# EDUCATIONAL ATTAINMENT, FUNCTIONAL CAPACITY AND DISABILITY IN ELDERLY: THE SITUATION IN NIGERIA.

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**EDUCATIONAL ATTAINMENT, FUNCTIONAL CAPACITY AND DISABILITY IN ELDERLY: THE SITUATION IN NIGERIA.**

*Abstract.*

Education, functional capacity and high-quality socioeconomic conditions are all essential to well being of the elderly. Thus, the need to consider elderly environment for literacy, disability and functional capacity. The literacy level revealed that three-quarters of the elderly were not literate in Nigeria. Males are more literate than females. Also, with an increase in age, the percent literate decreases. The overall picture of disability revealed more male (55%) than female elderly. The rate of disability increased with age. An idea for promoting aged well being was highlighted.

**Key words: Education, elderly, Nigeria, disable Population.**

*Introduction.*

Understanding about the changes of the elderly will help caregivers and families to be better prepared. As people get older, bodily function decreases, some of the main functions that change are in vision, hearing, touch, skin, endocrine, renal, and musculoskeletal.

The decline of functional capacity and physical abilities, the diminishing mental health, and cognitive functions cause many adults to seek help from family members or institutions. Education and functional capacity are ideal for elderly to survive independent life. (Olayiwola et al 2004).

Education has been critically necessary for health, nutrition and survival (world bank 2002; Solomon, 2000; Engle et.al. 1997) Although the precise mechanisms by which education affects nutrition and health outcomes are yet to be thoroughly investigated in Nigeria. Evidence from various countries approach that, stress, proper sanitation and food behaviour are important pathways to longevity and healthy living [Engle et al 1997]. Thus, low education is likely to lead to inadequate care, sanitation and poor health-seeking behaviors, which in turn are associated with increased risk of inadequate food intake among the elderly (Olayiwola et al 2004).

The additional effect of education was reported on self management training in elderly (AHRQ 2000). Disease Self-Management Program, help prevent or delay disability even in patients with arthritis, heart disease, or hypertension. The elderly were trained to manage their symptoms, adhere to medication regimens, and maintain functional capacity. Functional capacity is influenced with the presence of adequate food, education and basic facility such as water supply with other socio-economic and environmental factors (Olayiwola and Ketiku2006; Solomon, 2000).
Health authorities, like the World Health Organization have identified environmental issues, water supply, electricity, and pollution as key indicators of health and nutrition status (WHO, 1997; WHO 1989; United Nations 1994). In Nigeria, education and other socio-economic conditions play a

pivotal role in vulnerability and food intake of the elderly (Olayiwola and Ketiku, 2006; Oguntona et al 1998). A significant association of education among Yoruba elderly in Ogun state Nigeria on functional capacity ($X^2$ = 24.1; $p<0.05$) memory loss ($X^2$ = 6.7; $p<0.05$) reduced mobility ($X^2$ = 15.1; $p <0.05$), health status rating ($X^2$ = 51.9; $p<0.05$) and coping strategy ($X^2$ = 70.2; $p<0.05$) along with nutritional vulnerability score ($X^2$ = 3.7; $p<0.05$) have been reported (Aboaba,2004).

There was a positive correlation between food habit scores and educational level among Yoruba elderly. Food habits have been seen as predictors of health and nutritional status (Steen et al 1991; Wahlqvist and Savige 2000; Olayiwola et al 2004). In view of this relationship, researchers have concluded that dietary surveys must be in conjunction with measurements of educational attainment, and other demographic variables to create useful intervention in public health programmes (Steen et al 1991; Lundgreen et al 1987; World bank 2002).

Nutrition scientists also contemplate that socio-demographic factors are key determinants of ageing and malnutrition. (Engle et.al. 1997, World Bank, 2002; Solomon 2000 Oguntona 1998 and Olayiwola et. al. 2006). Thus in the absence of clinical, biochemical, a dietary and food intake data as assessed through socioeconomic indicators, are able to assess nutrition and health condition of individuals and to inform people's potential vulnerability level and functional capacity.

*Literacy and Education Attainment of elderly in Nigeria.*

This section reviews literacy and educational attainment of the elderly by age and sex. In the Nigeria previous National Population Commission (NPC) publications on further analysis of the 1991 Census (NPC, 1998; NPC, 2001 and NPC, 2003) provide definitions of literacy and educational attainment as applied during the 1991 population census and the post enumeration survey (PES). Literacy is the ability to read and write with understanding in any language, local or foreign. During the main census and the post enumeration survey (PES), information on literacy level of all persons was collected.

