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# Relationship of Physical, Emotional Health Variables and Functional Health Status of the Elderly in Asaba, Delta State

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**Abstract:** Functional health status is the level of activities performed by an individual to realize needs of daily living in many aspects of life including physical, psychological, social, spiritual and intellectual roles. Level of performance is expected to correspond to normal expectation in the individual's nature, structure and conditions. Researching into the functional health status of the senior citizens will aid in designing a worthwhile health education programme for them. The few health-related studies carried out on the senior citizens in Asaba have not addressed their functional health status. Therefore, this study examined physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy/fatigue, emotional well-being, social functioning, pain and general health as determinants of functional health status of the senior citizens in Asaba, Delta State. The study used descriptive survey research design. The sample aged  $64.93 \pm 11.57$  years in average were two hundred and fourteen (214) drawn through multistage sampling techniques from five local government areas in Asaba, Delta State. Functional Health Status was assessed using the Medical Outcomes Trust Short Form 36 (SF-36) Health Status Questionnaire that has internal consistency reliability results based on Alpha levels to range from 0.42 to 0.91. Eight hypotheses were tested and data were analyzed with the use of descriptive statistics of frequency count, percentage, mean and standard deviation as well as non-parametric statistics of chi-square ( $X^2$ ) at 0.05 level of significance. Results showed that physical functioning ( $X^2=423.87$ ,  $p<0.05$ ), role limitations due to emotional problems ( $X^2=8.46$ ,  $p<0.05$ ), energy/fatigue ( $X^2=148.12$ ,  $p<0.05$ ), emotional well-being ( $X^2=616.36$ ,  $p<0.05$ ), social functioning ( $X^2=25.30$ ,  $p<0.05$ ), pain ( $X^2=26.30$ ,  $p<0.05$ ) and general health ( $X^2=520.78$ ,  $p<0.05$ ) were significant determinants while role limitations due to physical health was not a significant determinant of functional health status of the senior citizens in Asaba, Delta State. It was concluded that the content of health education programme for the senior citizens should strongly take the factors examined into consideration.

**Keywords:** *Physical functioning, Role limitations, Social functioning, Pain, General health*

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## 1. Introduction

Functional health status reflects the ability to move and perform desired tasks without pain or injury. It is a unique category of health focusing on the mechanical well-being of the body of an individual. In contrast to the more traditional categories of health that includes general medical, cardiovascular and mental, functional status concerns with those elements that directly responsible for our physical function: muscles, bones, joints, and nerves [1]. Functional status is a systematic and standardized approach to a person's wellness status which takes the pattern of health management, nutrition, excretory function, exercise activity pattern,

cognitive function, sleep and rest pattern, self-concept, role relationship [2]. Others include sexuality pattern, coping with stress and tolerance pattern as well as value and belief pattern. Health status of the elderly as perceived by the individual and indicated by objective measures, is associated with subsequent retirement from active career as documented in a number of studies [3, 4]. The mental health functioning declined among the elderly who continued to work, but improved among the senior individuals even after adjusting for differences in baseline health functioning [5]. It should be noted, however, that this improvement was only found among those of the highest socioeconomic status.

Older adults can live longer, healthier lives by staying

socially connected, increasing their levels of physical activity, eating in a healthy way, taking steps to minimize their risks for falls and refraining from smoking. But there are real environmental, systemic and social barriers to adopting these healthy behaviors. Some relate to inequities as a result of gender, culture, ability, income, geography, ageism and living situations. Scholar reported that old age often brings about health problems and decreasing functional capacity which may affect the sense of wellbeing of an individual [6]. Other than health problems and functional impairments to which most elderly persons are vulnerable [7], old age in Nigeria may predispose to some social and economic problems.

Poor health is associated with earlier elderly (the senior citizens) plans. Each of us is aging. As a population, Deltans (people in Delta State) are aging faster than ever before. Today, there is a more informed recognition of the important contribution that older (the senior) people make to their families, communities and nation. Self-rated health measures are not endogenously determined with labour supply and seem not to be correlated with compensation variables. Some studies compare the effects of financial variables and subjective health status on the seniors. Studies showed side effects of health variables are substantially stronger than financial implications [8-10]. It is in the light of these that this study examined the relationship of the physical, emotional health variables and the functional health status of the elderly in Delta State, Nigeria.

## 2. Methodology

### 2.1. Participants

Participants consist of two hundred and fourteen (214) male and female adults. Their mean age was  $64.93 \pm 11.57$ sd years. The respondents were drawn through clustered sampling technique in five selected local government meeting centers in Asaba, Delta State. Each of these local government meeting centers have at least thirty (30) members.

### 2.2. Instruments

Functional health status has been assessed using the Medical Outcomes Trust Short Form 36 (SF-36) Health Status Questionnaire, which is integrated into the NSN Health Status Survey developed by Ware and Sherbourne [11]. SF-36 functional status questionnaire was designed to assess eight multi-item independent health dimensions, namely, physical functioning, social functioning, role (health) limitation due to physical problems, role limitation due to emotional problems, mental health, energy/vitality (functional limitation), pain, and general health perception.

