Quality of life among the Elderly in Ghana: The contribution of Stroke

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OBJECTIVE

☐ This study examined the effect of stroke on the quality of life of the elderly in Ghana

BACKGROUND

☐ Globally, the proportion of the world's population 60+ will double from 11% (605 million) to 22% (2 billion) between 2000 and 2050 (**WHO, 2014**). In Ghana, the population of the elderly has increased more than 5-fold from 213,477 in 1960 to 1,643,381 in 2010 (**Ghana Statistical Service, 2010**). Research has shown that that there is an inverse relationship between ageing and quality of life. This means that as people age, they assess their quality of life lower and this has implication on survival.

☐ Also, as population becomes ageing, the pattern of disease shift to chronic non-communicable diseases (**WHO, 2014**). Stroke has been shown to contribute significantly to burden of disease globally (**WHO, 2010**). Stroke impact can be devastating, leaving a person with different disabilities (**WHO, 2012**). In Ghana, stroke is the second leading cause of death (**WHO, 2010**). With the emerging elderly population in Ghana, the incidence of stroke in the country may continue to grow at an alarming rate if serious measures are not put in place to curtail this (**Darkwa, 1999**).

☐ Stroke survivors have been shown to have poorer quality of life than those without stroke (**Hackett et al., 2000; King, 1996; Ann-Cathrin, 2005; Javier et al., 2000**)..However, the extent of the differences remains unknown in Ghana.

☐ In this study, Quality of life (QOL) is defined as *"individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns"* (**Meeberg 1993; WHO, 1997; Oort, 2005**). Adequate knowledge of this concept among stroke survivors is necessary for stroke rehabilitation and it is an effective prognostic indicator that can be used to determine survival of elderly with stroke (**Fallowfield L, 2002**).

DATA AND METHODS

☐ We retrieved data from the Wave 1 of the World Health Organization (WHO) survey on global Ageing and Adult Health (SAGE) conducted between 2007 and 2008.