*Literacy levels.*

In Nigeria, in 1991, three-quarters of the elderly were not literate. Also, with the increase in age, the percent literate decreases (NPC 2001). This means that the highest illiteracy rates occur at the oldest ages. Additionally, elderly males are more than 3 times as likely to be literate as elderly females. This finding confirms the existence of widespread gender disparities in literacy and educational attainment which are in a companion volume (NPC, 2001). Among males, literacy rates differ markedly by age. For example, almost four in ten persons aged 60-64 were literate in contrast to only one quarter of those aged 85. Among females, on the other hand, there is greater homogeneity in literacy rates. (Tables 1&2)

Levels of education vary by urban rural residence. Literacy rates are higher in urban than in rural areas of Nigeria. In both urban and rural areas, elderly males have higher literacy rates than elderly females.

According to NPC (2006) report, there are variations in intensity of education by gender (table 2). It shows that the level of literacy of elderly persons varies by sex of respondent. Percent literate for both sexes varied from 21 – 26.2% (Table 2).

Comparing the elderly literacy level with those of developed countries shows that Nigeria educational level is low and not yet widespread. Because attainment of at least primary education is common in most developed countries, schooling is almost universal.

Many developed countries no longer collect or tabulate age- specific statistics on literacy. For those that do, data from the early 1980's admit that literacy was far from universal among the elderly. For instance, literacy rates for ages 65 and over were only 46% in Portugal, 69% in Greece and 89% in Italy. At the same time, rates for middle age cohorts usually were well above 90%. This suggests that the future elderly in developed countries will share high levels of literacy.

The condition in some developing regions of the world is quite different to developed countries. The situation of elderly in many developing countries including Nigeria is largely rural, and the quality and quantity of rural educational facilities tend to be inferior to those in urban areas. Consequently, literacy rates for the elderly in developing countries are low relative to younger generations. In Egypt and Liberia, for example, they are less than half the rates for adults in the 25 to 54 age range. Differences among countries are marked; about 60% of elderly Mexicans were literate in the mid- 1980's compared with 7% of the elderly in Liberia (UN, 2006). In both developed and developing countries, even Nigeria, educational level has an impact on ageing functional capacity and disability (National population Commission,2006).

*Prevalence of Disability among Elderly in Nigeria.*

Disability is a limitation or loss of the ability to perform social roles and activities in relation to family, work, or independent living (Yu, Yeun-Chung 1991). WHO also defined disability as *a* restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being (WHO, 1980). The impairments could be a loss or abnormality of psychological, physiological or anatomical structure of function and involve disturbances at the level of the organ which contain defects or loss of limb, organ, tissue or other body structure as well as a defect or loss of cognitive function.

A disabled person is unable to use his/her body up to the normal expectation and is, therefore, handicapped. He/she is compelled to be explicitly or fully dependent on others. A disabled person may be disadvantaged in various ways – socially, economically, psychologically and educationally. The term- handicap describes the social and economic roles of impaired or disabled persons that leave them at a disadvantage compared to other persons.

With increasing life expectancy, improving the quality of life is an essential aspect of improving the health of the elderly population. Many social sciences in developed and developing countries have observed the negative impact of disability education, socioeconomic status health and nutrition (Sheena et al 2008).

In Nigeria elderly, both males and females show a similar trend of disability, increasing with age. This is not surprising because disabilities like blindness, deafness and restrictions in physical movements tend to be related to the downturn people experience as they grow older (Yu 1991; Adeokun, 1984). The prevalence of different types of disability among elderly in Nigeria are as shown in Table 3.

In Nigeria, a crude disability rate is 12.34 disabled per 1000 elderly persons. Slightly more than half of all disabled is male (55 percent). The highest level of disabilities occurs in the age group 85+ (24.1/1000). The disability rate at ages 85, for instance, is about three times the rate for ages 60-64. The lowest rate is for the age group 60-64, which confirms the fact that, among the elderly, disability increases with age. The gender variability in disabilities and literacy were observed in Table 4. Broadly males have higher disability rates than females (Table 4). Varying exposure to health risks at younger ages may account for this development (NPC, 2000).

