



Original Article

Factors Associated with Quality of Life Among Older Adults with Chronic Disease in Taiwan^{☆,☆☆}Hsiao-Mei Chen^{1,2}, Ching-Min Chen^{3*}¹ Institute of Allied Health Sciences, College of Medicine, National Cheng Kung University, ² Cheng Ching Hospital, Taichung City, ³ Department of Nursing, National Cheng Kung University, Taiwan

ARTICLE INFO

Article history:

Received 1 October 2015

Received in revised form

29 June 2016

Accepted 27 July 2016

Available online 30 November 2016

Keywords:

chronic disease,
disability risk,
older adults,
quality of life

SUMMARY

Background: There have been many studies reviewing quality of life (QoL) of older population and found an inverse association between QoL and chronic diseases. However, previous studies have focused only on that of people with specific diseases. In this study, we identified critical quality of life determinants, especially risk for disability, in older adults suffering from chronic diseases.

Methods: A cross-sectional, correlational design was used. A purposive sample of 115 older patients, diagnosed with co-morbidity was recruited from an outpatient medical center in Southern Taiwan.

Results: Results of a stepwise multiple regression analysis indicated that the overall regression model explained 49% of the variance in QoL. After controlling the sociodemographic factors and health status of older patients, the risk for disabilities in social isolation and depression were negatively correlated with QoL. Alzheimer disease-8 (AD-8) had the strongest association with the total QoL score, and it alone explained 27% of the variance.

Conclusion: Understanding the importance of determining factors of poor QoL, such as potential cognitive impairment, potential social isolation and depression, inadequate family income, and diminished ability to perform practical and social activities (IADLs) among older adults with chronic diseases is critical for geriatric health care providers. Awareness of these factors can assist providers in identifying people at risk and guide new intervention programs to improve care for these invaluable members of our communities.

Copyright © 2016, Taiwan Society of Geriatric Emergency & Critical Care Medicine. Published by Elsevier Taiwan LLC. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Aging is a global issue¹. The older population (aged 65 years and over) in Taiwan crossed the 7% threshold of an aging society in 1993, and the percentage of aging population has reached 12.50%². The disability of older adults is closely related to the degree of their weakness, which is determined by aging, diseases and lack of exercise^{3,4}. Aging is frequently accompanied by a larger burden of comorbid conditions and greater illness severity^{3,5}. Aging-

associated diseases, such as heart disease, stroke, degenerative arthritis and fractures caused by falls often reduce older adult's capability of activity^{6,7}. Disability can be defined in several ways, including difficulties with activities of daily living (ADL), difficulties with instrumental activities of daily living (IADL), and mobility limitations, impairments, and participation restrictions^{4,5}. Globally, co-morbidity is a common problem and increases with age^{3,8}. The prevalence of chronic diseases among older adults aged 65 and above accounts for approximately 70%, and about one-third of the older adults suffer from co-morbidity⁸. In addition, chronic diseases and co-morbidity have a considerable degree of influence on the health functions of older adults^{8,9}. With the Charlson Comorbidity Index (CCI), the co-morbidity situation and the disease burden of the chronic disease patients can be understood¹⁰. Disability-adjusted life-year (DALY) is a measure of overall disease burden, and mortality and morbidity are combined¹¹. Dementia causes major disability in older adults and is a global public health burden¹². The Alzheimer disease 8 is, however, quite sensitive to

* Conflict of interest: The authors declare that there is no conflict of interest.

** Funding: The work was supported by the "Aim for the Top University Plan" of the National Cheng Kung University and the Ministry of Education, Taiwan, R.O.C. None of the study sponsors or funding sources had a role in the design, conduct, analysis or reporting of the study.

* Correspondence to: Dr Ching-Min Chen, National Cheng Kung University, Department of Nursing, 1 University Rd, Tainan, 70101, Taiwan. Fax: +886 62377550.

E-mail address: chingmin@mail.ncku.edu.tw (C.-M. Chen).

detecting early cognitive changes associated many common dementing illness¹³. Older adults who suffer from multiple chronic diseases and cognitive dysfunction are often rendered physically impaired¹⁴. Therefore, the preventing disability from happening among older adults has become a government priority in Taiwan.

Previous studies on the quality of life (QoL) of older adults have found an inverse association between QoL and chronic diseases, but most of the data focused on patients with a specific disease or have used a wide variety of instruments. Thus, studies on the factors affecting QoL among older adults with multiple chronic diseases are limited^{15,16}, particularly those on the correlation between risk for disability and QoL. Therefore, the objectives of this study were (1) to understand QoL of older adults with chronic diseases in physical and mental health, social relations, and environment components; (2) to examine the correlations among the socio-demographic characteristics, health status, risk for disabilities, and QoL; and (3) to identify impact of disability risk on QoL of older adults with chronic diseases.

