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Research Paper

The WHO Active Aging Pillars and Their Relationship with Quality of Life in Older Adults Indonesian

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Abstract

One of humanity's outstanding accomplishments is population aging, with the elderly offering valuable resources and significantly contributing to the structure of our societies. Concurrently, this aging population poses enormous challenges, as it needs more significant economic and social requirements. This research aims to consider active aging factors to increase the quality of life of older people. The research design was qualitative and quantitative analysis with cross-sectional for the case studies and evaluations in three areas of active aging by collecting data through interviews, focus group discussions with the elderly, caregivers, and direct observation. Geriatric assessment instruments of the Geriatric Division of Cipto Mangunkusumo Hospital (RSCM) were used for diagnosis. EQ-5D index score Indonesia version was applied to measure the quality of life, with 0,692 cut-off points for the low and high. From the study results, it was found that routinely carrying out health checks, being grateful, social activities, cooperation, and participating in/out of the environment is significantly related to the quality of life of the elderly. In addition, occupational status and the number of illnesses are also significantly related to the quality of life, while cognitive function tends to be significant. Physical participation, social participation, and experience of falling were significantly correlated with quality of life. Health check-up behavior was also significantly correlated with health quality of life. Based on the resulting study, it is recommended for future studies would be better if they could cover social security, including pensions, as pensions are the most essential source of security that will directly affect the welfare of the elderly.

Keywords *Participation, Security, Quality of Life, Elderly*

INTRODUCTION

Currently, the problem of the aging population in the world is a global issue. The decline in fertility and declining mortality rates has changed the population structure in many countries towards the age of aging (Blackburn & Dulmus, 2007; Nugroho, 2007, World Health Organization, 2007; Sowers & Rowe, 2009). One in 10 persons is over the age of Sixty. By 2050 this proportion will have doubled to 1 in 5. Two individuals worldwide celebrate their 60th birthday every second, approximately 58 million people annually. The majority of these individuals (80%) reside in developing nations, as reported by World Health Organization (2007), United Nations (2009), and Verena (2009). Additionally, Indonesia has experienced a surge in individuals aged 60 years and above. Since the year 2000, Indonesia has become the old structure because the number of elderly people has reached 7.18% of the population and is expected to rise to 9.77% in 2010 and 11.34% in 2020 (National Social Economic Survey/ SUSENAS 2004) (Komnas Lansia, 2006; Nugroho, 2007). In 2025, It is estimated to be 13% and then 25% in 2050. Secondly, according to the international population data released by the Bureau of the Census USA (1993), from 1990 to 2025, Indonesia will have a rise in the number of elderly by 414%. This increase is the highest in the world (Departemen Kesehatan Republik Indonesia, 1998; Departemen Sosial, 2002).

One of humanity's outstanding accomplishments is population aging, with the elderly who present valuable resources and make a significant grant to the structure of our societies. Besides, this aging population poses enormous challenges, as it needs higher economic and social

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requirements (Departemen Kesehatan, 1998). To increase the Health Related Quality of Life (HRQoL) of middle-aged and older people, it is important to examine active aging elements (Eum & Kim, 2021).

Aiming at facilitating active aging, Institutions such as the World Health Organization (WHO) are promoting policies that are understood as optimizing health, participation, and security opportunities to improve older people's quality of life (Garcia et.al., 2018). The fundamental pillars of active aging recommended by the WHO are health, participation, and security (Wongsala et.al, 2021). It gives older people a policy scheme to acquire their potential for well-being, which may promote longevity (Hijas-Gómez et.al., 2020).

Quality of life (QoL) is a significant consideration for the well-being of the elderly in the context of an aging population (Zin et.al., 2020). According to WHO, the QoL is the personal's awareness in life, in accordance with local cultural systems and values, concerning the interests, life goals, expectations, and standards to achieve. QoL is an internal experience of someone affected by what happens outside of himself and is also influenced by the subjective experience of someone who has never experienced it before, a mental condition, personality, and expectations—the quality of life implications for the well-being of a person (World Health Organization, 2007). Assessment of the quality of life is more appropriate to reflect the elderly welfare than just assessing physical health. When viewed from the concept of wellness and its relation to the quality of life, wellness is the ultimate choice, and it is important to be responsible for the quality of life (Darmojo, 2000).

