Using Mobile Outreach Psychosocial Services to Improve Elderly Quality Of Life in Wakiso District Uganda: A Randomized Controlled Trial

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Abstract. *The main objective of this study was to ascertain whether a system of educated, empowered and skilled Community Geriatric Volunteers could be developed and adopted for use as a Government Local structure aimed at improving the quality of life of elderly persons in Uganda. A Randomized Controlled Trial (RCT) was conducted to compare effects of a Mobile Outreach Psychosocial Services (MOPS) model and Treatment as usual programme on the different QoL domains in community-dwelling elderly was conducted. The experiences of the MOPS model were found to be twofold. On one hand, the positive experiences indicate that the model empowered the participants and strengthened their self-esteem, making them feel in control over their situation. This motivated them to engage in QOL-promoting activities that included involvement in psychosocial groups, economic strengthening groups, mobilization and sensitization for elderly support, and home visits to the frail elderly. On the other hand, the model was experienced as being of no value by a few. These findings partly explain the positive results from the MOPS model interventions and emphasize that one challenge for health care professionals is to motivate the elderly who are healthy and independent to engage in elderly QOL related projects, health-promoting and disease-preventive activities.*

Keywords*:* Elderly health, Mobile outreach psychosocial services; Community geriatric volunteers

Introduction

Insufficient information on how the quality of life can be mediated by economic wellbeing, social support, and the health status among elderly adults has been noted. No studies have documented directly on the effect of lack of economic wellbeing, social support, and health status, and the impact on the quality of life among the elderly adults. It has then been further unclear, however, how good social support, improved economic wellbeing, access to health can improve quality of life if the elderly adults are to stay with their natural degeneration syndromes while in their homes. In view of the above, a Randomized Controlled Trial study was conducted investigating how the Quality of life among elderly adults can be improved by perfectioning on economic wellbeing, social support, and health status.

Like other developing countries, the population of elderly adults 60 years and above is increasing in Uganda. A prediction by WHO (2010)

showed that the global population of those aged 60 years and above will double from 600 million in 2000, to about 1.2 billion in 2025 and around 2 billion by 2050. This increase is known worldwide and raising concern in many countries. Less is known about systems that can provide for this increase to cope with the enormous pressure that this will cause (WHO, 2008). There is a need for all governments to come up with sustainable solutions to the plight of the elderly.

In the African traditional systems, the family has been the first line of support while community support is the second assuming that Elderly care has always been the duty of biological children, clan members and significant others which is no longer the case. Due to urbanisation, economic migration, death due to disease especially the young adults dying of HIV, the elderly people are left alone in the rural communities with no outright source of social support (Philip, 2006). Worse still, they are left to offer care to grandchildren many of whom are orphaned. Such a lack of a concrete social support system leaves them quite vulnerable and in misery thus affecting their quality of life.

According to Golaz and Rutaremwa, (2011), the majority of older persons live in semi-permanent or makeshift structures. These are reported to be usually grass thatched with mud walls, while the homeless ones move from place to place, sometimes occupying abandoned structures, exposing them to cold and harmful animals and insects. Such a poor state of economic wellbeing exposes both the elderly and their dependants to diseases that are related to the poor conditions they live in (Baryayebwa, 2005). Many of the elderly are reported to depend on one meal a day, two or more days, a situation that affects their health status negatively (Kikafunda and Lukwago, 2005). This has been reported to leave many emaciated and exposed to diseases that could be avoided. The elderly are further often found to have many untreated common health problems which often lead to complications and permanent incapacitation with high prevalence of psychiatric morbidity thus a miserable health status (Dzuka & Dalbert, C. 2000; Nakasujja et al, 2007). There are no systems in Uganda that can track and halt such misery citing a need for a community based approach to programming that will help alleviate such suffering and penury.

This study is thus an attempt to understand economic wellbeing, social support and health status as factors influencing the quality of life of elderly people in Wakiso District, Uganda, and further intervene by implementing a mitigation strategy to reduce on the negative impacts brought on by the ageing process among this population group. Furthermore, it is hoped that the intervention will form sustainable

systems to inform policy and elderly stakeholders on what can be added on the existing systems to improve the quality of life of elderly people in Uganda. The relationship between the elderly people's economic wellbeing, health status, and social support, and the overall quality of life of the elderly people in Uganda, will then be established. Wakiso District will be taken as the case study to investigate the quality of life of the elderly; 60 years and above in the spheres of their Economic wellbeing, Health Status and Social supports with a view to try out appropriate interventions and later inform on strategies needed to improve the quality of life of elderly persons in Uganda.

Economic Well-Being and Quality of Life among Elderly People

Aging is a natural life course process, and which is an outcome of the demographic transition, and as well experienced differently among the different ages specifically with the change of societal norms and conditions (Gilleard & Higgs, 2007; Phillips, 1998; Vincent, 2003). The problems of elderly population have been reported to become manifold specifically when elderly people are not accompanied by socio-economic development. Furthermore, more reports on the Low and Middle Income Countries (LMIC) such as those in Africa signify the majority of the workforce as involved in the informal economy whereby, most of the retired people in the older population live without a cover of pension or any type of social security scheme. The Population Secretariat, (2013) stated that many older people in Uganda live in rural areas, with fewer social services yet they are often denied employment and access to insurance or credit schemes thus a life of penury. Pensions are rare and mainly concern former civil servants. This therefore means that a large segment of the elderly population, because of their relatively disadvantaged lived socioeconomic position; continue to live on low levels of income than paid workers including those receiving pensions and other retirement benefits. Other anecdotal reports show that to some elderly, no formal employment was enjoyed either previously to cause a pension, or currently to earn a living among this group. These situations are increasing the dependency ratio of old age people and yet the people to be depended on have either been urbanized or have died due to HIV, which greatly impacts on their quality of life (Kyaddondo, 2014). With an estimated 1.6 million people living with HIV, and an estimated 63,000 Ugandans died of AIDS-related illnesses and an estimated HIV prevalence among adults aged 15 to 49 stood at 7.4% (Avert, 2013), the elderly adults in Uganda are likely to continue with the trend of economic strain having to take on lost

responsibilities of the orphans left behind by the reproductive group and as well experience poverty. A common practice in Uganda, as in many African societies, when older persons living alone need help, is to entrust them to one of their grandchildren (Golaz and Rutaremwa, 2011), thus recycling the generation of poverty at most times.

