ASSESSMENT OF THE DETERMINANTS OF PHYSICAL HEALTH QUALITY OF LIFE OF THE AGED WITH DISABILITY IN SELECTED DISTRICTS IN GHANA

Bismark Nantomah[1]

Department of Integrated Social Sciences, Ghana Institute of Journalism, Accra

Augustine Tanle[2] and Eugene Kofuor Maafo Darteh[3]

Department of Population and Health, University of Cape Coast, Cape Coast

ABSTRACT

There is increasing proportion of the aged population in Ghana who are affected by physical and visual disabilities. Therefore, this study assessed the determinants of physical health Quality of Life (QOL) of the aged with disability in selected Districts in the Upper West Region of Ghana. The International Classification of Functioning, Disability and Health (IGF) model was adapted to guide the study. The study used a census survey and questionnaires to collect data from 810 respondents. Those who were aged 60-69 years had the highest physical health QOL mean score and lowest for those aged 80 years and older. Physical health QOL mean score was highest for those who were married and lowest among those who were separated / divorced. Aged with physical disability scored higher in physical health QOL as compared to those with visual disability. It was observed that age, marital status and type of disability of the aged with disability determined their physical health QOL.

Keywords: Aged with disability, Ageing, Old age, Physical health quality of life, Quality of life

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1   Bismark Nantomah (PhD) is a Lecturer in the Department of Integrated Social Sciences of the Ghana Institute of Journalism, Accra, Ghana. His research interest is on issues of population, development and health, particularly, social gerontology.

2   Augustine Tanle is a Professor of Migration and Refugees Studies in the Department of Population and Health of the University of Cape Coast, Cape Coast. Ghana.

3   Eugene Kofuor Maafo Darteh is an Associate Professor in the Department of Population and Health, University of Cape Coast, Ghana. His research focus is on social and behaviourial change communication; and social dimensions of reproductive health.

Corresponding Author: Bismark Nantomah!*: Email: nantomahbismark@yahoo.com

INTRODUCTION

Ageing is a normal biological process, which involves the cumulative deposition of damaged and defective cellular components, loss of organ physiological functions and inability to perform physical activity (Giddens, Duneier and Appelbaum, 2005; Aydos, 2012). The immunological theory asserts that the immune system of an individual is programmed to decline overtime, which propels ageing, diseases and disability (Jin, 2010). In spite of the fact that the proportion of older people is greater in high-income countries, older people in these countries are relatively less disabled than their counterparts in low- and middle-income countries like Ghana (World Health Organization [WHO], 2011). Disability which is a limitation of an individual in performing specific tasks at expected levels considered as normal adversely affect individuals in their activities of daily living (Mann, 2004; WHO, 2011). Mobility disability in particular affect individuals because the ability to ambulate is critical to many activities that allow individuals to be independent (Chappell and Cooke, 2010).

According to the Ghana Statistical Service [GSS] (2012), 3.0 percent of the total population of Ghana are battling with some forms of disability including physical, visual or sight, speech, intellectual and emotional or behavioural. The highest form of disability is visual or sight (1.2%) followed by physical (0.8%) and 0.6 percent being emotional/behavioural (GSS, 2012). It is indicated that about 12 percent of the elderly has one or more kinds of disability as compared with 2 percent of the population aged less than 60 years (GSS, 2013a). In the Upper West Region in particular, out of the total disability population of 25,746, those with visual or sight disability are 9,655 and that of those with physical disability are 5,417 (GSS, 2012; GSS, 2013b). In the midst of these disabilities, the aged with disability are particularly vulnerable due to their reduced income and physical capabilities (Steiner- Asiedu et al., 2010).

Though, there have been some research on issues of the aged and disability in Ghana, scanty studies have been conducted on the physical health Quality of Life (QOL) of the aged with disability. For instance, Tawiah (2011) revealed that in Ghana elderly females are branded as witches and are subjected to abuse and torture. Sackey (2015) found that inadequate political representation of PWDs was linked to stigmatization and negative social perception regarding the capabilities of PWDs. Another study showed that the built environment of the University of Ghana presented barriers of

varying degrees to persons with mobility disabilities (Ashigbi et aL, 2017). In order to contribute to the limited literature on QOL of the aged in Ghana, the study assessed the determinants of physical health QOL of the aged with disability in selected Districts in the Upper West Region of Ghana (Wa Municipality, Nadowli-Kaleo, Jirapa and Wa East Districts).