Given the circumstances outlined above, it is crucial to research the pillars of active aging proposed by the World Health Organization (WHO) and their correlation with the well-being of the elderly population in Indonesia. Such research is necessary to promote the welfare of the elderly and enhance the overall quality of life for the Indonesian community. The research question is how to consider active aging factors to increase the quality of life of older people.

LITERATURE REVIEW

Service providers and care professionals must realize that the QoL domains are strongly intertwined, meaning that changes in one domain likely affect others. Service providers and care professionals must decide which domains apply in a specific situation, preferably by turning on specific domains using flexible measurement instruments (van Leeuwen et al., 2019).

Older adults value feeling healthy and not limited by their physical condition, being able to manage on their own, retaining dignity and not feeling like a burden, spending time doing activities that bring a sense of value, joy and involvement, having close relationships which makes them feel supported and enable them to mean something for others, looking on the bright side of life, feeling at peace, feeling attached to and experiencing faith and self-development from beliefs, rituals and inner reflection, feeling secure at home and living in a pleasant and accessible neighbourhood and not feeling restricted by their financial situation (van Leeuwen et al., 2019).

Regarding 'health', physically healthy persons were not only considered to be those with less illness or the capacity to be independent but also those with fewer barriers to living well, such as physical pain and mobility limits. Older persons needed to join meaningful activities and receive respect. Essential aspects of security included obtaining a balance between being burdensome parents and maintaining dignity by receiving care from their children (Wongsala et.al, 2021). Chronic disease was accepted when controlled or did not present a barrier to well-being. Maintaining functional independence is the first step of active ageing and thus improves older 'adults' quality of life. The ability to be physically mobile indicates good physical health, while the capacity for age-related role adaptation indicates mental health (Wongsala et.al, 2021).

The variables loading on the biomedical component of the health pillar (e.g. cognitive

function, health conditions or pain) could affect survival chances. A comprehensive and multidimensional assessment of the health pillar of active ageing is fundamental to evaluating survival, with the rest of the pillars interlinked to achieve active ageing (Hijas-Gómez et.al, 2020).

Intervention programmes, mainly oriented to encourage variables that contribute to the component 'Physical health', such as cognitive stimulation, change of unhealthy behaviours, self-care literacy, clinical treatment of pain, development of barrier-free environments and social involvement, may be key to reducing disabilities and chronic diseases, promoting a person's active ageing and improving chances of survival (Hijas-Gómez et.al, 2020).

Public health policy can further focus on the optimal process of older people's health, further, extend their healthy life expectancy, and enhance their ability to self-care and function; second, the economic and material security policy for older people must adhere to the "moderate" principle, not the "optimal" principle. In addition, more attention should be paid to the development of non-material supportive environments, including the physical, spiritual, cultural, social and legal security content; third, relatively young older people make up the critical group to promote participation and explore the value of human resources; and fourth, economic incentives and material security can mainly be used to encourage the participation of female older people, while the "participation" of male older people should pay more attention to improving or maintaining their health status and physical function (Yang et.al., 2020)

The importance of research on active and healthy ageing is emphasized, focusing on three major areas of interest. Biophysical involves researching key habits that provide good functional status and longevity, such as nutrition and physical activity. Research on the socio-emotional character of healthy ageing incorporating psychological and social aspects (social, economic and cultural needs, pensions and economic stability, social and family support, etc.). There is a scope related to cognitive functioning: analyzing social, residential, and geographical contexts (rural-urban) and ageing environments (Garcia et.al., 2018).