Poverty is known to affect all human populations but on the lives of the elderly people it gets worse specifically due to the physical degeneration and lost income status. It is reportedly evident that income is a fundamental contributor to good quality of life and low income results in loss of self-esteem, illnesses and ultimately death.

Many researchers have singled out the older population as prone to poverty. Findings by Najjumba-Mulindwa (2003) showed the majority of people perceive old age to be characterized by ill-health, dependency, low incomes and depreciated asset bases. When this is coupled by changed body features and the declining physiological state, most of the elderly will be left in abject poverty. Further findings showed that, the single, widowed, disabled, women and the elderly living alone are the elderly people most prone to; "*chronic poverty resulting from unemployment, chronic ill health, lack of skills, HIV/AIDS, lack of social security systems, low land productivity, political instability, low agricultural returns and functional inability due to old age, which predisposes them to mental stress and depression*". Similarly, Eaton et.al (2001) explained that lower socioeconomic status cannot only raise the risk for mental disorder, but also prolong the duration of episodes of mental disorders through an etiologic process possibly unrelated to causation. This phenomenon tends to explain why a correlation exists between economic wellbeing and the health status of elderly people thus the impact on quality of life.

Social Support and Quality of Life among Elderly People

Social support has been cited as a particularly important issue for older adults as common life events may jeopardize the support networks of this age group (Kahn, Hessling, & Russell, 2003). According to Lercher, (2003); Osborne et al, (2003); and Staquet, Hays & Fayers, (2000), there is an upward shift in life expectancy that calls for more focus on health and preventive measures ensuring that longevity can be accompanied by quality of life. Old age has often been associated with health problems and irreversible decrease in functional capacity. The trend is a universal natural phenomenon for physical, economic, and social degeneration is expected as people age.

Many theories explain the trend which include as here explained. The Stress and Coping Theory as quoted in Barrera, (1986) clearly explains that social support protects people from the bad health effects of stressful events (i.e., stress buffering) by influencing how people think about and expend conscious efforts to solve personal and interpersonal problems, and as well how they seek to master, curtail or tolerate stressful or conflicting events. It is assumed that by the time people get older, they have encountered many losses of life for significant others, personal property, and personal prestige. It is assumed that if an elderly person is surrounded by a social support system, the effects of stressful situations may be less which is no longer the same in with the loss of significant others due to life style diseases, urbanization and economic migrations.

The Relational regulation theory as cited by Lakey & Orehek (2011), explains the effects (the direct effects hypothesis) between perceived social support and the elderly's physical and mental health whereby the perceived support having both buffering and direct effects on mental health. The theory was further proposed in order to explain perceived support's main effects on mental health which cannot be explained by the stress and coping theory. The hypothesis is that the elderly will be able to regulate their emotions through ordinary conversations and shared activities with the social support system rather than through conversations on how to cope with stress. In the absence of significant others, the elderly adults will have nothing to succumb to. The regulation further hypothesizes that the relationship between the social support providers, discussion topics and activities that help regulate emotions are primarily a matter of personal taste and can promote good physical and mental health (Lakey, 2010). With many elderly people staying on their own, the theory cannot be tenable.

The Life-span theory as well explains the relationship between social support and health, which emphasizes the differences between perceived and received social support. According to this theory, social support develops throughout the life span, but especially in childhood bonding and attachment with parents and significant others. Much as the theory may explain what needs to be done to the elderly, the elderly adults might have moved quite far from their childhood bonds and as well left with no parents. However, the theory explains that social support develops along with adaptive personality traits such as an elderly's unfriendliness, low neuroticism, high expectations, as well as social and coping skills which include both introversion and extroversion. Both introversion and extroversion may happen depending on emotional states and quality of life of the elderly adults.

These further coupled together have been reported to influence the elderly quality of life by promoting health practices (e.g., exercise and weight management) and by preventing health-related stressors (e.g., job loss, divorce) (Lakey, 2010). Evidence for life-span theory includes that a portion of perceived support is trait-like and that perceived support is linked to adaptive personality characteristics and attachment experiences (Willis, 1991). This is expected to be rejuvenated in the model that will be designed in the study.

Social support represents a main source of personal care and well-being and is more critical and amplified by the various problems connected to an ageing population. A study done by Chronic Research Centre (2006) cited that the elderly people have limited social support. They further narrated that in the past, families easily cared for their parents. However, the harsh economic conditions which most working Ugandans now face, coupled with high levels of urbanisation, severely limit their ability to assume these traditional roles. This has caused a growing tendency among income earning Ugandans to contrite care and support more to nuclear than the extended families. Older persons are then perceived more as dependents than active household members which make them susceptible to vulnerability. Social vulnerability, which is a concept related to a low social support, is higher among people with individual frailty and increases with age, a concept common among the elderly people (Litwin H, Landau R., 2000). Citing the Ugandan elderly population, such a situation may not be any different in Wakiso District. It is thus a challenge for government and society to maintain and promote the quality of life of older adults in the absence of a supportive and sustainable social support system.

Social support of the elderly has been documented as having a positive influence and in particular emotional support from offspring, which positively associates with a higher degree of well-being, less distress and cognitive impairments among older people especially those without a spouse (Okabayashi, et al, 2004). Lack of social support has been reported to always lead to loneliness. Conversely, loneliness in old age has been suggested to be a risk factor for morbidity and mortality (Luo, 2012). Research about social support (and related concepts) carried out in different contexts and cultures have further demonstrated that there is a strong relationship between quality of life throughout the lifespan and social support, but particularly in old age (Takahashi& Kai, 2007). Quality of life in old age is a significant challenge for gerontological researchers and practitioners with the increasing life expectancy worldwide (Chalise, Saito, & Kai, 2007a; Chalise, Saito, Takahasi, & Kai, 2007b). It has been estimated that 25% of the world's

population experiences episodes of poor quality of life on a regular basis (Miedema & Tatemichi, 2003), although its prevalence in the elderly population varies from 7% (Victor, Scambler, Bond, & Bowling, 2000) to 49% (Holmen, Ericsson, & Winblad, 1994).

