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Determinants of Quality of Life among the Elderly Living with Arthritis in Manonyane Community, Lesotho

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Abstract

Background: Arthritis is a common health problem in old age often impacting the quality of life (QOL) of the elderly. Data on QOL among the elderly living with arthritis in Lesotho is lacking.

Objectives: The study assessed the QOL of arthritic elderly people aged >65 in Manonyane community of Lesotho.

Methods: This was an analytical cross sectional study. The study purposively sampled 108 arthritic elderly people who received old age pensions in April 2014. Interviewer-administered Ferrans and Powers Quality of Life Index questionnaire for arthritis version III was used to collect data. Logistic regression ($p<0.05$) was used to determine predictors of lower scores of the QOL index.

Results: The overall quality of life Mean Score (MS) was 19.9 (Confidence Interval (CI): 19.4-20.5). Comparatively, the respondents were most unhappy with health and functioning (MS: 17.2; CI: 16.6-17.9) followed by social and economic aspects (MS: 19.3; CI: 18.5-20.0). Gender, comorbidity, age and marital status were not significant predictors ($p>0.05$) of dissatisfaction with quality of life in this study.

Conclusion: Health and functioning as well as social and economic concerns of the elderly are important determinants of quality of life which need attention in Lesotho.

Keywords: Quality of life; Arthritis; Lesotho

Introduction

There is paucity of data on the quality of life of the elderly in Lesotho. Quality of life indices are frequently used to measure the quality of life of certain populations. Quality of life among the elderly with arthritis is one of the most commonly measured aspect [1]. Although there are numerous health complains in the elderly, arthritis is one of the most common health problems related to age [1].

Arthritis is characterized by painful chronic inflammation of the joints [2]. The most common form of arthritis is osteoarthritis [3]. Other common rheumatic conditions include gout, fibromyalgia and rheumatoid arthritis [3]. The impact of arthritis is significant. It has an obvious effect on activity limitation with approximately three quarters or more of people over the age of 65 years reporting limitation in at least one physical activity [4].

This paper therefore seeks to assess the quality of life of the elderly people living with arthritis in Manonyane community of Lesotho with the hope that the study will highlight the factors affecting quality of life among the elderly in Lesotho.

Methodology

Study design and data collection

The study purposively sampled 108 arthritic elderly people aged >65 who received old age pensions in Manonyane community of Lesotho in April 2014. Manonyane community constitutes about 6% of Lesotho's population (GoL, 2009). Manonyane community is in Maseru District of Lesotho. Lesotho (GPS coordinates: Latitude: 29° 30 ´S, Longitude: 28° 30´E) is a small landlocked country completely surrounded by South Africa.

All the 108 respondents indicated that they had been treated for symptoms of arthritis at least once. The study excluded the elderly who were diagnosed of cancer, gout, joint or limb fractures and other disease conditions associated with pain. However, the study did not exclude those who had treatment-controlled diabetes and hypertension.

This was a cross-sectional study. Interviewer-administered Ferrans and Powers Quality of Life Index (FPQLI) questionnaire for arthritis version III [5] was used to collect data. The FPQLI measures the total quality of life score which measures the overall quality of life from four subscales-Healths and functioning, social and economic, psychological/spiritual and family subscales.

The research was approved by the Ministry of Health of Lesotho on the 20th of January 2014 (File number: ID124-2013).

Statistical analysis

Data was analysed according to the syntax for calculating quality of life index scores[6] using STATA® version 12 statistical software (StataCorp, Texas, USA). For purposes of comparison, an overall quality of life score below 15 was categorised as unhappy with life whilst scores above 15 were deemed happy with life. In addition, logistic regression ($p<0.05$) was used to determine predictors of lower scores of the quality of life index.