☐ The sample size was limited to 4724 respondents aged 50 years and above. At the bivariate level, two-sample ttest were used to compare the mean quality of life of stroke survivors and that of the other elderly. Linear regression was used to show the effect of stroke on QOL, controlling for background characteristics of the elderly.
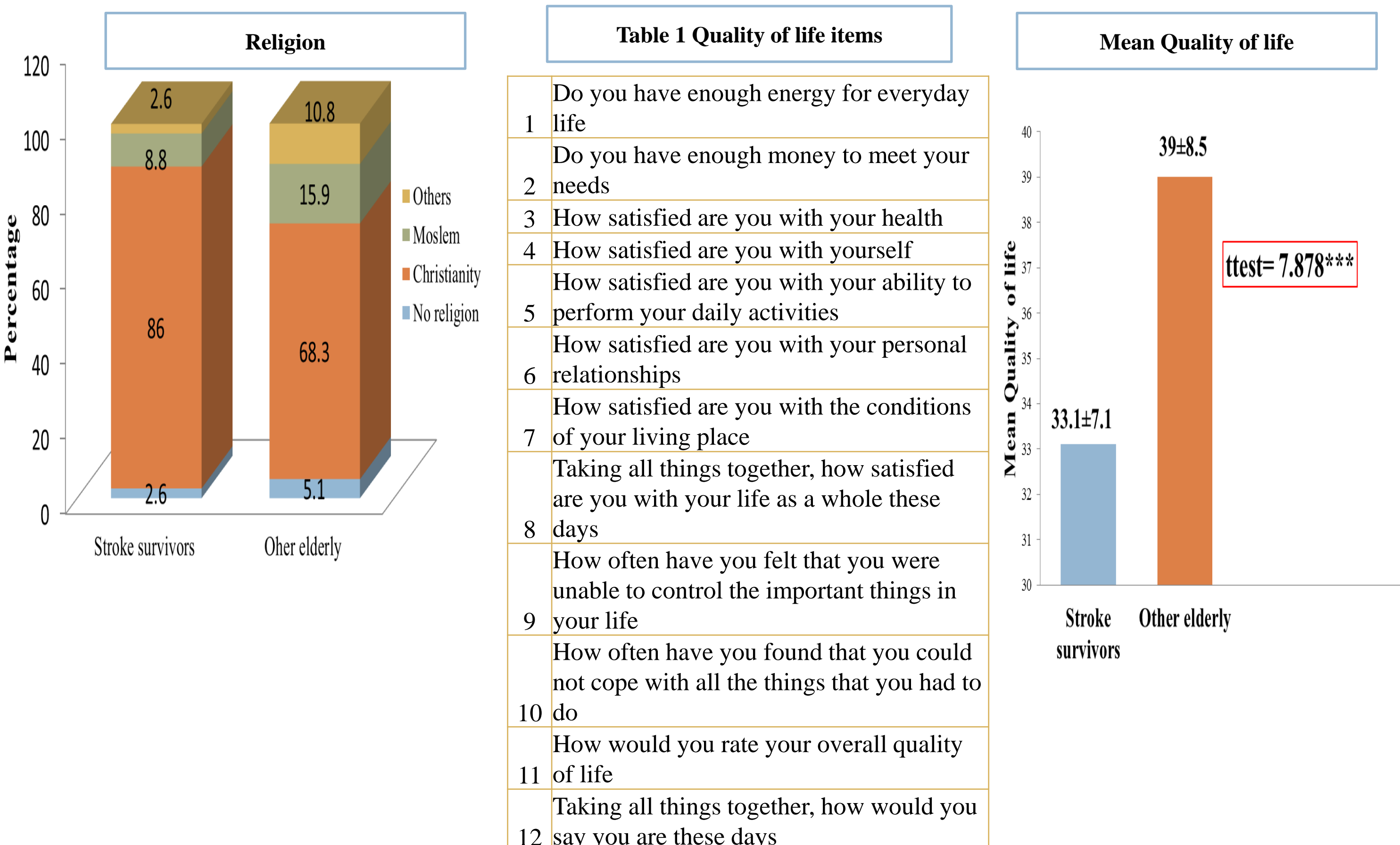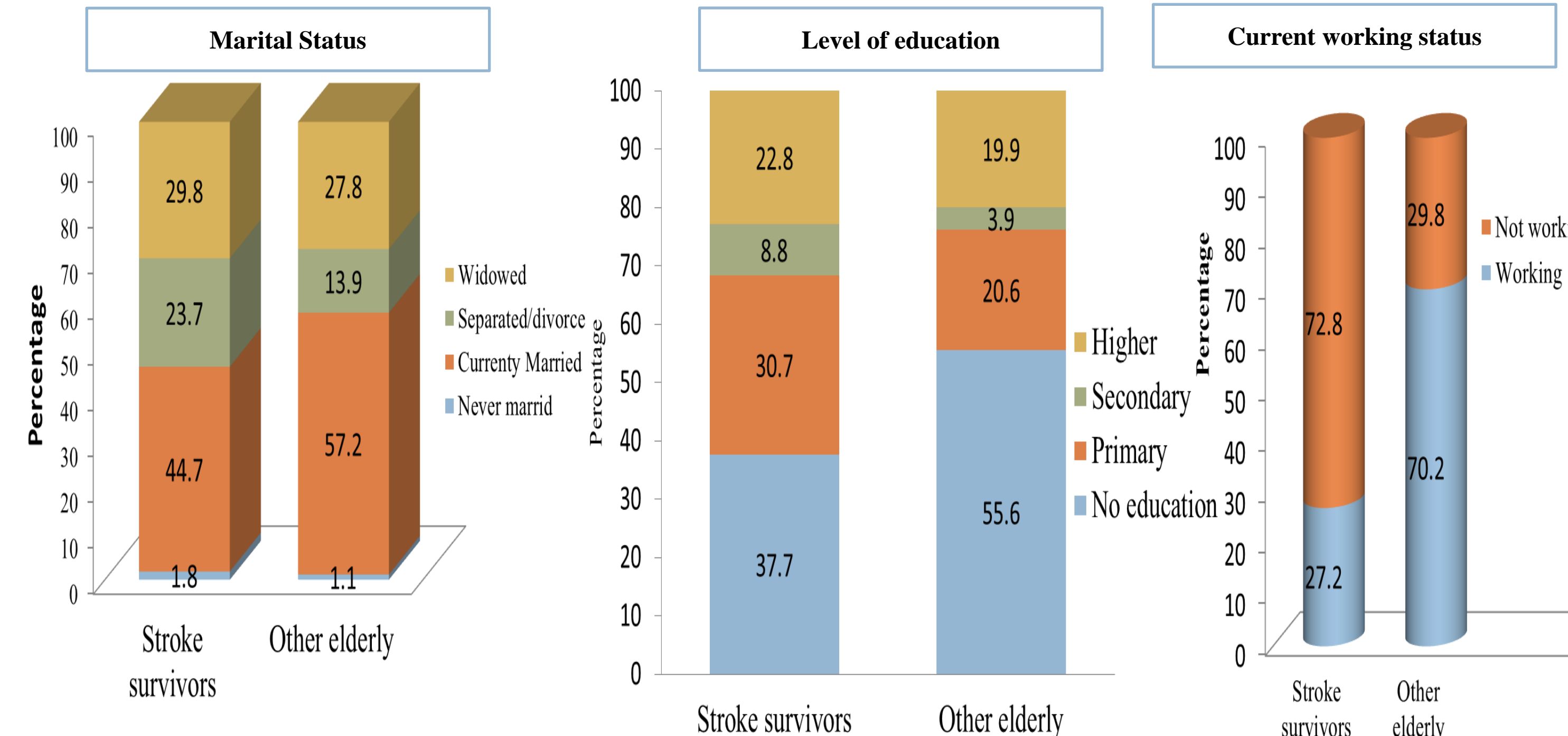
Measures