The experience of quality of life impacts individuals across the life spectrum and has physical, psychological, and social repercussions (Lauder, et al, 2004). Poor Quality of life lowers life expectancy and is associated with poor medical outcomes in old age especially when this is coupled with poor social support (Victor, Scambler, Bond, & Bowling, 2000). There is a strong relationship between depressive symptoms and quality of life (Holmén, Ericsson, & Winblad, 1999; Mullins & Dugan, 1990; Prince, Harwood, Blizzard, Thomas, & Mann, 1997). Lack of social support is then referred to as number one cause of such morbidities among the elderly.

Another study reported that social support among the elderly adults is often assessed under three categories: perceived support, support behaviours (received support), and support resources (Barrera, 1986; Vaux, 1985). Perception of support refers to one's subjective assessment of the availability and adequacy of support which cannot be defined among the rural elderly adults. Research suggests that this perception affects one's quality of life as much as received support (Thoits, 1995; Wethington & Kessler, 1986). Support behaviour describes the actual emotional and/or instrumental assistance received. Support resources are simply the social support networks (i.e., the sources of one's social capital, or the advantage received through social interaction) (Wu & Hart, 2002). The most common sources of social support are spouse (or partners), children, and siblings, followed by close friends (Campbell, Connidis, & Davies, 1999; Lynch, 1998). In this case, many people forming the social support services are not within reach of the elderly support networks. The spouses may have died or re-married in many circumstances, while the children may have moved on for economic gains or died due to diseases. The convoy model of social support (Kahn & Antonucci, 1980) postulates that each individual is surrounded by a convoy, a set of people to whom the individual maintains reciprocal emotional and instrumental support. This convoy includes specific people who make up the person's social network and affects quality of life, for married people in particular. The prevalence of each type of support, however, varies according to union, parental, and socioeconomic statuses, as well as gender, age, and ethnicity among the elderly adults (Barrett, 1999; Lynch, 1998; Thoits, 1984; Turner & Marino, 1994). For example, research has found that the perception of available support is higher among the married, increases with

socioeconomic and employment status, but decreases with age (Thoits, 1984; Turner & Marino, 1994). Such an analysis clearly depicts the level of vulnerability caused to the elderly relating social support to their quality of life.

Women generally report more perceived support than men (Ross & Mirowsky, 1989). According to the hierarchical compensation model, other relatives, friends, and neighbours are the preferred sources of assistance in serial order following spouse and children, with formal organizations the least preferred and least likely to be called upon for assistance (Antonucci, 2001; Cantor & Little, 1985). According to Biegel (1985), family, friends, and neighbours are important sources of support to elderly people. These social networks help to buffer stress and depression and enhance individual's morale and wellbeing (Bankhoff, 1983; Litwin, 1995; Schaefer, Coyne, & Lazarus, 1981). With regard to depressive symptoms among older people, Dean and colleagues (1990) found that a spouse, friends, adult children were ranked in the descending order of importance, whereas other relatives showed no significant effect. The above explained shows that the quality of life of Ugandan elderly will be left in a state of jeopardy. Studies by URAA (2002) revealed that the elderly no longer uphold their positions of status among the community where instead they become care takers of children of their children when these get urbanized while looking for greener pastures or dead due to HIV.

One study in Spain showed no significant association between social support and quality of life among older Spaniards, despite their living arrangement with their children and contribution (help) in the family (Antonucci, Okorodudu, & Akiyama, 2002). Such a study contrasts the prevailing situation in Uganda. Given the cultural set up in our country Uganda, a significant impact on health status of the elderly is known to exist as a result of good and caring social support systems. Numerous investigators have suggested that social support has a major impact on the health and well-being of the elderly, but it is less clear how this effect might operate (George, 1989). Further, there is lack of research on the gender difference in the social support exchange between elderly men and women. There is also a lack of research that deals with how the source affects the social support received and provided regarding loneliness of older adults (Chalise et al., 2007b).

Another study done in Nepal stated that aging is cited as more a demographic phenomenon (involving fertility and mortality decline) rather than a result of socio-economic development in the last few decades (Chalise & Brightman, 2006). Nepal is cited due to its similarities with Uganda. According to the 2001 population census of

Nepal, the elderly population constitutes 6.5% of the total population and annual elderly population growth rate was 3.39. Nepal is suffering from widespread poverty, inadequate health facilities, insufficient security schemes, stagnant economies, and the increasing prevalence of HIV/AIDS. Therefore, the country is less prepared to address the rapid pace of change and its consequences to its rapidly increasing elderly population. There is also a lack of reliable national data and scientific research on the situation and needs of older persons. Like many other countries in Africa and Asia, the majority of their elderly work in the informal sector. Children are regarded as security for the old age. Culturally speaking, taking care of parents is the responsibility of children, especially the sons and daughters-in-law. Although most forms of support flow to the elderly, support was reported to flow from the elderly to their children in the form of goods, labour, and services. The elderly were reported to help their sons and daughters-in-laws in different household work with the main roles as participating in family decision-making and assuming roles of leadership in the family and community. This then forms a concrete culturally imposed support system that caters for the elderly which may not be seen happening among the communities of study in Uganda thus needing a system that will define what social support entails.

Health Status and the Quality of Life of Elderly People

Many studies have reported that as people age, they become more susceptible to disease and disability. However, the same studies have reported that much of the burden of ill health among older people can be reduced or prevented if adequate measures are put in place to adequately address specific risk factors among the elderly.