The instrument has an excellent internal reliability of 0.86 in Cronbach's alpha. However, a modified fashion used in this study centered on two independent measures of Physical and Emotional Health Questionnaire ( $r=0.74$ ) and the dependent measure of Functional Health Status Questionnaire ( $r=0.79$ ).

### 2.3. Procedure for data collection

The consent of the participants was sought after all ethical consideration through signed inform consent form. Instructions were given to the participants on how to fill the questionnaire forms. The completed questionnaire were later collected and coded for data analysis.

### 2.4. Design and Analysis

The descriptive survey research design was adopted. This was appropriate because there was no manipulation involved in the study. The analysis of data collected was done with the use of descriptive statistics of percentage, mean and standard deviation as well as non-parametric statistics of Pearson product moment correlation (PPMC) at 0.05 level of significance.

## 3. Results

A total of 214 retirees constitute the sample in the study. Out of this sample, 125 (58.4%) were male while 89 (41.6%) were female; 30 (14.0%) were farmers, 58 (39.7%) were civil servants, 15 (7.0%) were artisans, 30 (14.0%) were healthcare providers, 5 (2.3%) were security officers, and 49 (22.9%) were clergy men; 60 (28.0%) identified that they have between one and two children, those with between three and four children were 50 (23.4%), as much as 99 (46.2%) submitted that they have between five and six children while 5 (2.3%) have seven children and above; on the level of education of the respondents, 44 (20.6%) had SSCE qualification, 45 (21.0%) obtained OND/NCE, 65(30.4%) had HND/B.A/B.Sc., 15 (7.0%) acquired MA/M.Sc./M.Ed., 10 (4.7%) obtained Ph.D. whereas 35 (16.4%) did not indicate their qualification; information of their religious affiliation indicated that 209 (97.7%) were Christian as against 5 (2.3%) that were Islam; 90 (42.0%) of the respondents retired based on computed statutory age, 40 (18.6%) retired as a result of official years of service, 10 (4.7%) were compulsorily retired while 74 (44.5%) retired voluntarily; and 90 (42.2%) had retired for between 1-5years, 74 (34.6%) has between 6-10 years as the length of retirement, 15 (6.9%) has between 11-15 years as against 35 (16.3%) with between 16 -20years post retirement experiences.

*Table 1. Pearson Product Moment Correlation showing the relationship between physical functioning and Functional Status of the Elderly.*

Variables	Number	Mean	Standard Deviation	r	Sig.
Functional Health Status	214	14.215	2.79		
Physical Functioning	214	5.991	7.52	.43	.000

Table 1 showed that the relationship between physical functioning and functional health status of the elderly in Asaba, Delta State ( $r = 0.43, p < 0.05$ ). Therefore, the null hypothesis was rejected. Therefore, the null hypothesis was rejected. This result showed that physical health had a positive relationship with Functional health status of elderly in Asaba, Delta State

The result in table 2 showed that the relationship between emotional health and Functional health status was significant ( $r = 0.345, p < 0.05$ ). Therefore, the null hypothesis was rejected. This result showed that emotional health had a positive relationship with Functional health status of elderly in Asaba, Delta state.

**Table 2.** Pearson Product Moment Correlation showing the relationship between Emotional health and Functional health status.

Variable	Number	Mean	Standard Deviation	r	Sig.
Functional Health Status	214	14.215	2.79	.345	.000
Emotional Health	214	15.841	3.03		

#### 4. Discussion

Physical health variable and functional health patterns were significantly related, also emotional health was found to correlate with functional health status of the elderly. This finding is in congruence with earlier study of Anderson, Patrick, Carter and Malmgren [12] and WHO [13] that functional health occurs when a person’s capacity to carry out activities or performance of activities is not compromised. Functional health status is also achieved by the elderly through compensatory environmental factors which include physical, social, and attitudinal factors of individuals. The study of Buchwald, Pearlman, Umali, Schmaling and Katon [14] on functional status in patients with chronic fatigue syndrome, other fatiguing illnesses, and healthy individuals showed that a strikingly consistent pattern was found for the physical functioning, role functioning, social functioning, general health, and body pain subscales, with the lowest scores in chronic fatigue syndrome patients, intermediate scores in acute infectious mononucleosis patients, and the highest scores in the healthy control subjects.

The association between perceived physical and emotional health and functional health status is supported by other scholars [15]. Studies however reiterate the need for inclusion of an intermediate classification that may be useful in identifying persons who have preclinical physical function impairment [7, 12, 16]. This is important, because there is increasing evidence for a period termed “preclinical disability” where individuals experience some physical function limitation [17]. It is interesting to note that poor physical function and each of the health-related variables associated with physical function are predictors of increased morbidity and mortality in older persons [18]. Social changes are affecting the position of the elderly in the society and leading to a reduction in their social status and influence in the community [19]. Studies have found that barriers to care such as cost, transportation, lack of information, and caring for others prevent elderly from obtaining good physical and emotional health [16, 20-22].

#### 5. Conclusion

Functional health status of the elderly can be measured

from different perspective. It is apparent to be mindful of some functional limitations of the elderly to their total physical and emotional health. The utilisation of medical care and other clinical assessment of other health related parameters of the elderly should be of utmost concern for future studies.

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