QUALITY OF LIFE AND ITS DETERMINANTS AMONG ELDERLY WHO LIVING WITH CHRONIC NON-COMMUNICABLE DISEASE

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ABSTRACT

Background: Chronic diseases include non-communicable diseases have been a health burden globally particularly for older people. Since the ageing population is being increased during few decades. The incidence of non-communicable diseases among older people also increased, and continues to rise as alongside the growth of aging. There many studies identified that chronic disease affect the health-related quality of life among older people. **Purposes**: This study aims to identify the quality of life and its determinant among older people who living with chronic non-communicable disease. **Methods:** This study applied a cross section survey design. The study participants are elderly who visit primary health care, and older people who have a chronic disease. The study conducted in two primary health care facilities, in Makassar. **Results**: there are 41 participants who involve in this study. Predominantly participants were late older in group of age (48.8%), female (75.6%), have secondary level in education (41.5%), currently employ (85.4%), divorce status (58.5), have hypertension history range from 1-5 years (73.2%), and have complications (58.5%). The complication of disease shows significant impact on the quality of life ($p<0.05$, $p=0.022$). Since the sample size was small this may affect the study results. Conducting research in large sample and add some characteristics are needed in order to improve the evidence.

Keywords: Quality of life, Elder people, Non communicable disease

INTRODUCTION

Chronic disease are defined by the World Health Organization, as disease of long duration and slow progress in recovery, such as heart disease, stroke, cancer, chronic respiratory disease and diabetes (WHO, 2021). While elderly persons define as age when a person can start to retire from a regular working and recieve pension benefits (Mwangi and Kulane, 2015). This issue is remained a topic for debate as it varies in different societies. In the high income countries the cut off point is 65 years while the United Nations has an arbitrary cut off 60 years and above. By 2050, Indonesia is projected to have 72 million individuals aged 60 years and above, and will be one of only six countries in the world with over 10 million individuals aged 80 years and above (Cao and Rammohan, 2016). The challenges for Indonesia in dealing with an ageing population are increased disease, both infectioun and degenerative include chronic diseases (Kadar, Francis and Sellick, 2013).

Chronic diseases include non-communicable disease are a global public related issue. Chronic non-communicable disease are the leading causes of morbidity and mortality in most low- and middle-income countries (LMIC) (Wu et al, 2015). Besides that, the chronic disease also is leading cause of disability (Hamm et al, 2019). Since last decade, the chronic diseases contributed to more than 60% of death worldwide (38 milllion), in which predominantly (82%) of cases are cancer, cardiovascular disease, chronic respiratory disease, and diabetes (Ng et al, 2018).

The global non-communicable diseases related deaths take place after the age of 60 (Wu et al, 2015). Compared with other age of group, the elderly (individuals ≥65 years of age) endure a high risks of suffering from chronic disease include

non-communicable diseases and higher mortality and havier economic burden of disease (Zhang, Liu and Ni, 2019). Further, chronic disease have been responsible for decreased quality of life among the patients particularly those who are elderly (Mwangi and Kulane, 2015). A study in China reported that individuals elderly with chronic disease have a lover a general health status and lower level of quality of life (QoL) than the general population (Zhang, Liu and Ni, 2019).

The ageing population is a worldwide issue that will result increased medical expenditure in the elderly care sector in addtion to other negative consequences (Zhao et al, 2018). The ageing affects many older people aged 65 and older more suffer from chronic multi-morbid conditions that's associated with reduced health related quality of life (HRQoL) (Botes et al, 2018). The health related quality of life as a measure of well-being is matter of interestin gin health assessment among elderly in compared with traditional mortality-based meausres of outcome (Hajian-Tilaki, Heidari and Hajian-Tilaki, 2017). Further more, regardless of the conditions, some studies among Iranian both in urban and rural settings reported that a poorer HRQoL in women than men. However, the studies result were contadicted among western counterpart elderly. The poorer HRQoL in women in western counterparts may affected by differences of socio-demographics and clinical profiles. Due to lack of evidence related to quality of life among oder people who living with chronic non-communicable disease in Indonesian context. This Study aims to investigate the quality of life and its determinant among older people with chronic non-communciable disease.

METHODS

This study applied a cross sectional study design. The study conducted in two primary health care facilities, Puskesmas Jongaya and Pampang, in Makassar, South Sulawesi Province from July to September 2021. Due to the pandemic reason, sampling in this study we recruited used an accidental sampling method. All older patients who visit primary health care facilities for monitoring and regular check up we invite to involve voluntary in this study. Inclussion criteria were older people who diagnosed have hypertension for more than 6 months, who living under hte primary health care authority, and aggre to participate in this study. Data collection used quality of life for hypertension questionnaire that offer in paper-based. The questionnaires consist socio-demographics data such as age, gender, educational level, employment staus, marital status, hypertension history, and quality of life in four dimensions. The questionnaires that used already adapted and validated in Bahasa Indoensia (Rahayu and Supratman, 2019). This study approved by the Ethical commission of Faculty of Medicine Universitas Hasanuddin with registration number 3637/UN4.14.1/TP.01.02/2021.

RESULT

This study result that there are 41 older patients who participated in this study. The participants recruited voluntary when they have regular visit in primary health cares. This find some interesting data inwich the majority of them who late older in group of age (48.8%), female (75.6%), have secondary level in education (41.5%), currently employ (85.4%), divorce status (58.5), have hypertension history range from 1-5 years (73.2%), have complications (58.5%), and have good condition in physical, psychological, social, spiritual and quality of life (80.5%, 87.8%, 87.8%, 73.2%, 75.6%, respectively). The detail of the socio-demographic characteristics see table 1.