Conceptual and theoretical issues

Ageing and old age are viewed differently among many scholars, societies and regions globally (Kinsella and Phillips, 2005). Harman (1981) defines ageing as the progressive accumulation of physiological changes with time which result to an ever-increasing susceptibility of an individual to disease, disability and death. Similarly, ageing means declining vision, hearing loss and wrinkles as the skin's underlying structure of an individual becomes more and more brittle (Giddens et al., 2005). Ageing is not only fatal, but also costly because the elderly must constantly undergo treatment for their old age associated diseases and disabilities (Hung, 2011).

The concept of old age differs among authors (Heslop and Gorman, 2002; Giddens et al., 2005). For instance, old age is that late part of the human life span when the physical and mental capabilities become more restricted than that of the younger age groups (Heslop and Gorman, 2002; WHO, 2002a). In some regions, individuals are considered to be old when they reach age 55; in other areas it is age 60 or 65 (Giddens et al., 2005; National Population Council, 2007). In Asia for example, old age sets in at retirement age, which ranges from 55 in Indonesia, Malaysia, and Thailand, to 65 in the Republic of Korea and the Philippines (Park and Estrada, 2012). Besides, old age is grouped into three based on the chronological threshold considered; the 'young old' for those aged 65 to 74, the 'old old' consisting of those aged 75 to 84, and the 'oldest old' for those aged 85 and older (Giddens et al., 2005). In Ghana for instance, most public sector workers go on retirement at age 60 and old age sets therein (National Population Council, 2007).

Old age is said to have untoward effect on QOL of individuals (WHO, 1996). Notwithstanding one's age, Diener and Suh (1997) contend that QOL is based on the satisfaction obtained from one's preferences, because in the midst of scarce resources individuals will select those things that will most enhance their life. Quality of life equally conveys an overall sense of wellbeing, including aspects of happiness and satisfaction with life as a whole

(Centers for Disease Control and Prevention, 2000; Tripathi, 2012). Physical health QOL concerns the efficient functioning of the body and its systems in activities which require mobility and exertion of some level of energy (WHO, 1996; WHO, 2001). In another perspective, physical health QOL is described as the way individuals perceive their ability to reduce physical pain and fatigue and the use of required medical aids in improving their motor skills (WHO, 1996; World Health Organization Quality of Life [WHOQOL] Group, 1997). It is further argued that the physical health QOL of individuals is adversely affected by their state of disability (WHO, 2011). Disability in one way depicts the inability of an individual to do certain things, as a result of having impairment thus partial loss or the total loss of a physical function including seeing, hearing, talking and movement (HelpAge International, 2004; WHO, 2014). In another vein, disability is portrayed as a limitation in performing tasks, activities and roles at expected levels in physical and social contexts (Mann, 2004; WHO, 2011).

In addition, the medical and social models of disability have been propounded to explain the concept of disability. The medical model of disability which traces its roots to the rise of the medical profession in the late 19th and early 20th centuries conceives disability as an individual problem (Midgley and Michelle, 2009; Sullivan, 2011). The medical model views disability as a problem that is directly caused by diseases, trauma, accidents or other health conditions and this ill condition requires professional medical care (Rowlingson and Berthoud, 1996; WHO, 2001). It has been stressed that disability is a personal tragedy borne by the victim (Waddell and Aylward, 2010). The medical model is skewed to the individual by regarding the difficulties that an individual with disability experiences as being caused by his/her defective condition (Rowlingson and Berthoud, 1996; Carson, 2009).