☐ Quality of life for stroke survivors and the other elderly population was assessed using the World Health Organization Quality of Life (WHOQOL) measure. The scale provides responses on thoughts of respondents about their lives and life situation (subjective well-being), and how they feel about their health and quality of life.

☐ WHOQOL consists of 12-item, measured on a 5-point scale ranging from 1[very dissatisfied] to 5 [very satisfied] (Table 1). The score ranged from 12-60 with higher score indicating higher QOL. The factor analysis showed that the items loaded on one factor thus explaining one latent variable. The items also showed a Cronbach's alpha of 0.89. This means that the scale is reliable.
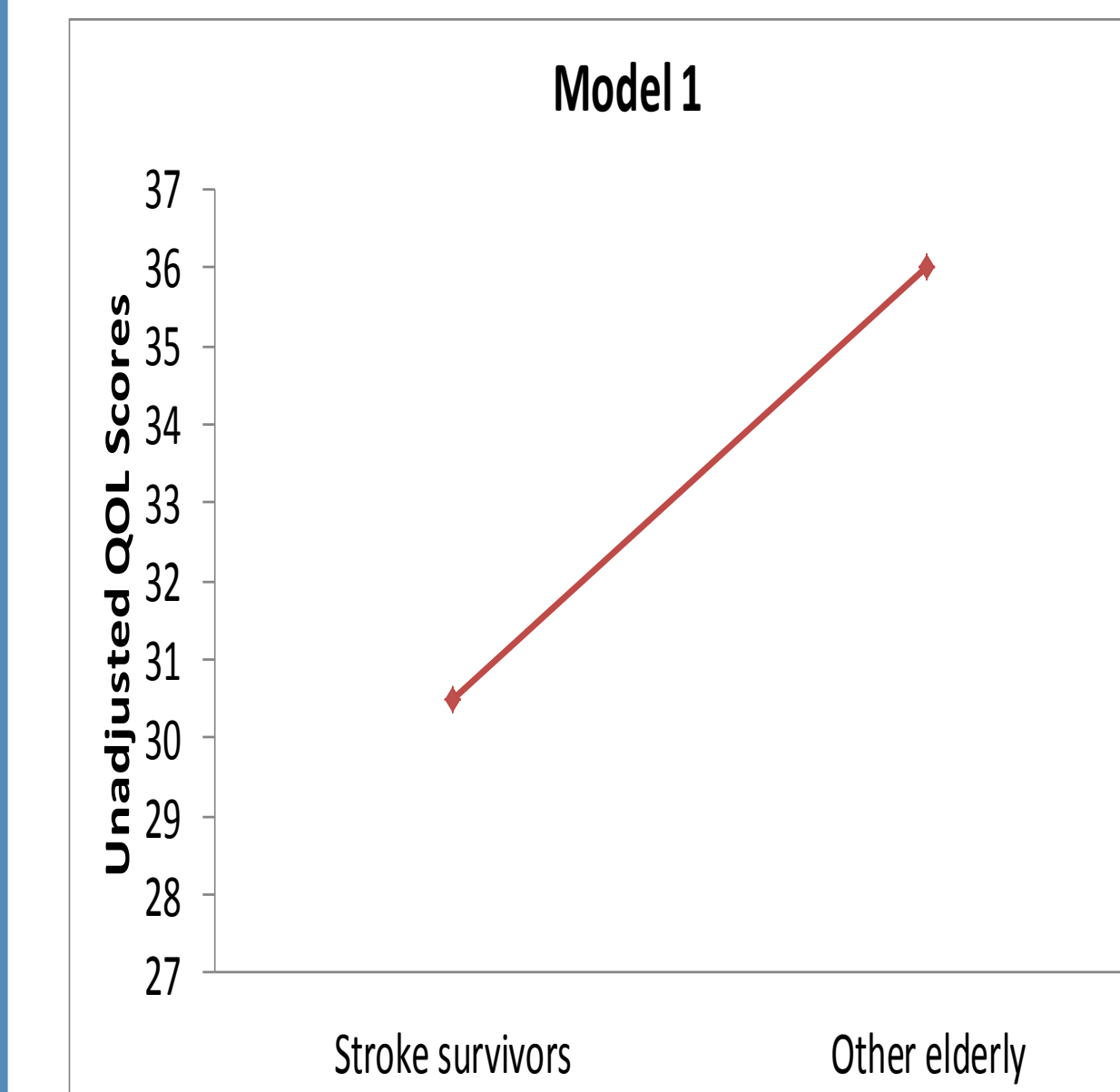
RESULTS