RESEARCH METHOD

The research design used quantitative and qualitative cross-sectional case studies and evaluations in three care areas. Data collection was carried out through interviews, FGDs with the elderly and caregivers, as well as direct observation. For clinical diagnosis, a geriatric assessment instrument was used by the Geriatric Division of Cipto Mangunkusumo Hospital (RSCM), while for measuring the quality of life using the Indonesian version of the EQ-5D index score with a cut point of 0.692 for the low and high. Furthermore, a model for caregiving was developed. The research was conducted for six months, preceded by a preliminary study, implementation, data analysis and preparation of reports and submission of recommendations.

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The informant of this study was elderly and caregivers from two Nursing Home (Panti Sasana Tresna Wredha Karya Bhakti (STWKB), Cibubur and Panti Budi Mulya 1 Cipayung Jakarta Timur), and Homecare Yayasan Yaspi RW I Kampung Cantayan Desa Cicantayan Kecamatan Cantayan Kabupaten Sukabumi. For elderly subjects, inclusion criteria were age 60 and over, willingness to be the subject, ability to communicate well, have been cared for at least three months, with exclusion criteria having Barthel ADL score < 5.

For the caregiver Subject, inclusion criteria were age 19 years and over, cared for the

elderly for at least three months, being willing to be an informant, able to communicate well, having at least graduated from elementary school, and having no cognitive impairment; with exclusion criteria having a severe illness.

Data collection took approximately six months. Analysis of characteristics of the subject's data used descriptive statistics (univariate), while for wellness dimensions related to the quality of life, one by one used bivariate analysis. To find the correlation value and its significance, the Lambda correlation test is used if one of the variables is nominally unequal, while the Somers'd test is used for ordinal and unequal variables.

FINDINGS AND DISCUSSION

The results of the study were based on a comprehensive analysis that was conducted through both quantitative and qualitative, as detailed in the following sections:

Sociodemography

The distribution of subject characteristics in the three study locations can be seen in Table 1.

Table 1. Elderly Characteristics

Variable	P. Cibubur n=35	P. Cipayung n=39	Cicantayan Home Care n=73	Total n=147
	%	%	%	%
Sex :				
Male	22,9	23,1	27,4	25,2
Female	77,1	76,9	72,6	74,8
Age 60-69 yo	25,7	**43,6**	39,7	**37,4**
70-79 yo	25,7	30,8	**43,8**	36,1
>80 yo	**48,6**	25,6	16,4	26,5
Ethnic Jawa	**37,1**	**46,2**	0,0	**21,0**
Sunda	5,7	**23,1**	**100,0**	**57,1**
Batak	5,7	0,0	0,0	1,4
Minang	**22,9**	2,6	0,0	6,1
Cina	2,9	2,6	0,0	1,4
Others	25,7	25,5	0,0	12,9
Job status				
Not work	91,4	97,9	68,5	81,6
Work	8,6	1,4	**31,5**	18,4
Marital status				
Not married	17,7	7,7	0	6,1
married	20	17	38,4	30,0
divorced	11,4	7,7	1,4	5,4
Widower/widower	**51,4**	**66,7**	**60,3**	**59,9**
Religion: Islam	77,1	87,2	100	91,1
Kristen	20	10,3	0	7,5
Katolik	2,9	2,6	0	1,4
Education				
Low	14,3	**76,9**	**98,6**	**72,8**
Middle	40,0	20,5	1,4	15,6
High	**45,7**	2,6	0,,0	11.6

Economic status				
Low	0,0	**97,4**	**91,8**	71,4
High	**100,0**	2,6	8,2	28,6

The Relationship between Health and Quality of Life

Of the four components of the physical dimension assessed, only regular health check-up behaviour was significantly correlated with health quality of life. The results of this study support the statement of the Ministry of Health that behaviour is a crucial factor for intervention because behavioural factors influence health status by 30% (Rautio & Heikkinen, 2001; Handayani, 2006).