The World Health Organization (WHO) defined health as the "complete state of physical, mental, and social well-being and not merely the absence of infirmity" (WHO 1948). In its definition the WHO acknowledged that an individual who is technically "cured" or free of disease may not necessarily be "well" and went on to further indicate the three dimensions of well-being which are the physical, Mental and Social Wellbeing. Physical well-being assumes the ability to function normally in activities such as bathing, dressing, eating, and moving around and with no infirmity which may not be the case for the elderly adult. Likewise, mental well-being has been reported to imply that cognitive faculties are intact and that there is no burden of fear, anxiety, stress, depression, or other negative emotions, a situation unlikely among the elderly adults. Social well-being relates to one's ability to

participate in society, fulfilling roles as family member, friend, worker, or citizen or in other ways engaging in interactions with others. Due to the natural degeneration, the elderly experience falls and injuries as a result of frailty coupled with reduced movements and body functions. Falls and the injuries are a common occurrence and offer a large share of the burden of disease and disability on older people. The risk of falls increases steeply with age. Injuries from falls (such as femur fracture) usually require hospitalization and costly interventions, including rehabilitation, and cause much of the functional limitations that lead to the need for long-term care, including admissions to nursing homes which is not tenable among the elderly in developing countries.

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The efforts to understand relationships are particularly relevant given the aging of the population. Consequently, an increasing international awareness of health issues relating to aging populations has been reported. As the percentage of the elderly population over 60 increases, and is expected to more than double by 2020, an increase in the number of older people presenting with numerous elderly diseases will

succumb. There is a prediction of challenges to the health care system, and especially to health care workers providing services to older clients with both acute and chronic conditions. Currently, studies have reported on the changes to the health care system and shortage of health care personnel as aspects that make it difficult for older adults to access adequate health care of suitable quality. In light of the above, health care provision for older people needs to be addressed.

As Gift and Atchison (1995) stated, measuring health-related quality of life allows assessment of "the trade-off between how long and how well people live." The study further indicated that diseases and disorders that result in dental and craniofacial defects can thwart that goal, disturbing self-image, self-esteem, and well-being having oral-facial pain and loss of sensorimotor functions limiting food choices and the pleasures of eating, restrict social contact, thus inhibiting intimacy, a factor known to dominate the old elderly. Given such a finding, more factors related to elderly physical degeneration can cause inhibition in social attachment and a reduction in self-esteem thus making it difficult for the elderly to seek healthcare. A social status variable, such as individual profession, contributes to one's self-esteem, which is considered an important coping resource related to health among the elderly which status is likely to have been lost as a result of job loss or retirement. Although personal occupation is a major component of socio-economic status and is consistently related to health outcome and economic exclusion, it can only be assessed among people who are in the paid labour force (Population Secretariat, 2013), which may not apply to the elderly. This then indicates that the level of economic wellbeing and the health status for the elderly will be at stake.

Models and theories are terms used interchangeably to explain the meaning and relatedness of health in everyday life. Both terms aim to offer a hypothesis or an explanation as to how something works, or to describe and illustrate the principles underlying an issue or a subject. Klein & Romero (2007) noted that a model is a term used to mean the visual representation of the elements of a theory, and is often informed by more than one theory. The researchers noted that a theory is thus seen as a broader concept, something that interprets or represents reality from a discipline-specific perspective. The study further suggested that theories are "usually concerned with very general and global classes of behaviour and do not deal directly, as conceptual models do, with specific types of behaviour in specific contexts" (Klein & Romero as cited from Earp & Ennett, 1991:166). Theories therefore are the roots of the ideas and concepts that form the basis of models.

Models are set to explain health concepts on the individual, community, communication and organizational levels and literature related to these is highlighted here below.

Many theories have been used to explain the health of elderly adults. The Health Belief Model (Individual) is the first set of models that focus on individual health behaviour and behaviour change citing the intra-personal (within an individual) or the inter-personal (between individuals) levels. The elderly subjective health and perceived health is constituted herein. Coulson et.al. (1998) stated that these models consider things like people's knowledge, beliefs and attitudes about health whereby a team knowledgeable in these aspects may be the only solution to the elderly population.

The purpose of the present study was to determine if economic wellbeing, social support, and health status influences the quality of life of elderly adults especially when a reach out model precedes the normal traditional treatment for this population. It was hypothesized that if a model constituting formation of elderly psychosocial and economic groups, changing the health system to include community Geriatric Volunteers through the VHT system, regular Community sensitizations and home visits for the frail elderly, is functionalized and rolled out, the Quality of life of elderly adults would improve. This prediction was based on WHO that defines active aging as "*the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age*" So, if the dependent variable of quality of life involves active ageing which allows people to realize their potential for physical, social, environmental and mental well-being throughout the life course, a model comprising of sustainable response solutions will help in the improvement of quality of life of elderly adults. In other words, elderly penury and misery will be less likely to influence quality of life if the proposed model is adopted.

In summary, previous findings for what improves the quality of life among the elderly adults are not uniform, thus warranting further investigation. Past research on quality of life among the elderly do not compare the three variables focused on; economic wellbeing, social support and health status among the elderly. Also missing from the literature is a model that can sustainably respond to the improvement of the quality of life of the elderly adults' population. This study therefore employs a measure of quality of life by developing a model (Mobile Outreach Psychosocial Service – MOPS) which can be used by all care providers if the quality of life of elderly adults is to be improved. The hypothesis then is that if a sustainable response solution is made, it can improve the overall quality of life among the elderly adults population.

Sustainability in this case means using an available system that utilizes community insiders as change agents.