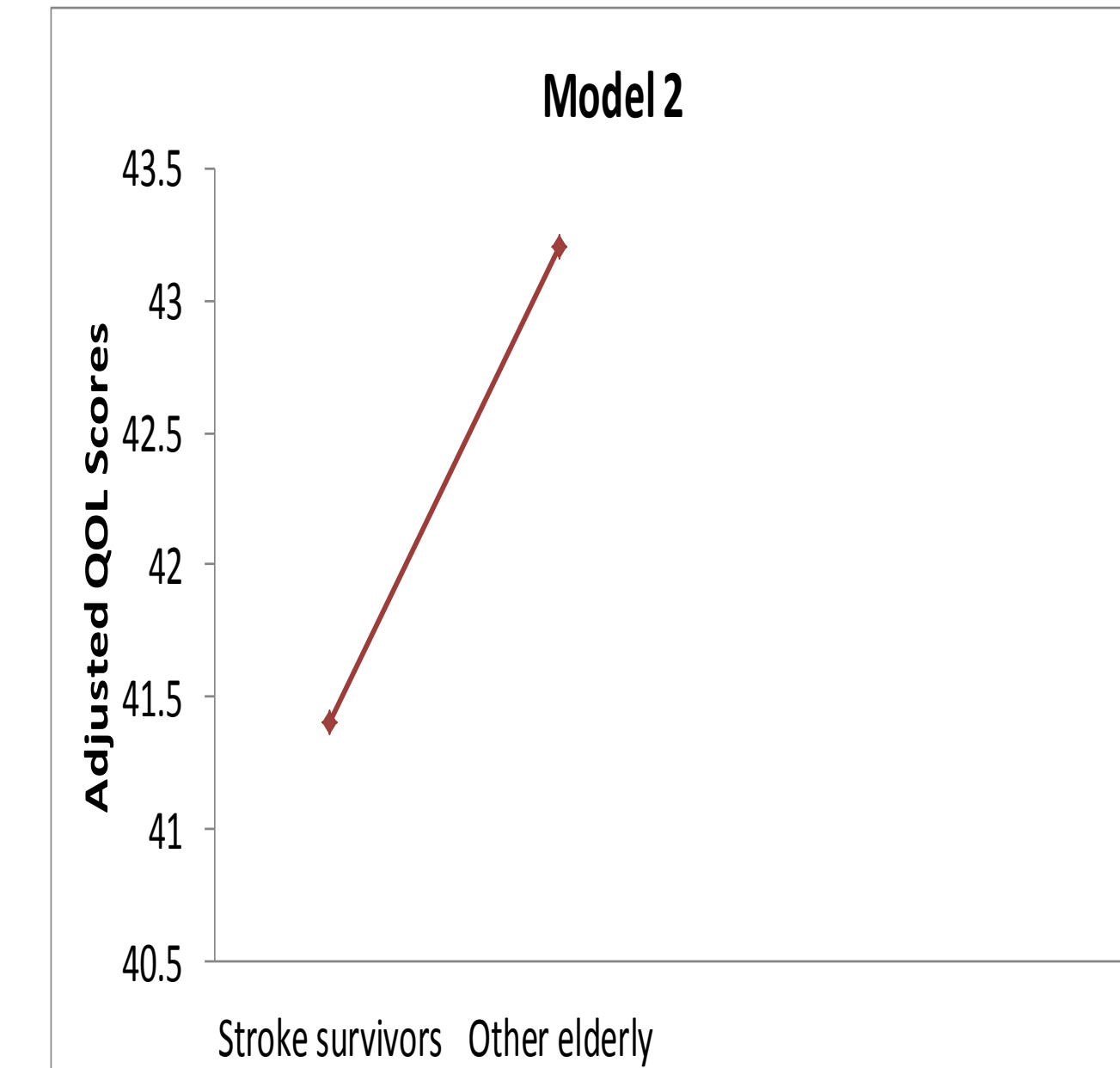### Socio-demographic characteristics of stroke survivors and other elderly