Results

Demographic characteristics of the respondents

A total of 108 arthritic elderly people were included in the study. Their ages ranged from age 65 to 76 and the mean age was 70.9 (IQR: 68-73). The respondents consisted of 61.1% (n=108) females and 38.9% males. Overall, 46.3% (n=108) were married, 52.8% were widowed and only one female respondent (0.9%) aged 72 was single and had never been married. Sixteen respondents (15%, n=108) were on treatment for hypertension whilst 13 (12%, n=108) were on treatment for diabetes. Other conditions noted were poor vision problems (10%), hearing (6%), urinary tract infections (6%) and frailty (4%). The other 51 (n=47%, n=108) had minor complains or none at all.

Quality of life

The overall quality of life score ranged from 11.8 to 28.3. The mean score was 19.9 (95% confidence interval (CI): 19.4-20.5). Only 6 respondents (5.6%, n=108) had an overall quality of life score below 15 and were deemed unhappy with life.

When the health and functioning subscale was considered, the mean score was 17.2 (CI: 16.-17.9). Out of the 108 respondents, 29.6% had a health and functioning score below 15. The mean score of the social and economic scale was 19.3 (CI: 18.5-20.0) and 15.7% (n=108) had scores below 15. In addition, the mean score of the psychological/spiritual subscale was 24.6 (CI: 23.8-25.4) and only 1.9% (n=108) scored below 15. Moreover, the mean score of the family subscale was 22.4 (CI: 21.4-23.4) and 8.3% (n=108) scored below 15. Figure 1 presents the relative levels of satisfaction with the four subscales. Overall, the respondents were most unhappy with health followed by social and economic aspects. However, the respondents were most satisfied with psychological/spiritual aspects followed by family aspects.

Figure 2 presents the levels of satisfaction with various items which make up the four subscales of the quality of life index. Pain and worries were the major contributors to low levels of satisfaction with health and functioning subscale. Dissatisfaction with health and fatigue were also of concern among the respondents. When the social and economic subscale was considered, the major worry was financial need. On the psychological/spiritual subscale, respondents were least satisfied with their achievement of personal goals. Moreover, dissatisfaction with the health of family members was the major worry on the family subscale.

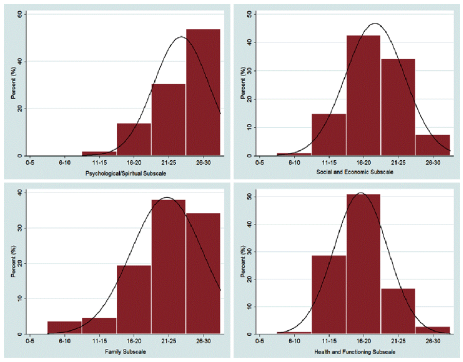

Figure 1: Distribution of levels of satisfaction in the four subscales of quality of life index (n=108).

When predictors of dissatisfaction with life were considered, gender (p=0.533) and having at least one other condition besides arthritis (p=0.210) were not significant predictors of dissatisfaction with life. Having at least one other condition besides arthritis was However, females had a slightly higher odds ratio (OR=1.3) of being dissatisfied with life compared to men. Age was not a significant predictor (p=0.487) although being aged over 70 had higher odds (OR=1.5) of dissatisfaction with life. Compared to married respondents, widows/widowers had the higher odds ratio (OR=2.1) of dissatisfaction with life although it was not statistically significant (p=0.089).

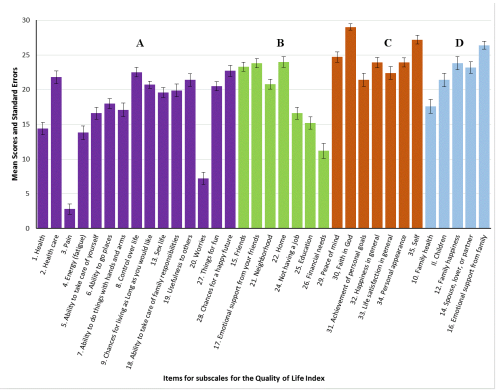

Figure 2: Levels of satisfaction with various items of the quality of life index subscales (n=108). A=Health and functioning subscale; B=Social and economic subscale; C=Psychological/spiritual subscale and D=Family subscale. Mean scores range from 0 to 30.