The WHO (1980) in line with the medical model perceives the concept of handicap as a disadvantage for a given individual, resulting from an impairment that prevents the fulfilment of a role that is normal depending on age, sex, social and cultural factors for that individual. The WHO in this same vein describes impairment as any abnormality of the psychological and physiological function of an individual. The medical model suggests that the desired solution to disability challenges is often a medical cure or rehabilitation in order for the individual to attain some level of normalcy (Rowlingson and Berthoud, 1996; Midgley and Michelle, 2009; Waddell and Aylward, 2010; Sullivan, 2011). For instance, specific medical advances

including cataract surgery, antidepressant medication and hip replacements have been most important in preventing and reducing the functional limitations of individuals with disability (Cutler, Wise and Woodbury, 2009). Notwithstanding, it has been argued that the medical model, aside focusing on diagnosis of diseases and treatment of individuals sometimes leads to management challenges and neglect of people with disability (Waddell and Aylward, 2010).

The social model of disability is contrary to the medical model (Gilliard et al., 2005). This model sees disability mainly as a socially created problem and does not limit it only to the individual who has impairments and physical limitations (WHO, 2001; Mitra, 2006; Murphy et al., 2007). The social model in its broader context proposes that disability resides in the social, physical, economic and political environments within which people live (Murphy et al., 2007). For instance, poor architectural planning creates physical obstacles for people who use wheelchairs, those who cannot climb stairs and for other people who cannot open doors and all these exclude individuals with disability from participating in major aspects of life (Wendell, 1996). This model provides the framework for exploring the experiences of the aged with disability within the person-environment relationship, allowing for a rich assessment of age-related issues including QOL (Putnam, 2002). However, the social model of disability downplays the reality of what impairment means for disabled people and takes disability as an ordinary part of life (Albert, 2004).

Several theories and models of ageing, disability and QOL have been reviewed, however, the International Classification of Functioning, Disability and Health (ICF) model as portrayed in Figure 1 was adapted for this study (WHO, 2001; WHO, 2002a). The ICF model shows that the health condition of an individual is determined by the interaction of five broad factors (WHO, 2001). The body functions and structures depict the functioning or impairment of an individual's physiological, anatomical and psychological characteristics (WHO, 2001; van Roekel et al., 2014). The activity aspect describes a person's functional status including mobility, interpersonal interactions, self-care and domestic life (WHO, 2001; Stucki, Cieza & Melvin, 2007; Badley, 2008). The participation subcomponent relates more to the involvement of an individual in work/employment, interpersonal relationships and social life (WHO, 2002a; Kostanjsek, 2011; van Roekel et al., 2014).

Health condition (disorder or disease)

J I I
Body functions and « --------- ► Activities ----------------- ► Participation

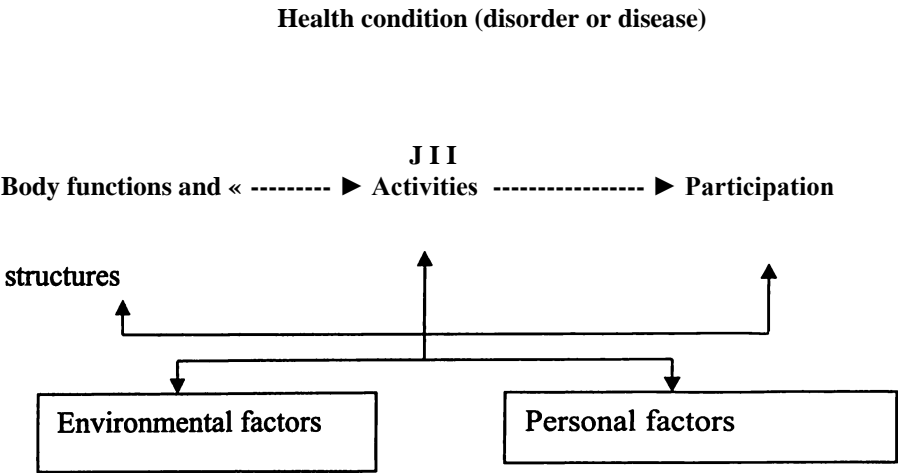structures

Environmental factors   Personal factors

Figure 1. Interactions between the components of the ICF
Source: WHO (2001).

The environmental factors are described as the external factors that make up the physical, social, and attitudinal factors that people live and conduct their lives (Hemmingsson & Jonsson, 2005; Saleeby, 2007). Personal factors on the other hand are individual's background characteristics such as age, sex, educational level, lifestyles and race (Jette, 2006; Saleeby, 2007; Quinn et al., 2012). The ICF model is a universal framework for assessing the health condition of individuals (WHO, 1996; WHOQOL Group, 1998). Though, the ICF model is robust in nature, it was adapted to show the interactions between the determinants of physical health QOL of the aged with disability (Figure 2).