Proportion of SS and other elderly

Mean age

Place of residence

Marital Status

Level of education

Current working status

Religion

Table 1 Quality of life items

1	Do you have enough energy for everyday life
2	Do you have enough money to meet your needs
3	How satisfied are you with your health
4	How satisfied are you with yourself
5	How satisfied are you with your ability to perform your daily activities
6	How satisfied are you with your personal relationships
7	How satisfied are you with the conditions of your living place
8	Taking all things together, how satisfied are you with your life as a whole these days
9	How often have you felt that you were unable to control the important things in your life
10	How often have you found that you could not cope with all the things that you had to do
11	How would you rate your overall quality of life
12	Taking all things together, how would you say you are these days

Mean Quality of life — ttest= 7.878***

Relationship between the Quality of life of stroke survivors and other elderly population

Unadjusted effect of stroke on QOL — Model 1

Adjusted effect of stroke on QOL — Model 2

Note: Age , sex, Marital status, place of residence, level of education, employment status, Hypertension, diabetes, angina, arthritis and chronic lung cancer were controlled for in Model 2

Key Messages

Stroke contributed significantly to QOL of the elderly in Ghana

Elderly living with stroke assessed their QOL lower than those without stroke

DISCUSSION AND CONCLUSION

☐ The study shows that quality of life of people living with stroke in Ghana was significantly lower than that of the general elderly population. This finding confirms Bury's theory of biographical disruption that chronic illness is a catastrophic event that affects all aspects of an individual's life (**Bury, 1982**). Also, the finding confirms what studies have observed that the impact of stroke can be devastating because of the severe disabilities of the disease.

☐ Further, stroke generates different consequences because it increases dependency on others for activities, alteration in mood and disruption of social interaction (Clark et al., 1999; Gillen 2006; Hackett et al., 2000; King, 1996). Although studies have shown that the QOL of stroke survivors is worse than that of the general population (**Jonsson et al., 2005; Bugge and Hagen, 2001; Hopman and Verner, 2003; Kauhanen et al., 2000; Anderson et al., 1996**), many of these studies did not compare people of the same age group. This study adds to the body of knowledge by looking at difference in QOL between stroke survivors and the general elderly population. This shows that stroke is indeed a disruptive event which alters people's life trajectories.

☐ The main limitation of this study is that the findings may not be generalizable to other countries due to differences in value systems, which is a major focus of the QOL.

☐ In conclusion, this study showed that stroke contributed significantly to reduced QOL among the elderly in Ghana. We recommend the need for more studies on stroke in Ghana, with specific focus on the lived experiences of stroke survivors.