Discussion

The overall quality of life score which ranged from 11.8 to 28.3 in this study is indicative of a wide range of levels of satisfaction among the elderly in Lesotho. However, the mean score of 19.9 (CI: 19.4-20.5) indicates that generally the elderly people are satisfied with their lives. When this overall quality of life score was broken down into four subscales would became apparent that the respondents were least satisfied with their health followed by their social and economic

aspects and were most satisfied with their psychological/spiritual aspects followed by family aspects.

A closer look at the health and functioning subscale revealed that pain and worries were the major contributors to low levels of satisfaction with health and functioning subscale. Pain had the lowest mean score in this study. Physical labor which continues even in old age may be a major contributor to joint injury which leads to the development of arthritis [4]. However, dissatisfaction with health and fatigue were also concerns among the respondents in this study. Notwithstanding the benefits of old age pension in Lesotho, the pension is insufficient for medical cover. This unmet need for health cover is affecting the quality of life of the elderly. The uses of assistive devices that improve mobility and functioning have been suggested as a solution to the problem of fatigue [7].

Worries among the elderly were a major concern in this study. Although, the causes of worries were not probed further in this study, the results suggest that issues of depression and anxiety may be common in this population. Depression and anxiety have been associated with arthritis [8]. The need for mental health check among this population cannot be over emphasized.

In the social and economic subscale, financial needs were a major worry. The old age pension is therefore falling short of the needs of the elderly people. A study in South Africa where the level of poverty among the elderly may be lower than in Lesotho, financial need was also cited as a major contributor to dissatisfaction with life [7]. In Lesotho, old age pensions are reported to support not only the beneficiaries of the scheme but the extended family including orphans of HIV/AIDS who are often left in the care of the elderly [9]. The elderly in this study also showed dissatisfaction with the health of family members which in essence may be attributable to the problem of HIV/AIDS.

Gender, comorbidity, age and marital status were not significant predictors ($p>0.05$) of dissatisfaction with quality of life in this study. However, females (OR=1.3), age over 70 (OR=1.5) and widow/widowers status (OR=2.1) had higher odds ratios of dissatisfaction with quality of life. A study in South Africa reported that females had higher odds of developing functional disability compared to males [10]. Age has also been associated with arthritis which then affects the quality of life among the elderly. The results of this study suggest that unemployed widows/widowers dependent on old age pensions may have lower quality of life compared to those who are married.

It is important to note that this study used a translated interviewer-administered questionnaire. Some researchers have queried the rigor of translated questionnaires [11]. In addition, the study did not classify the different types of arthritis. Though there are many types of arthritis, the most common forms of arthritis in the elderly are osteoarthritis and rheumatoid arthritis [3]. Different types of arthritis may affect quality of life differently with some forms of arthritis resulting in more severe pain and worries. Therefore, there is need for further studies to assess the effect of different types of arthritis on severity of QOL indicators such as pain in this population. Limited screening of other underlying conditions that may affect the quality of life another limitation of the study. Although the researchers excluded respondents who had diagnoses of cancer and other painful conditions such as gout, some respondents might have had undiagnosed conditions.

Another limitation to the study was that the Ferrans and Powers Quality of Life Index tool that was used in this study only gives a more general assessment of the effects of disease conditions such as arthritis when compared to other assessment tools. Therefore, more studies conducted using arthritis-specific quality of life assessment tools are recommended in this population.

Conclusion

Arthritis is common among the elderly in Lesotho. Whilst the respondents are most satisfied with their psychological/spiritual aspects and family aspects, the arthritic elderly in Lesotho are most unhappy with their health followed by their social and economic aspects. Pain and worries are the major contributors to low levels of satisfaction with health and functioning subscale and financial need the main driver of dissatisfaction with the social and economic aspects of the arthritic elderly in Lesotho. The use of assistive devices and improved access to health facilities is recommended to improve the quality of life of the elderly in Lesotho.

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Authors' Contributions Statement

All authors contributed equally to study design, implementation and analysis.

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