Physical health quality of life of the aged with disability

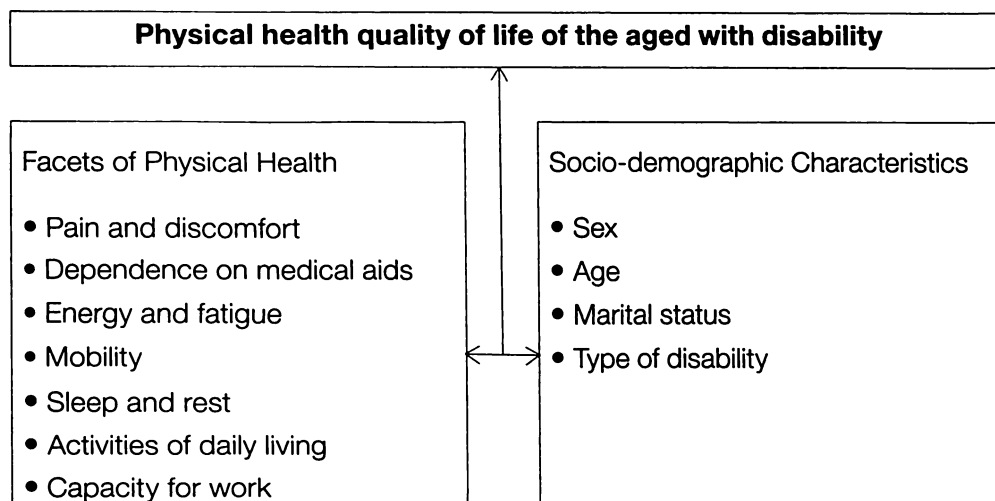| Facets of Physical Health	Socio-demographic Characteristics
• Pain and discomfort • Dependence on medical aids • Energy and fatigue • Mobility • Sleep and rest • Activities of daily living • Capacity for work	• Sex • Age • Marital status • Type of disability

Figure 2. An Adapted Conceptual Framework on Interactions Between the Determinants of Physical Health Quality of Life of the Aged with Disability Source: WHO (1996); WHO (2001).

From Figure 2, the physical health QOL of the aged with disability is determined by the interaction of facets of physical health and sociodemographic characteristics (WHO, 1996). Each of these two domains has other subcomponents which interact in an intra and inter-symbiotic manner to determine the physical health QOL of the aged with disability (WHO, 1996). For instance, it has been revealed that people with higher level of education are more likely to engage in healthy behaviours which could improve their physical health QOL compared to those with lower level of education (Van Oort, Van Lenthe and Mackenbach, 2004). The study was guided by the hypothesis that socio-demographic characteristics (sex, age, marital status and type of disability) of the aged with disability have no significant effect on their physical health QOL (Figure 2).

STUDY AREA

This study was conducted in the Upper West Region of Ghana. The region shares borders to the north with Burkina Faso, to the east with the Upper East Region, to the south with the Northern Region and with Cote d'Ivoire to the west (GSS, 2013c) (Figure 3). The region is located in the Guinea Savannah belt and covers a geographical area of 18,476 square kilometres (GSS, 2013c). One of the main reasons for choosing the Upper West Region

is that it has 3.7% of its population with some form of disability which is more than the national average of 3.0 percent (GSS, 2012).
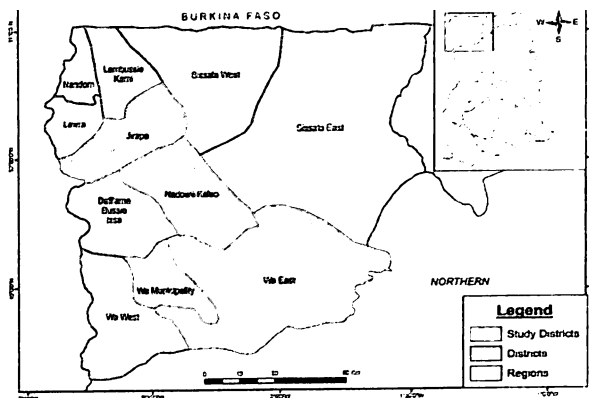

Figure 3. Map of the Upper West Region showing the Study Districts
Source: Cartography and Remote Sensing Unit of the Department of Geography and Regional Planning, University of Cape Coast (2016).