Although statistically exercise habits have a very weak correlation with the quality of life, substantially exercise habits are essential behaviours that support health and are associated with quality of life (Blackburn & Dulmus, 2007). This can be explained by the fact that the habit of exercising is mainly carried out by the elderly at the Cipayung Panti, but the elderly at the Cipayung Panti have more illnesses and the highest percentage of depression and the possibility of dementia, thus obscuring the effect of exercise on quality of life. The lowest percentage doing exercise is the elderly in Cicantayan Home Care. The elderly at Home Care Cicantayan, although they don't have the habit of exercising, have quite a lot of physical activity, they are active in doing household activities and social activities and some of them are still working.

The Relationship between Participation and Security with Quality of Life

Participation

The simple definition of participation is involvement or connection. Some of the literature has a complete understanding of various kinds, including a person's involvement physically or mentally, or emotionally towards a policy or activity. From these various definitions in this study, participation of the elderly defines as Involvement of the elderly individually or in groups both actively and passively which is positive in development to achieve a goal. In this case, the goal is to improve the quality of life. Participation is one of the pillars of active aging.

Participation in actual activities is assessed from the responsibilities/roles given or carried by the elderly both within and outside their environment. Participation in the community was only carried out by 8.2% of the elderly in Cantayan and 2.9% of the elderly in the Cibubur orphanage. Only 6.8% of the elderly in Cantayan carried out religious responsibilities; in the cultural sector, only 2.9% of Cibubur elderly; while the role of administrator is 4.1% of Cantayan seniors; and only 2.7% of Cantayan seniors as resource persons. Development of the participation or role of the elderly in the environment or outside the environment, of the elderly in institutions is not developed enough. Elderly Home Care Cantayan still has a role in the group and outside the group.

Security

Security is a pillar of active aging. Security in this study is seen from respect by relatives, friends, and the community, as well as unpleasant or violent actions and falls experienced by the elderly. The results show that:

1. Respect

   The respect given to the elderly in this study was seen from the activities of friend visits made to the elderly living in the institution and the community, as well as the community's attention/care to the elderly. One of the ways to pay respects to the elderly through relatives and friends is to visit. The visits were made around 67 to 98% with a frequency of 5 times a month; Cibubur nursing homes only 1-2 times per month by about 11 to 28%; and the Cipayung residence only 1-2 times per month by around 7.8%. As for attention by the community in the form of visits, around 65.7% in Cibubur, 84.6% in Cipayung, and 92.8% in Cantayan.

2. Acts of Violence

Acts of violence only occurred in Cibubur by 14.3% and 25.6% in Cipayung; only around 25% were yelled at in Cipayung. Being insulted was more real in Cibubur, around 11.4%. Fellow residents of the institution dominated the action. About 60% of the search for help was only carried out in Cibubur. They do not seek help because of reluctance.

3. Fall Event

Seniors in the three places have experienced falls, and the highest percentage of cases are in the elderly at the Cibubur Panti 48.6%, followed by Cipayung Home 35.9% and Home Care Cantayan 34% with the causes being slippery floors, tripping, and dizziness.

The relations between the parenting aspects of the pillars of participation and safety from the concept of active aging and quality of life can be seen in Table 2.

Table 2. Relationship of Participation, Safety and 6 Wellness Dimensions with Quality of Life

Variable	Quality of Life						Statistics		
	Low		High		Total		R	P	Statistic Test
	N	%	n	%	N	%			
Participation/role									
Yes	0	0,00	7	100,0	7	4,8	0,214	**0,010**	**Somers'd**
No	30	22,4	110	78,6	140	95,2			
Visit/visited by friends									
No			59				0,173	**0,006**	**Somers'd**
Yes	23	28,9	58	72,0	82	55,8			
Visit/visited by family	7	10,		89,2	65	44,2			
No							0,198	**0,004**	**Somers'd**
Yes		8	43		63	42,9			
	20	31,7	74	68,3	84	57,1			
	10	11,9		88,1					
Experience exchange There is no real activity yet									
Teaching and learning activities There are no real activities yet									
Integrate with the environment (community work, set up events / help in disasters, etc.)									
The risk of fall									
Ever									
Never	19	33,9	37	66,1	56	38,1	0.072	**0,003**	**Somers'd**
	11	12,1	80	87,9	91	61,9			
Experiencing Violence									
Ever	5	33,3	10	66,7	15	10,2	0,144	0,269	Somers'd
Never	25	18,9	107	81,1	132	89,8			

From Table 2, it appears that the physical-participation domain, as well as being visited by friends and relatives in their spare time, which is the social-participation domain, is significantly correlated with quality of life. Experience of fallen is also significantly correlated with quality of life.