The rate of disability increase with age also more illiterate is disabled in Nigeria (Table 4). Chronic illness and disability increase the likelihood that some elderly will no longer be able to live independently but will need care, however, growing old do not have to mean becoming disabled. Research sponsored by the Agency for Healthcare Research and Quality (AHRQ) 2000 that education and lifestyle changes can reduce disability, control costs, and have a positive influence on the quality of life of America's elderly. Similarly, Sheena et al 2008 relates disability with demography. However the socioeconomic factor outweighs effects of other demographic attributes in the sheen study. Other issues that can affect disability include poverty, living arrangements and health of the elderly (Mapule 2001; Kinsella and Velkoff. 2001).

*Functional capacity and associated risk factors among elderly in Nigeria.*

In Nigeria, elderly are exposed to certain associated factors of functional capacity. Table 5 put on view the various factors such as health, environment, psychology and family.

In most part of Africa including Nigeria, observation revealed that, crisis, change in living arrangements, economic or financial problems, psychological problems, family life and the inability to perform self care activities are insidious events among the very old (Aboaba 2004). In all, it is obvious in this review that the Nigeria elderly educational status is low and some are disabled in the midst of associated factors of functional capacity.

WAY FORWARD.

The poor educational level calls for policy development to remove barriers that prevent the elderly from playing an active and valued role in the development of the community.

To buttress this, older people should be included in poverty alleviation programmes.

The local government must develop intervention programmes in the field of education, nutrition, health, housing, and income protection.

Socio cultural activities that are exclusively for the elderly must be in place at local government authorities.

Immediate intervention, on self education programme for the elderly disabled in Nigeria, is necessary.

Considering the impact of disability, attention should be paid to living arrangement and overall atmosphere.
National health and Nutrition Studies should be carried out to establish the status of the elderly.
The gender differences observed acknowledges the need to develop gender sensitive policies and strategies to ensure equal access to social and economic amenities.
It is time to conduct a national research to increase the awareness of the basic needs of the elderly in Nigeria.
Policy considerations should take into account a broad-based approach, which distinguishes, between the well and active elderly, the disabled elderly and the frail elderly.
Intervention options should consider inter- sectoral structures and multi-disciplinary strategies to ensure that older people are healthy physically and psychologically for as long as possible. This means families and local communities must be empowered with resources, and technical assistance to care for older persons in communities, and this in turn, means access to amenities ranging from water, sanitation, transport, housing, access to health promotion, disease and disability prevention strategies.
The main overriding goal should be formulating policies and interventions, which will result in the elimination of poverty as the first priority. This means Nigeria should try to understand and adjust where possible, the broad range of high-risk situations that have long term and harmful effects on older people.

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TABLE 1.

**Literacy Rate of Total Population Aged 60 and above, in Nigeria.**

| Age | Total Population | Literate | LITERACY |
|---|---|---|---|
| 60-64 | 1,690,374 | 452,137 | 26.7 |
| 65-69 | 763,940 | 187,185 | 24.5 |
| 70-74 | 886,302 | 208,450 | 23.5 |
| 75-79 | 351,823 | 74,739 | 21.2 |
| 80-84 | 480,686 | 98,048 | 20.4 |
| 85+ | 424,989 | 76,110 | 17.9 |

**Source : NPC 2006**

**TABLE 2 Literacy Rate of Population Aged 60+, by Sex in Nigeria.**

| | *Total Pop | Literate | Rate | | *Total Pop | Literate | Rate |
|---|---|---|---|---|---|---|---|
| **All Male** | **2,481,626** | **841,134** | **33.9** | **Female** | **2,116,488** | **255,535** | **12.1** |
| AGE | | | | | | | |
| 60-64 | 898,801 | 348,109 | 38.7 | | 791,573 | 104,028 | 13.1 |
| 65-69 | 406,540 | 147,670 | 36.3 | | 357,400 | 39,515 | 11.1 |
| 70-74 | 492,186 | 159,670 | 32.4 | | 394,116 | 48,780 | 12.4 |
| 75-79 | 195,455 | 58,457 | 29.9 | | 156,368 | 16,282 | 10.4 |
| 80-84 | 258,059 | 71,795 | 27.8 | | 222,627 | 26,253 | 11.8 |
| 85+ | 230,585 | 55,433 | 24.0 | | 194,404 | 20,677 | 10.6 |