Another reason for the choice of the Upper West Region is that it has the highest proportion of rural population of 83.7 percent and it has been established that more than half (54%) of the aged population in Ghana reside in rural areas (GSS, 2012; GSS, 2013a). The concentration of aged population in rural areas coupled with out-migration of young people from these areas to urban centres for greener pastures leaves older people isolated with little means of support (WHO, 2002b). Consequently, the Wa Municipality, Nadowli-Kaleo, Jirapa and Wa East districts of the Upper West Region were specifically chosen for the study (Figure 3). The basis for the choice was that these districts had data on people living with disability.

DATA AND METHODS

The data for this paper was extracted from a thesis work submitted to the School of Graduate Studies of the University of Cape Coast, Ghana. The primary data were obtained from interviewer administered questionnaires whilst the secondary data were sourced from databases and reports of the Wa Municipality, Nadowli-Kaleo, Jirapa and Wa East District Assemblies, most particularly their data on lists of People with Disabilities (PWDs). The study population were the aged with visual and physical disability in the

study Districts. In this study, visual disability is a limitation in the performance of an individual's sight as a result of impairment or malformation of the eye (s) (WHO, 2011; GSS, 2012). Physical disability on the other hand is a limitation in the performance of an individual's motor skills due to loss of function of either/or the neck, hand, arm, waist, leg and knee as a result of impairment, malformation or accident (Castaner et al., 2009; GSS, 2012). Motor skills of an individual are actions that involve movements of the arms, legs, feet, or the entire body (Castaner et al., 2009).

The study targeted all aged who were 60 years or older with visual and physical disabilities. With respect to disability, the commonest disability type in Ghana is visual or sight impairment (29.0%) followed by physical challenges (18.4%) (GSS, 2013a). In all, the target population was 950 aged with disabilities comprising 350, 216, 200 and 184 from the Wa Municipality, Nadowli-Kaleo, Jirapa and the Wa East Districts respectively (Wa Municipal Assembly, 2015; Nadowli-Kaleo District Assembly, 2015; Jirapa District Assembly, 2015; Wa East District Assembly, 2015). The total number of the aged with disability was obtained from lists of PWDs from the Department of Social Welfare and Community Development in each of the study Districts. The study used a census survey design of the quantitative methodology to collect data from all the 950 targeted population based on the assertion that a large sample size is more likely to generate a normal distribution in a data set than smaller sample size (Barnett, 1989; Islam, 2018).

The data collection instrument for the study was a questionnaire. The questionnaire was adapted from the WHOQOL-BREF questionnaire (WHO, 1996; WHO,2004). The WHOQOL-BREF questionnaire contains three sections. The first section centres on socio-demographic characteristics but for the purpose of this study the socio-demographic characteristics were adapted from questionnaires of the 2010 Population and Housing Census of Ghana (GSS, 2010). The socio-demographic characteristics contain sex, age, ethnic group, religious affiliation, marital status, level of education, employment status, type of disability, biological children, surviving children and living arrangement (GSS, 2010). The second section cover overall QOL and general health whilst the third section has physical health, psychological health, social relations and environmental health QOL domains containing 24 facets (WHO, 1996). Nevertheless, the physical health QOL domain was excerpted to guide the study. This domain has seven facets consisting of pain and discomfort, dependence on medical aids, energy and fatigue,

mobility, sleep and rest, activities of daily living and capacity for work (WHO, 1996; Gholami et al., 2016). The questions and responses of each of the facets in this domain were constructed on a 5-point Likert scale (WHO, 1996). The instrument was pre-tested in the Lawra District because it has similar physical and socio-economic characteristics as the study districts. In the data collection, the research team translated the questions in the instrument into the most commonly spoken local languages such as Wali, Dagaare or Sissali. This was done because most of the respondents could not read due to illiteracy or effects of their disability. Any respondent who was not willing to participate in the study opted out without seeking for approval from the research team.