Conceptual Framework

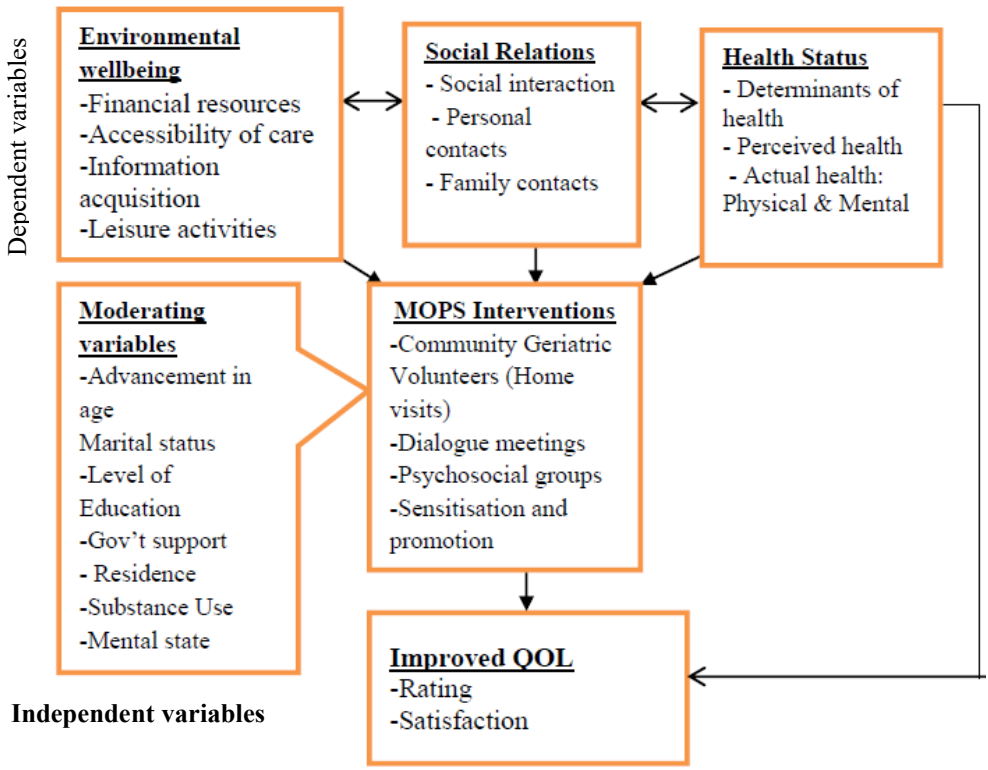

Figure 1: Relationship between environmental wellbeing, Social Relations, health status, and quality of life among the elderly.

This Conceptual Framework shows the causal effect relationships between the independent and dependent variables within the study. It showed variations between Economic wellbeing, Health Status, and Social supports on the Quality of life of the older persons in selected sub-counties of Wakiso District. In the first independent variable, the study conceptualizes that for an elderly person to receive economic wellbeing there should be income insecurity either from Social grants, social insurance, social security, or personal investments or family. The type or amount of economic support received is also shown to impact on the Quality of life among the elderly people. Furthermore, lack of basic needs such as food, shelter, clothing, and source of water, is hypothesized to impact on the Quality of life of the elderly people.

The second independent variable stated that social supports are a significant variable in the attainment of quality of life among elderly people. If an elderly person lacks social interaction, including personal contacts and family contacts, such a person is likely to experience problems in daily life which ultimately will affect his /her final quality of life. At the same time an elderly person's health is likely to impact on the quality of life. Aspects like perceived health as a determinants of health, and actual health which includes the physical, Mental and psychological health, are likely to impact on the quality of life of elderly people. In this study, it is assumed that if an intervention which includes forming a system of Community Geriatric Volunteers, Dialogue meetings, Home visits to the elderly and group formation for social insurance, is instituted, the quality of elderly people in Wakiso District will be met.

Furthermore, the study intended to be conscious of other moderating variables like, Marital status, elderly level of education, availability of Government support, type of residence, current substance abuse and mental health status which are likely to confuse the outcome of the interventions rolled out. Overall, it is assumed that if all variables are checked, intervening variables are used and moderation variables manipulated, the physical state, material state, psychological state, social relationships, and elderly safety and environment will be determined thus translating into good quality of life among the elderly people in Wakiso District.

Methods

The population were the elderly people, 60 years and above, residing in the selected sub counties of Wakiso District and who are staying in their homes and not institutions. A Randomised Controlled Trial was used to allot the participants to either the control or study group. From the 13 sub-counties in Wakiso district, four (4) were randomly selected for the study. Wakiso comprises of 3 Counties that is Busiro County (8 Sub-Counties), Entebbe Municipality County (2 sub-county Divisions) and Kyadondo County (3 sub-counties). The two sub-counties of Entebbe municipality and those in Kyadondo County are predominantly urban. To avoid urban location bias these did not participate in the study leaving us with Busiro County which has a mix of both rural and urban communities. In addition, a rural setting was chosen because a large proportion of Ugandans (85%) live in rural settings.

The study used both quantitative and qualitative approaches. Quantitative data collection methods employed WHOQOL BREF as a

measuring instrument while qualitative approaches used standardized Focus Group Study Guides, In-depth Interview Study Guides, and Key Informant Interviews for the purpose of triangulation. The formula used for sample size calculation for case control or comparative studies was the Douglas Altman Formula to calculate the sample size per arm. The study further employed purposeful sampling technique whereby information rich respondents such as some elderly people in the study, or formal care givers, informal care givers, and social workers from NGOs, villages and homes in Wakiso district were strategically and purposefully selected. Sampling of villages and respondents was dependent on advice from the local community leaders. Sampling of the elderly for the twenty focus group discussions was purposeful and the groups were homogeneously composed.

WHOQOL-BREF Instrument

The domains are measured in a positive direction; the higher the score, the better the quality of life. The answer to each question was used to calculate the measurement for the total domain. The steps for assigning scores were based on the WHOQOL-BREF scoring guide (WHO, 1996). The steps for assigning scores were; All 26 questions were assigned a score of 1-5; The scores for each domain were computed and multiplied by 4, for equivalence with the WHOQOL-100; If the domain had more than 20% missing data, the domain score would not be calculated; The scale scores for each domain ranged from 4 to 20; The 4-20 scores were converted to 0-100 scale.