**Source: NPC 2006. *Total Population.**

**Table3. Age Specific Disability Rates for persons aged 60 years old and above in Nigeria**

| | **Total Populations** | | | **Population Disabled** | | | **Disability Rates (Per 1000)** | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Age Groups** | **Males** | **Females** | **Both Sexes** | **Males** | **Females** | **Both Sexes** | **Males** | **Females** | **Both Sexes** | **Ratio** |
| 60-64 | 898,801 | 791,573 | 1,690,374 | 8,240 | 6,401 | 14,641 | 9.20 | 8.10 | 8.70 | 128.73 |
| 65-69 | 406,540 | 357,400 | 763,940 | 4,620 | 3,704 | 8,324 | 11.40 | 10.40 | 10.90 | 124.73 |
| 70-74 | 492,186 | 394,116 | 886,302 | 6,124 | 4,662 | 10,786 | 12.40 | 11.80 | 12.20 | 131.36 |
| 75-79 | 195,455 | 156,368 | 351,823 | 3,132 | 2,311 | 5,443 | 16.00 | 14.80 | 15.50 | 135.53 |
| 80-84 | 258,059 | 222,627 | 480,686 | 4,041 | 3,312 | 7,353 | 15.70 | 14.90 | 15.30 | 122.01 |
| 85+ | 230,585 | 194,404 | 424,989 | 5,490 | 4,731 | 10,221 | 23.80 | 24.30 | 24.10 | 116.04 |
| **Total** | **2,481,626** | **2,116,488** | **4,598,114** | **31,647** | **25,121** | **56,768** | **12.80** | **11.90** | **12.30** | **125.98** |

Source NPC 2006.

**TABLE 4. Distribution of Population (60+ Years and Above) by Sex, Type of Disability and Literacy.**

| | Literate % | Illiterate % | Not stated % |
|---|---|---|---|
| | **Male** | | |
| **Not Disabled** | 34.1 | 65.7 | 0.2 |
| **Deaf** | 26.4 | 73.2 | 0.4 |
| **Dumb** | 22.9 | 76.6 | 0.4 |
| **Deaf and Dumb** | 27.4 | 72.1 | 0.6 |
| **Blind** | 15.2 | 84.5 | 0.4 |
| **Crippled** | 24.4 | 75.1 | 0.5 |
| **Mentally Retarded** | 20.7 | 73.8 | 5.5 |
| **Others** | 23.1 | 76.1 | 0.8 |
| | **Female** | | |
| **Not Disabled** | 12.1 | 87.5 | 0.4 |
| **Deaf** | 14.0 | 85.6 | 0.4 |
| **Dumb** | 13.9 | 85.2 | 0.9 |
| **Deaf and Dumb** | 14.7 | 84.5 | 0.9 |
| **Blind** | 6.5 | 93.0 | 0.6 |
| **Crippled** | 8.2 | 91.3 | 0.6 |
| **Mentally Retarded** | 8.5 | 88.7 | 2.8 |
| **Others** | 7.9 | 91.1 | 1.0 |

Source NPC 2006.

TABLE 5: RISK FACTOR OF FUNCTIONAL CAPACITY OF YORUBA ELDERLY IN NIGERIA.

| VARIABLES | FREQUENCY | PERCENTAGE |
|---|---|---|
| **ENVIRONMENT** | | |
| No access to water | 173 | 57 |
| No access to regular energy | 192 | 63 |
| Pollution | 143 | 47 |
| Poor housing | 79 | 26 |
| **FAMILY LIFE** | | |
| No care giver | 131 | 43 |
| Living alone | 12 | 04 |
| Taking care of small children | 128 | 42 |
| **ECONOMIC LIFE** | | |
| No regular income | 125 | 41 |
| In Debt | 101 | 33 |
| No access to land | 171 | 56 |
| **PSYCHOLOGY** | | |
| Depression | 97 | 32 |
| Mental illness | 9 | 03 |
| Memory loss | 34 | 11 |
| Socially Isolated | 15 | 5 |
| **DISABILITY** | | |
| Poor Mobility | 64 | 21 |
| Poor eye sight | 107 | 36 |
| Dental Problem | 82 | 27 |
| House bond | 31 | 10 |
| Sensory (hearing, nose, vision) | 49 | 16 |
| **HEALTH PROBLEMS** | | |
| Daily medication | 238 | 78 |
| Presence of Diseases /ailment | 122 | 40 |
| Alcoholic | 31 | 10 |
| Smoking | 18 | 06 |
| Poor appetite | 55 | 18 |
| Constipation | 43 | 14 |

*Footnote: No sum total in view of multiple responses.*
Source: Aboaba, 2004