The University of Cape Coast Institutional Review Board (UCCIRB) gave approval (Ethical Clearance -ID No: UCCIRB/CHLS/2016/12) for the research to be conducted. Again, the WHO approved the adaptation of the WHOQOL-BREF questionnaire (WHO, 1996) for this study. In addition, the appropriate authorities of the various Municipality and District Assemblies and communities of the study areas were contacted and approval granted before the offset of the actual data collection.

In data processing and analysis, the questionnaires were edited and numbered serially. The International Business Machines (IBM) Corporation Statistical Product and Service Solutions (SPSS) version 20 (IBM Corporation, 2011) was used for data entry and analysis. The independent variables considered were: sex, age, marital status, level of education, type of disability and living arrangement. However, the coding of the independent variables of the questionnaire were as follows: Sex was male and female; Age was captured in absolute years but was re-coded into three age groups: 60 - 69 years, 70 - 79 years, and 80 years and older; Marital status was grouped as never married, married, separated/ divorced, widowed, and other; Type of disability was visual and physical disabilities; Level of education was captured as none, primary, JHS/Middle school, SHS/Vocational/Technical, Post-Secondary/Tertiary but these were later collapsed into two broad groups: illiterates and literates; living arrangement was categorised as: alone, nuclear family, extended family and other but was collapsed into nuclear and extended families. On the other hand, the dependent variable was physical health QOL.

The scores in this physical health QOL domain were transformed to a scale ranging from 0 to 100 to enable comparisons between different domains consisting of unequal numbers of items (WHO, 1996; Cao et al., 2016). In the 5-point Likert scale, the scores of 1, 2, 3, 4 and 5 were transformed into 20, 40, 60, 80 and 100 respectively (WHO, 1996). Also, this domain mean score was computed by finding the average of all the responses of the facets under it. A lower score indicated a lower QOL and higher score indicated a higher QOL (WHO, 1996; Khan et al., 2014). In addition, means, independent-samples t-test and one-way Analysis of Variance (ANOVA) statistical tools were used to analyse and present the findings.

RESULTS

Socio-demographic Characteristics of the Aged with Disability by Sex

Table 1 presents percentage distribution of the socio-demographic characteristics of the respondents by sex. The results showed that most of the aged with disability were aged 60 - 69 years (73.8%) with females (74.3%) being more than males (73.2%). Majority of the respondents were married (50.9%). Notwithstanding, 55.2 percent of females far more than 25.3 percent of the males were widowed. More than two-thirds of the respondents were illiterates (68.6%). More females (69.6%) than males (67.4%) were illiterates. About two-thirds of the aged with disability were unemployed (66.7%). Over half of the respondents had visual disability (52.0%). Many of the respondents lived in extended family homes (57.0%). However, more males (57.7%) than females (56.5%) lived in extended family homes.

Table 1: Socio-demographic Characteristics of the Respondents by Sex

Socio-demographic characteristics	Males (n = 359)	Females (n = 451)	Total (n = 810)
Age			
60-69	73.2	74.3	73.8
70-79	24.0	22.8	23.4
80+	2.8	2.9	2.8
Marital status			
Married	65.5	39.2	50.9
Separated/Divorced	9.2	5.6	7.1

Widowed	25.3	55.2	42.0
Level of education			
Illiterate	67.4	69.6	68.6
Literate	32.6	30.4	31.4
Employment status			
Self employed	3.6	4.7	4.2
Unemployed	69.1	64.7	66.7
Other	27.3	30.6	29.1
Type of disability			
Visual disability	54.0	50.3	52.0
Physical disability	46.0	49.7	48.0
Living arrangement			
Nuclear family	42.3	43.5	43.0
Extended family	57.7	56.5	57.0

Physical Health Quality of Life of the Aged with Disability

The socio-demographic characteristics by physical health QOL of the aged with disability are presented in Table 2. It is shown that physical health QOL mean scores were low and barely the same for both males (37.8) and females (37.9). Hence, there was no significant difference in scores of males (M = 37.8; SD = 5.47) and females (M = 37.9; SD = 5.76) in their physical health QOL [t (808) = 0.114, p = 0.909]. These results suggest that the gender of the aged with disability did not affect their physical health QOL.

