>64.50</td>
<td>9.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>690.0</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

In support of the findings, Hymen (2003) reports that dietary factors contribute substantially to preventable illness, preventable diseases, and preventive death in the United States as they are associated with 10 of the 10 leading causes of death of Americans. Hence, prudent dietary practices are important to the prevention of diseases and promotion of good health.

In collaboration with the finding, Ukpor (1993) and Coppack (2003) state that consumer education assist consumers to develop essential skills that will aid in making decisions and enhance their patronage of goods and services. It will also produce "informed" or "effective" consumers who will know their own rights, be aware of their responsibilities for the environmental and social impact. Consumer health helps consumer access to, understand, and make use of, information that is available to them on products and services for their health and their family. Also, in support of the finding, Fennell and Ogletree (2003) report that safety education plays important role in helping to achieve each and every one of these objectives.

The findings of the study reveal that physical activity plays an important role for healthy living. In line with the findings of, Drewalowski, Estabrooks and Johnston (2002) stated that proper nutrition and physically active lifestyle are two important preventive health behaviors for children and adolescents. The finding is equally supported by Moe et al. (2002) who state that a modest increase in physical activity may significantly lower the risk of coronary heart disease and favourably modify cardiac risk factors. Healthy nutrition helps in preventing chronic illness, and about one-third of both coronary disease and cancer could be prevented with healthy eating. This result is collaborated by Robinson, Bockting, Rosser, Miner and Coleman (2002) as well who state that sexually healthy persons (i.e. persons who are sexually literate, comfortable and competent) will be more likely to make sexually healthy choices, including decisions concerning HIV and sexual behaviors.

Conclusion: the result of the study reveals that provisions of health education will enhance people's lifestyle.
This is evidence from the result which indicate high positive response from the respondents. Behavioral changes, such as reduced fat intake, smoking cessation, stress management and social support alongside with increase in physical activity will promote healthy lifestyles and reduce coronary heart disease (CHD) risk (Toobert, Stryker, Glasgow, Barrera & Bagdade, 2002).

The following recommendations are made based on the findings:

- **Health education should be a core subject in the school curriculum.** This will enable the inculcation of health principles that will enhance healthy behavior in the young, which will make them productive and fulfilled adults.
- **Health education should be included in religious worship programs.** This will take care of people outside the school setting.
- **Health education should be available in public places such as markets, motor parks and during sporting activities.**

**References**