2. Materials and methods

2.1. Design and sample

A cross-sectional study design was adopted. Participants were recruited from October to December of 2011 at the outpatient center of a medical center (Neurology, Cardiology, Metabolism, Rehabilitation, Family Medicine, etc.) in Southern Taiwan. Purposive sampling was used, and the inclusion criteria included older adults aged 65 years or over who were (1) physician-diagnosed with more than one common chronic diseases, (2) able to communicate in either Mandarin or Taiwanese, (3) willing to participate in interviews and to complete the questionnaire independently or with assistance, and (4) agreed to participate in the study and signed the letter of consent. The exclusion criteria were severe dementia, disability, visual or hearing impairments, and inability to communicate. Among the participants, 115 were willing to participate in the interview and complete the questionnaire, 29 declined, and six did not meet the criteria. The response rate for this study was 79.86%.

2.2. Data collection process and definitions

Ethical approval for the study was obtained from the institutional review board (IRB) (No: ER-100-359), National Cheng Kung University Hospital. After obtaining agreement from the case hospital and outpatient departments, we explained the research purposes to the recruited participants to obtain their agreement and signed consent forms before beginning data collection.

Data on socio-demographic characteristics included age, gender, marital status, living conditions, religion, level of education, and economic condition. Health status were measured according to diagnosis, charlson comorbidity index (CCI), Alzheimer disease 8 (AD8), Activities of daily living (ADL) and instrumental activities of daily living scale (IADL). CCI was developed in 1987 to predict a relative risk of death within 12 months¹⁰. For calculation of CCI, a standardized weight was assigned in each indicated 19 diagnoses and added together to provide a total CCI score. The scores are calculated as 0 (no condition occurs), 1, and 2, 3, and 6 points. A higher score indicates a more severe burden of co-morbidity^{10,17}. The AD8 contains 8 items that test for memory, orientation, judgment, and function. An AD8 score of ≥ 2 indicates possible cognitive impairment and that further diagnosis is required¹⁸. The ADL consists of 10 items. The total score ranges from 0 to 100¹⁹. The IADL score of each item ranges from 2 to 4 points, with a total score of 24 points²⁰.

The risk for disability scale was adopted from Japan²¹. The scale comprises five subscales, movement (5 items), nutrition (4 items), cognition (5 items), social relations (5 items), and depression (5 items), yielding a total of 24 yes/no questions. A score of 1 or above in each subscale shows disability risk in that domain. A higher score indicates that the person is at higher risk of disability²². Quality of Life comprises 28 questions across four domains, physical health, mental health, social relations, and environmental. The scoring is based on a 5-point Likert scale. The average score of all the questions within the same domain is multiplied by 4 as the score of that domain, which ranges from 4 to 20. The sum of the scores of the four domains represents the overall QoL score²³.

2.3. Statistical methods

Statistical analysis was conducted using the SPSS17.0 Chinese version. The frequency, percentage, mean, standard deviation were reported for variable description. Independent *t* test, Pearson correlation, one-way analysis of variance (ANOVA), and stepwise multiple regression analysis were used to determine correlations between predicting variables on QoL.

3. Results

Among the 115 participants, there were more women (62.6%) than men. The average age was 70.87 (SD = 8.39). Married participants accounted for 79.1% of the total sample, and a great part of them (53.3%) had a high school (vocational) degree. Regarding the income, 69 (62.7%) participants considered it was sufficient, 7 (6.4%) considered it was slightly inadequate, and 4 (3.6%) considered it was very inadequate. The prevalence of chronic diseases among subjects were hypertension (43.6%), cardiovascular disease (24.5%), diabetes (22.6%), hypercholesterolemia (12.7%), and arthritis (11.3%). Based on age-unadjusted CCI score, 63 older adults (54.8%) had a disease burden. The average score of the ADL was 98.83, with a range of 97–99.6. The average IADL score was 22.68 (out of 24), with a range of 93%–97.50% of each item, indicating that majority of older adults with chronic conditions having intact physical functions. The mean AD8 score was 1.56, and 40 subjects (34.7%) obtained scores equal to or greater than 2, indicating an early sign of dementia.

3.1. Quality of life of older adults with chronic diseases

The average QoL score of older adults with chronic diseases was 58.30 (out of 80), showing a medium level of QoL. From each QoL dimension, the environmental category scored the highest, with an average of 15.02 (SD = 1.97), followed by the physiological health (14.69 \pm 2.37) and the social relation (14.35 \pm 2.23), whereas the psychological category scored the lowest, with an average of 14.21 (SD = 2.42). For overall health satisfaction, 87 (77.9%) reached moderate or higher satisfaction regarding their health.

3.2. Disability risk and health status of older adults with chronic diseases

The five components of disability risk assessment were movement, nutrition, cognition, social relations and depression. Fifty-seven (49.6%) older adults obtained scores equal to or higher than 5, and a higher score indicated a higher risk of disability. Nearly half (49.6%) of older adults with chronic diseases had a higher risk for disability (Table 1).

Correlational analyses among the socio-demographic characteristics, health status, disability risk, and quality of life of older

Download English Version:

<https://daneshyari.com/en/article/5662730>

Download Persian Version:

<https://daneshyari.com/article/5662730>

[Daneshyari.com](https://daneshyari.com)