Table 2: Socio-demographic Characteristics by Physical Health QOL of the Aged with Disability

					Facets of physical health QOL				
Sociodemographic characteristics	N	Pain and discomfort	Dependence on medical aids	Energy and fatigue	Mobility	Sleep and rest	Activities of daily living	Capacity for work	Overall Physical Health QOL
		Mean score	Mean score	Mean score	Mean score	Mean score	Mean score	Mean score	Mean score
Sex									
Male	359	35.7	38.2	38.8	37.4	39.6	36.6	38.2	37.8
Female	451	36.7	38.7	37.2	38.0	38.1	37.9	38.4	37.9
t-value		0.969	0.540	1.465	0.578	1.502	1.235	0.122	0.114

P-value		0.333	0.590	0.143	0.563	0.133	0.217	0.903	0.909
Age									
60-69	598	36.6	38.7	39.3	38.3	39.5	38.0	39.3	38.5
70-79	189	35.8	38.7	34.5	36.1	37.1	35.6	35.8	36.2
80+	23	32.1	32.1	30.4	37.3	34.7	33.9	33.0	33.4
F-value		1.154	2.987	9.632	1.792	2.864	2.506	5.300	19.950
P-value		0.316	0.051	0.000"	0.167	0.058	0.082	0.005"	0.000"
Marital status									
Married	412	38.0	40.1	40.0	38.6	40.1	39.6	39.2	39.4
Separated/ Divorced	58	33.7	35.1	36.9	37.2	35.5	35.5	37.5	35.9
Widowed	340	34.7	37.1	35.5	36.8	37.7	34.9	37.4	36.3
F-value		5.821	7.395	8.007	1.616	4.220	10.027	1.426	33.662
P-value		0.003"	0.001"	0.000"	0.199	0.015*	0.000"	0.241	0.000"
Type of disability									
Visual disability	421	35.6	37.9	37.2	37.5	37.9	37.6	37.6	37.3
Physical disability	389	37.0	39.2	38.7	38.1	39.7	37.0	39.0	38.4
t-value		1.409	1.477	1.377	0.594	1.864	0.574	1.326	2.737
P-value		0.159	0.140	0.169	0.552	0.063	0.566	0.185	0.006"

t = Student's t-test and F=ANOVA

* Significant at 5 % level (P<0.05); " Significant at 1 % level (P<0.001)

As shown in Table 2, physical health QOL mean score was highest for those aged 60-69 years (38.5) and lowest for those aged 80 years and older (33.4). Statistically, a one-way ANOVA was performed to determine the impact of age on physical health QOL of the aged with disability. A significant difference was found in physical health QOL [F (807) = 19.950 value, p = 0.000] across age of the respondents such that those aged 60- 69 years scored (M = 38.5; SD = 5.21), 70-79 years scored (M =36.2; SD = 6.31) and 80 years and older scored (M = 33.4; SD = 6.06). The effect size observed across the age groupings was small (eta sq = 0.047). This outcome implies that age determined the physical health QOL of the aged with disability.

The results in Table 2 revealed that physical health QOL mean score was highest for those who were married (39.4) and lowest for those who were separated / divorced (35.9). A significant difference was found in physical health QOL [F (807) = 33.662 value, p = 0.000] between marital statuses of the respondents. Those who were married scored (M = 39.4; SD = 4.21), those who were separated / divorced scored (M =35.9; SD = 5.56) whilst those who were widowed scored (M = 36.3; SD = 6.58). These resulted to a medium effect size (eta sq = 0.077). In effect, these findings suggest that the physical health QOL of the aged with disability differed depending upon their marital statuses.

Additionally, the findings in Table 2 highlight that physical health QOL mean score was higher for those with physical disability (38.4) as compared to those with visual disability (37.3). Statistically, there was a significant difference in scores between those with physical disability (M = 38.4; SD = 5.21) and visual disability (M = 37.3; SD = 5.95) in physical health QOL [t (808) = 2.737, p = 0.006]. The magnitude of the differences in the means between those with physical disability and visual disability was very marginal (eta sq = 0.008). These analyses indicate that the type of disability of the aged influenced their physical health QOL.