Discussion

Participation which gives the elderly the opportunity to participate in community life, such as visiting and being visited by friends, and visiting relatives in their spare time, is considered as social participation correlates significantly with quality of life. Appreciation for any activities that the elderly did, their feeling, and their belief was identified to have an impact on health and quality of life (Ayceman, 2010). Visiting or being visited by friends and or relatives was performed by the elderly Cantayan. Families usually provide caregiving for self-care (physical and emotional), while friends offer more emotional support. Social interaction with neighbours increased the QOL scores for physical health, social relationship, and environmental domains. Living in peri-urban areas was

associated with lower QOL scores for physical health, psychological health, and environment, while participation in group activities increased QOL scores in these domains (Zin et.al., 2020).

One component of the security aspect of elderly caregiving assessment is the experience of falling. The experience of falling is an application of physical-safety caregiving. The results of this study indicate that those who have fallen have a lower quality of life compared to those who have never experienced a fall. Falling and its consequences are one of the major health problems that affect the quality of life of the elderly (Rubenstein, 2000; Ozcan et al., 2005; World Health Organization, 2007). The most apparent consequence of falling is loss of independent function. Twenty-five percent of those with a fracture of one hip joint require nursing care throughout their lives. About 50% of those injured in falls require treatment in hospice care. Most who fall and do not suffer serious injuries often experience psychological impact. They are afraid to do various activities for fear of falling, which is about 25% of those living in the community. The cost for care and treatment of falls is not small and most of the costs incurred for injuries for elderly people aged 65 years during their lifetime are injuries due to falls (Tremblay Jr. & Barber, 2010).

Most of the risk factors that influence falls can be prevented, especially extrinsic factors which are closely related to caregiving (Johnston, 2001; Tremblay Jr. & Barber, 2010). Control of walking aids that are not the right size, weight, or method of use, hazardous environments (wet or uneven slippery floors, carpets that do not stick well on the floor, objects or floor mats that are easily shifted, places for handrails not strong/rocking, low bed or latrines, poor lighting or glare) all of these must be a part of parenting. Thus, efforts to prevent falls are very important. One of the intrinsic factors that influence falls is postural instability, which is defined as the body's inability to maintain the body's center of mass within the limits of stability determined by the base of support. Stability margins are places in space where the body can maintain its position without moving from the base of support. These limits may change according to the task, individual biomechanics, and environmental aspects (Rahmanto, 2008).

According to the WHO's Active Ageing, the exogenous latent factors "health" and "security" are estimated straight influence the endogenous latent factors of "participation", and indirectly modify it via intermediating the function of "willingness". Health has an important positive effect, while security has a significant negative effect on participation, which is found in the structural equation model. Furthermore, the willingness of older people to participate was significantly increased by health and security. For improving the participation of older people, the maximization of health and the balance of security level can be more beneficial (Yang et.al., 2020).

CONCLUSIONS

It was found that the habit of carrying out health checks, being grateful, social activities, mutual friendship, participation in/outside the environment, and remaining active at work is significantly related to the quality of life of the elderly. It is recommended that future studies focus on social security, as it represents the primary source of retirement security and significantly impacts the well-being of older adults who have retired. Additionally, exploring the national pension system in more detail would be beneficial. The development of geriatrics knowledge in holistic management of geriatric services should include caregivers. Development of social gerontology related to elderly empowerment and the development of gerontic care in the form of integrated nursing care involving caregivers also should be done.

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