Data Analysis

Qualitative data was captured and analysed using thematic analysis. The study used NVivo which is a Computer Assisted Qualitative Data Analysis Software (CAQDAS) while quantitative data was coded, entered into the computer, cleaned and analysed using the Statistical Package for the Social Sciences (SPSS) software, version 21. Descriptive statistics was used to summarize and organize the data. Multivariate analysis with logistic regression was used to test for association between variables. The level of significance was a p-value <0.05.

Study Procedure

A manual explaining the MOPS strategy was developed and adopted for use as the best practice model of care for the improvement of elderly

QOL. Research Assistants were recruited from the VHT members and fresh graduates from institutions of higher learning. At the same time, the research instruments were translated and back translated. Douglas Altman method of sample size determination was used to select both participants for phase one and phase two. While Phase one involved identification of study participants and succumbing them to the standardized questionnaire (WHOQOL-BREF), Phase two involved sub-dividing the participants into the control and intervention groups. This then later advised whether the proposed model can improve or change the quality of life among the elderly. Data was then collected after six months of roll out in the community, transcribed and analysed.

Historical and Philosophical aspects of Quality of Life among the Elderly

Historical aspects of the Aging Process

Population ageing has been described as a global phenomenon in light of the demographic consequences of falling fertility rates combined with increases in life expectancy (WHO, 2011). The increasing number of older people worldwide has become a global challenge and is likely to affect the elderly social support, economic wellbeing and health as contributors to overall quality of life among the study population. Uganda just like any other country global wide with 4.6% of Uganda's population as older persons aged 60 years and above is experiencing the same problem.

Overview of Quality of Life among the Elderly

WHOQOL Group (1993) defined QOL as the individuals' perceptions of their position in life in the context of culture and value systems in which people live and in relation to set goals, expectations, standards and concerns that vehemently informs of the social support system. Defined differently, Ferrans and Power (1992) stated that it is a person's sense of well-being that stems from satisfaction or dissatisfaction with the areas of life that are important to him/her. The areas of life for this study are those constituted amongst the independent variables of the study. This study tends to conform to all the definitions and as well investigate whether the elderly QOL may improve if an attempt on economic wellbeing, social support, and health status aspects is made with the use of the MOPS Model of care.

Philosophical Underpinnings

The core theory used in economics builds on a simple but powerful model of behaviour citing the fact that individuals make choices so as to maximize a utility function, using the information available, and processing this information appropriately (Della-Vigna, 2009). Social support interventions as part of the independent variable explain this. In reference, the philosopher further assumes that individuals' preferences are further assumed to be time-consistent, affected only by own payoffs, and independent of the framing of the decision. This phenomenon relates to the acceptance rates of the elderly to take on the proposed interventions in the MOPS model which ended in overall improvement of elderly QOL.

The Neoclassical Foundations

The neoclassical understanding of the human being is embedded in philosophy of utilitarianism. Mankind, in the neoclassical economic thought, is understood as individualistic and rational calculating beings, who are constantly trying to avoid pains and gain pleasures citing them as the basis for the concept of utility in functional and neoclassical line of thought (Jiang, 2009). Therefore as people age, there is need to maximize service utility as related to this study so as to avoid development of psycho-geriatric syndromes.

Philosophical Theories of Quality of Life

Hedonic theories. Hedonist theories hold that only pleasure is intrinsically good and pain is the only intrinsic bad, citing that a person's life can only go well to the extent that he or she is able to accumulate pleasure and avoid pain which is usually a nightmare to the elderly. To strive for quality of life is to strive for the greatest balance of pleasure over pain which is expected to be achieved by the MOPS model proposed for this study.

Rational preference theories. The rational preference theories, define quality of life in terms of the actual satisfaction or realization of a person's rational desires or preferences. Successful aging has been described as a collective phenomenon, and is stated to be not uniform across the different age groups among elderly persons thus differing from person to person (Samuelsson, et al., 2007). Aging cannot be successful without good health. In this study, good Physical health was achieved through the home visits made by the VHT as community Geriatric Volunteers and mental health through the psycho-social groups formed.

Philosophical Theories of Human Flourishing

These attempt to base understanding on an account that functions, capacities, and excellences that are most fully and constitutively human should be fulfilled. It is believed that human beings attain and master capacities to the extent that those conditions that would stunt or undermine those abilities should be avoided if we are to flourish as human beings. It further states that the more an individual continues to grow and develop throughout his or her life, the higher their quality of life is enhanced. Such a theory seems to have a lot of relatedness to elderly quality of life yet in our traditional systems, the concept of the family being the first line of support with community support as second is no longer tenable. Urbanisation, economic migration, death due to disease especially the young adults dying of HIV, has left the elderly people alone in the rural communities with no outright source of social support (URAA, 2008).

The Philosophy Sustaining the Think-Tank on Elderly Studies

Being a developing country, Uganda faces great challenges in meeting the health and social needs of the ageing population that has been brought about by the consequences of falling fertility rates combined with increases in life expectancy (World Health Organization, 2011), improvements in living standards, better nutrition, and decreased deaths from communicable diseases (Luo & Hu, 2011). The projected population of older persons today (2014) is 1,540,000, indicating an overall growth of 40% of people 60 years and above in a period of 10 years. This is likely to permeate every aspect of human life from economics (pensions, taxation, employment trends), to politics (voting patterns, representation), to family and community life (living arrangements, housing and migration, support), and to health planning (old age diseases) as stated earlier on in the introduction. This study then comes in handy to curb the adverse consequences.

Results

Socio-Demographic Characteristics of the Respondents

Of the 364 elderly that participated in the study, 27% of the respondents in the control group were male. Likewise, in the intervention group, female respondents' participation was higher than that of males at 34.1% males compared to 65.9% females respectively. The majority of

respondents were between 60-74 years old (58% control group, 65.2% intervention group), medium-old between age 75 to 84 years (31% control group, 26.8% intervention group), and the old-old 85 years (11% control group, 7.9% intervention group). As noted in this study, the groupings of the elderly age groups were conducted as by Kozar (1996).