Table 1. Sociodemographics respondents

Characteristics	Frequency (n=41)	Percentage
Age in group		
• Early older	4	9.8
• Late older	20	48.8
• Old older	17	41.5
Gender		
• Male	10	24.4
• Female	31	75.6
Educational level		
• Primary	15	36.6
• Secondary	17	41.5
• Tertiary	9	22
Employment status		
• Unemployment	6	14.6
• Employment	35	85.4
Marital status		
• Never married	2	4.9
• Married	15	36.6
• Divorce	24	58.5
Hypertension history (range 1-22 years)		
• 1-5 years	30	73.2
• 6-10 years	7	17.1
• > 10 years	4	9.8
Complications		
• Without complications	17	41.5
• With complications	24	58.5
Physical dimension		
• Poor	8	19.5
• Good	33	80.5
Psychological dimension		
• Poor	5	12.2
• Good	36	87.8
Social dimension		
• Poor	5	12.2
• Good	36	87.8
Spiritual dimension		
• Poor	11	26.8
• Good	30	73.2
Quality of life		
• Poor	10	24.4
• Good	31	75.6

Based on bivariate analysis by using the Chi Square Test this study found that only one charcteristic which related to sociodemographics statistically show has significant impact on the quality of life is complications of disease (p<0.05, 0.022). While all dimensions statistically show have significancy on quality of life (p=0.013, p=0.000, p=0.009, and 0.000). the details of sociodemographics characteristics and quality of life present in table 2.

Table 2. the Sociodemographics and quality of life

Characteristics	Quality of life		p-value
	Poor	Good	
Age in group			
• Early older	2 (4.9)	2 (4.9)	0.397
• Late older	5 (12.2)	15 (36.6)	
• Old older	3 (7.3)	14 (34.1)	
Gender			
• Male	3 (7.3)	7 (17.1)	0.464
• Female	7 (17.1)	24 (58.5)	
Educational level			
• Primary	4 (9.8)	11 (26.8)	0.567
• Secondary	5 (12.2)	12 (29.8)	
• Tertiary	1 (2.4)	8 (19.5)	
Employment status			
• Unemployment	1 (2.4)	5 (12.2)	0.542
• Employment	9 (22)	26 (63.4)	
Marital status			
• Never married	0	2 (4.9)	0.482
• Married	5 (12.2)	10 (24.4)	
• Divorce	5 (12.2)	19 (46.30	
Hypertension history (range 1-22 years)			
• 1-5 years	8 (19.5)	22 (53.7)	0.487
• 6-10 years	2 (4.9)	2 (12.2)	
• > 10 years	0	4 (9.8)	
Complications			
• Without complications	1 (2.4)	16 (39)	0.022
• With complications	9 (22)	15 (36.6)	
Physical dimension			
• Poor	5 (12.2)	3 (7.3)	0.013
• Good	5 (12.2)	28 (68.3)	
Psychological dimension			
• Poor	5 (12.2)	0	0.000
• Good	5 (12.2)	31 (75.6)	
Social dimension			
• Poor	4 (9.8)	1 (2.4)	0.009
• Good	6 (14.6)	30 (73.2)	
Spiritual dimension			
• Poor	8 (19.5)	3 (7.3)	0.000
• Good	2 (4.9)	28 (68.30	

DISCUSSION

To the best our knowledge, this study was the first study conducted during pandemic to investigate the older people' quality of life especially those who living with chronic disease. The quality of life is an important indicator that is multi-dimensional, highly subjective and linked to the spesific cultural and socio-economic situation (Nguyen et al, 2019).

This study finding was concluded the majority of participants characterics such as age of group, gender, educational level, employment status, marital status, and hypertension history were not significantly associated with the quality of life. The study finding was contradicted with a vietnamese study where all charactersitics above, exclude employment status, show statistically have a significant association with the quality of life among elder people who living in rural area (Nguyen et al, 2019). In that study, there are 406 older people who involve as participants which gender equally, men and women ratio was 53% and 47%. While in our study the study participants only 41 elderly with gender inequally, men and women ratio was 24.4% and 75.6%. From this point of view, we assume that the sample size and gender equally affect the study result. An Indonesian scholar who investigated the quality of life among elderly in nursing home found that the majority participants were female (65.7%), aged under 80 years old (71.8%), have no partner (87.8%) show that all variable have no significantly association with the quality of life (Pramesona and Taneepanichskul, 2018). The study result consistence with our study finding.

Previous study point out that all disease influence patients' life especially social and physical environment. The participants in that study have a negative view of their life after receiving a chronic disease diagnosis. When they had had the diagnosis, they were still affected by the influence of the chronic disease on their daily life. Thus, the situation bring negative impact on their quality of life (Benkel, Arnby and Molander, 2020). This study is consistence with our study finding which complication of the disease has singnificant impact on the quality of life among elderly.

From this study finding, we argue that even the instrument to assess the quality of life among elderly has widely offerred and used. However, there are some difficulties in evaluating the multidimensional health of older patients with chronic non communicable disease. Some scales, although suitable for the whole population, are not very pertinent to the elderly, and although some scales can be applied to the elderly, they do not involve all aspect of the health satus and charactestics of elderly patients with non communicable disease.

CONCLUSIONS

The prevalence of chronic disease among older people increased since they were more geeting older. The disease can impact older health realted quality of life. The complication of disease was signifanct impat on the olders' quality of life. While other socio-demographics characteristics have no significant impact on the quality of life.

Investigating the quality of life among older people particularly those who livig with chroic disease in large sample size is crucial in order to improve the evidence.

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