DISCUSSION

The study assessed the determinants of physical health QOL of the aged with disability. Analyses of the socio-demographic characteristics of the aged with disability showed that most of them were aged 60 - 69 years with more females than males. This is consistent with the assertion that females experience more disability in old age than males (Chappell and Cooke, 2010). It also supports the claim that women live longer and outnumber men at old age (Himes, 2002). The study also found that more females as compared to males were widowed. This is consistent with the assertion that women are more likely than men to lose their spouses and less likely to remarry if they are widowed (Kinsella and Phillips, 2005).

The results further depicted that more females than males were illiterate. This supports the findings that among the elderly in Ghana, 73 percent of the females compared with 45 percent of the males have no formal education (GSS, 2013a). In addition, more than half of the respondents had visual disability which is in line with the finding that the commonest type of disability of the elderly in Ghana is sight (GSS, 2013a). The results further showed that more males than females lived in extended family homes. This contradicts Mba (2007) assertion that elderly men are more likely to be living in nuclear households than elderly women.

In relation to QOL, most of the literature reveal that males and females differ significantly in their physical health QOL (Cheraghi et al., 2016). In the contrary, this study pointed that physical health QOL mean scores were generally low with little differences between males and females. However, this finding is similar to Cankovic et al. (2016) who found that physical health QOL mean scores did not differ significantly with regard to gender. It could

be explained that the mean scores in physical health QOL were generally low among the aged with disability due to their reduced physical capacity and inability to afford the needed medical aids to support them perform their activities of daily living.

It has been posited that age is a relevant determinant of individuals' physical health QOL (WHO, 1996; Kumar, Majumdar and Pavithra, 2014). This postulation reflected in this study such that the physical health QOL mean score was highest among those who were aged 60-69 years and lowest for those who were aged 80 years and older. The obtained results revealed that as the age of the aged with disability increased, their physical health QOL declined. These analyses affirm the observation by Chandrika, Radhakumari and DeviMadhavi (2015) that as the age of respondents increases mean scores of their physical health QOL decline.

Marriage, which is obligatory in traditional Ghanaian families provide older people with economic and human capital thereby enhancing their living conditions (GSS, 2013a). The results of this study showed that the physical health QOL mean score was highest forthose who were married and lowest among those who were separated *l* divorced. It could be inferred from the results that marital status of the aged with disability accounted for differences in their physical health QOL. The results agree with those of Soosova (2016) who found that living with a partner improved upon the physical health QOL of the aged. In addition, this finding supports the social model of disability which views disability mainly as a societal problem created through neglect and discrimination against persons with disability (Mitra, 2006; Waddell and Aylward, 2010).

Furthermore, it is noted that the aged differ in their physical health QOL depending upon their type of disability (WHO, 2001; Cankovic et al., 2016). In line with this assertion, the results of this study revealed that the physical health QOL mean score was higher for those with physical disability than those with visual disability. Besides, these findings support the adapted IGF framework that type of disability of the aged influences their physical health QOL (WHO, 1996; WHO, 2001).

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that the socio-demographic determinants of physical health QOL of the aged with disability were age, marital status and type of disability. Those who were aged 60-69 years, those who were married and those with physical disability respectively scored highest in physical health QOL. It is important for families, the Department of Social Welfare and Community Development of Ghana, non-governmental organisations and benevolent individuals to provide support including nutritional food, clothing, medical aids, physical exercise programs and possibly acupuncture interventions for the aged who are aged 80 years and older, the separated *I* divorced and those with visual disability in order to improve upon their physical health QOL.

The results of this study could guide the Department of Social Welfare and Community Development of the Metropolitan, Municipal and District Assemblies in Ghana in formulating and implementing policies to improve the physical health QOL of the aged with disability. Furthermore, the adapted International Classification of Functioning, Disability and Health (ICF) framework was useful and could guide other researchers to conduct similar studies on QOL of the aged with disability (WHO, 1996; WHO, 2001). Despite the contribution of this research to knowledge, it was bounded to some selected districts in the Upper West Region of Ghana and so future studies are recommended for the other regions of Ghana so as to give a nationwide picture of the physical health QOL of the aged with disability.

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