Many of the respondents achieved primary level of education (60.5% control group, and 49.4% intervention group); while those who did not attain any education were second largest with (29.5% in control group, and 49.4% in intervention group); secondary school education (7.0% control group and 7.9% intervention group) with a number higher in the intervention group than in the control group; those with College/University level were only found in the control group clusters having an overall (3.0%), and none (0.0%) in the intervention group citing more retired civil servants in the control group thus more numbers having attained this level of education, as compared to the intervention group where very few retired civil servants were cited and yet even these had not attained education up to the college levels. In the control group 17% were single, 11.5% married, 14.5% were living as man and woman, 0.5% polygamist, 10% divorced while 46.5% were widowed. However, in the intervention group, 18.9% were single, 29.9% married, 1.2% was living as man and woman, 15.2% polygamist, 3.7% divorced while 30% were widowed. The discrepancy is because the control group was situated in the urban rural areas (Katabi and Ssisa Sub-counties) while the intervention group was in the predominantly rural (Wakiso and Mende Sub-counties). In the control group, mixed religions were found while in the intervention group, some of the clusters were predominantly of the Muslim religion.

General Quality of Life

Responses on the overall quality of life were based on very poor being the lowest while very good was the highest. The majority of respondents in the control group showed at the baseline data collection stage that their quality of life was poor at 40.5% (n=81) which did not differ much at the end of the study having 43.5% (n=87). The least response was very good 1% (n=2) at baseline level, while at post intervention level, no participant 0% reported to have overall quality of life as very good. This means that the general quality of life did not change in the control group. Instead, a deterioration was registered in this group with none (0%) reporting either very good or good quality of life after the intervention period. In the intervention group, results show that the majority of respondents at the baseline data collection stage

showed that their quality of life was neither poor nor good at 39% (n=64) which differed greatly at the end of the study having 68.3% (n=112) reporting it as good. The least response was good 3% (n=5) with 0% (n=0) reporting it as very good at baseline level, while at post intervention level, no participant 0% reported to have overall quality of life as either poor or very poor. This means that the general quality of life changed greatly in the intervention group as a result of interventions rolled out in this study with no deterioration at all registered in this group with none (0%) reporting either very poor or poor quality of life after the intervention period.

Satisfaction with Health

Responses on the satisfaction with health as a measure of QOL in the tool were as well based on very poor being the lowest while very good was the highest and this happened after the intervention took place. Table 2 above shows that the majority of respondents in the control group showed at the baseline data collection stage that their satisfaction with health was poor at 37% (n=74) which as well did not differ much at the end of the study having 53% (n=106). The least response was very good 1% (n=2) at baseline level, while at post intervention level, no participant 0% reported to have overall quality of life as very good too. However, the results in the intervention group did not differ much with the majority of respondents in the intervention group showing at the baseline data collection stage that their satisfaction with health was poor at 45.7%% (n=75). The situation changed greatly at the end of the study having 59.1% (n=97) reporting satisfaction with health as very good with a few numbers 14.6 (24%) reporting it as very good. This means that the interventions made in the intervention group of this study registered a tremendous change in satisfaction with life for the elderly in this group.

Environmental Wellbeing and Quality of Life

One of the purposes of this study was to examine whether Quality of life is associated with Economic well-being in elderly people. Overall, there is a significant (p=0.000) weak positive (rs=0.213) relationship between EW and QOL. This implies that with all the results put together in both the control and intervention groups, the Environmental domain has contributed to overall QOL with 21.3%. Environmental health when coupled together with psychological health as a confounding variable, is significantly (0.3418) responsible for 34.18% of QOL. This means that the constituents of psychological health as a domain which constitute;

Bodily image and appearance, Negative feelings, Positive feelings, Self-esteem, Spirituality/ Religion/ Personal beliefs, Thinking, learning, memory and concentration , when coupled with the facets within the environment domain, were improved so as to contribute to overall QOL. Therefore, these were able to subjectively define the way an elderly rates and feels satisfied with own quality of life by 34.18%.

Social support as a determinant of QOL among the Elderly

Overall, there is significant (p=0.000) weak positive (r_s=0.255) relationship between Social support and Quality of Life. This implies that with all the results put together in both the control and intervention groups, the Social Support domain has contributed to overall QOL with 25.5%. Social Support, together with psychological health as a confounding variable, is significantly (0.033) responsible for **29.23%** of QOL. This means that the constituents of psychological health as a domain which constitute; Bodily image and appearance, Negative feelings, Positive feelings, Self-esteem, Spirituality / Religion / Personal beliefs, thinking, learning, memory and concentration, when coupled with the facets within the Social Support domain, effectively contributed to overall QOL. Therefore, these were able to subjectively define the way an elderly rates and feels satisfied with own quality of life by 29.23%.

Health status as a determinant of QOL among the Elderly

Overall, there is significant (p=0.001) weak positive (r_s=0.156) relationship between **Health Status** and Quality of Life**.** This implies that with all the results put together in both the control and intervention groups, the Health Status domain has contributed to overall QOL with 15.6%. Health status, together with psychological health as a confounding variable, is significantly (0.001) responsible for **32.80%** of Quality of Life. This means that the constituents of psychological health as a domain which constitute; Bodily image and appearance, Negative feelings, Positive feelings, Self-esteem, Spirituality / Religion / Personal beliefs, thinking, learning, memory and concentration, when coupled with the facets within the Health status domain, there was an effective contribution to overall QOL. Therefore, these were able to subjectively define the way an elderly rates and feels satisfied with own quality of life by 32.80%.

Analysis and Interpretation of Findings

Table 1: Path coefficients along with their bootstrap values

Intervention after project	β Values	Sample Mean	Standard Deviation	Standard Error	T Statistics	P Values
Economic empowerments -> Quality	0.3218	0.3235	0.0585	0.0585	5.4987	0.015759.
Health status -> Quality	0.2071	0.2153	0.0691	0.0691	2.9966	0.047826
Psychological domain -> Quality	0.2265	0.2196	0.0558	0.0558	4.0601	0.027824
Social support -> Quality	0.0848	0.0904	0.0445	0.0445	1.9061	0.098452
Intervention group at baseline						
Economic empowerments -> Quality of life	0.1798	0.1842	0.0641	0.0641	2.8064	0.05349
Health status -> Quality of life	0.3977	0.4028	0.0756	0.0756	5.2571	0.017165
Psychological support -> Quality of life	0.1737	0.1767	0.0644	0.0644	2.6969	0.057189
Social Support -> Quality of life	0.0448	0.0522	0.0629	0.0629	0.7125	0.275032
Control group after project						
Economic Empowerment -> Quality	0.0906	0.0909	0.0747	0.0747	1.2126	0.17454
Health Status -> Quality	0.1327	0.1416	0.0991	0.0991	1.3384	0.156315
Psychological Domain -> Quality	0.3951	0.3955	0.0852	0.0852	4.6366	0.021751
Social Support -> Quality	-0.0021	0.006	0.048	0.048	0.0447	.484204
Control group at baseline						
Economic empowerment -> Quality of life	0.0015	0.0224	0.0654	0.0654	0.0228	0 .49194
Health status -> Quality of life	0.5099	0.5033	0.0731	0.0731	6.9734	0.009975
Psychological Domain -> Quality of life	0.1158	0.1182	0.0699	0.0699	1.6574	0.119645
Social support -> Quality of life	-0.0171	-0.0159	0.0563	0.0563	0.3041	0.394887

Significance was considered at 0.05 whereby the β values range from --0.0021 to 0.5099 considering the intervention group and control group at baseline and after the project. Some of the constructs reported to be significant at both baseline and after project intervention, however with social support contributing negatively though not significantly in the control group and positively in the intervention at both baseline and after project phase as indicated in the tables above.

Structural Model for relationship with Psychological, Social Support, Heath Status, and Economic Wellbeing-Intervention Group

Based on the results from the assessment study findings showed improvement in the quality of life of the elderly in the intervention by 3.9% contribution by the efforts and work done by the intervention rolled out. Changing for 44.5% to 48.4% with all constructs studied of social support, psychological domain, Heath status, and economic wellbeing contributing positively to the quality of life of the elderly at both baseline and after project, as detailed in the figures below.

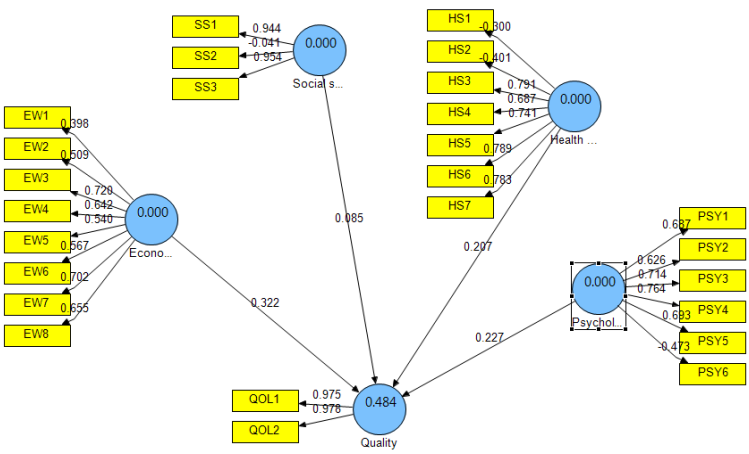

Figure 2: Intervention group after project time frame (Intervention Level)

Structural Model Analysis

The study conclusions were made based on 95% confidence interval (Levels of significance =0.05). The dependent variable considered in this study was the quality of life of the elderly. Based on the results from the study, all the mobile outreach psycho-social service factors studied reportedly influenced positively the quality of life of the elderly. However based on the degree of significance, considering 95% confidence intervals, only economic support services (β=0.1479, P

values=0.03353), and Health services (β=0.3879, P. Values =0.001005) were factors that revealed to influence significantly and positively on the quality of life of the elderly. While psychological support services, (β=0.1108, P Values=0.062461), and Social support services (β=0.0927, P Values=0.084777), though revealed to influence positively to the quality of life of the elderly, their degree of relationships were revealed not being significant to the quality of life of the elderly as detailed above.

Conclusions

This study reports that a Mobile Outreach Psychosocial Services (MOPS) can be experienced in different ways, depending on the visited person's situation. On one hand the positive experiences of the CGV indicate that a single, well-structured strategy as defined in the MOPS model is able to empower the participants, strengthened their self-esteem, give them information that makes them feel in control and get them more aware of the importance of good Quality of Life as they age gracefully. Together this could increase the elderly's ability to use their own resources and motivate them to take measures and engage in QOL-promoting activities. On the other hand, the MOPS model was experienced as being of no value by a few, either because Satisfaction with leisure and friends support they felt too ill or because they did not feel ready for the information.

The findings in this study could partly explain the positive results from quantitative studies of the MOPS interventions and emphasize that one challenge for health care professionals is to motivate older people who are healthy and independent, and engage them in activities tailored towards improvement of own QOL. These activities can begin from economic strengthening focus, social inter-relations and support, to engagement in health-promoting and disease-preventive activities.

Recommendations

The Use of telehealth as a factor in reaching out to elderly people needs more research since many may have hearing disabilities. While understanding the self-reported impact of reminiscence groups by the elderly, more elaborated research should be conducted to facilitate better understanding of the effectiveness of Reminiscence Therapy on general elderly mental health. Independent research targeting the different categories of elderly age groups should be targeted to avoid lumping them up.

Reminiscence therapy should be integrated in all structured interventions for older persons since it has proven to reduce depression and negative feelings hence improving their quality of life, especially those with life threatening and life limiting illnesses. The Government should adopt the MOPS strategy for use while developing programmes tailored towards improvement of elderly QOL. The Government should adopt the use of Community Geriatric volunteers (derived from the VHT system) as a strategy for reaching out to the frail elderly in their homes.

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