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# The Effects of elderly daily activities associated with the loneliness in urban communities, Jakarta, Indonesia

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The global demographic landscape is witnessing a notable rise in the number of elderly individuals susceptible to feelings of isolation. Loneliness is a significant concern that can adversely impact the overall wellbeing of older adults, encompassing both their physical and mental health, as well as their social connections. This research sought to explore the efficacy of engaging in daily activities as a means to alleviate loneliness amongst older adults residing in urban settings in Jakarta. The study examined a sample of 105 individuals aged 60 years and above in Jakarta province. Various statistical analyses such as cross-tabulation, chi-square tests, and logistic regression were employed to interpret the data collected. The study enrolled 105 older adults from diverse backgrounds including community-dwelling seniors, residents of nursing homes, and attendees of elderly schools. It was observed that 3 to 4 older adults in the study location reported experiencing loneliness, with the highest incidence observed among those in public aged care facilities. Participating in daily activities was associated with positive outcomes such as improved health status, better quality of life, and enhanced social support, which in turn contributed to a reduction in feelings of loneliness. The findings of this study underscore the significance of daily activities in mitigating loneliness and enhancing various aspects of wellbeing among elderly individuals. The prevalence of loneliness among older adults in urban communities was found to be at a moderate level, with higher rates reported among those in public aged care facilities. Prioritizing engagement in daily activities emerges as a crucial intervention in addressing loneliness among older adults, particularly in urban locales.

## 1. Introduction

The number of elderly individuals has significantly increased worldwide in recent years. In Indonesia, the percentage of older adults in the population rose from 9.78% to 10.82% in 2021, signaling a shift towards an aging population. Despite this trend, Indonesia is poised to experience a second demographic dividend, contingent upon a decrease in the dependency ratio. With the growing number of older adults, it is vital to enhance their quality of life to enable them to remain active participants in society, both socially and economically.

To achieve this, a promotional strategy focused on improving the physical, mental, and social well-being of older adults is imperative. Loneliness is a pressing public health concern for the elderly, with research highlighting the detrimental effects on their overall health. The prevalence of loneliness and social isolation has been on the rise, particularly exacerbated by the challenges posed by the COVID-19 pandemic. In light of these concerns, it is crucial to prioritize the well-being of older adults and provide support to mitigate the impacts of social isolation on their health and overall quality of life.

Prior research has indicated that various factors such as age, gender, marital status, education level, income, self-reported health, religious beliefs, activities of daily living (ADL), number of children, instrumental activities of daily living (IADL), living arrangements, oral health, dental issues, vision problems, employment status, hearing impairments, chronic illnesses, leisure pursuits, social support, depression, and cognitive function play a significant role in determining the level of loneliness experienced by elderly individuals. Loneliness can have detrimental effects on both the physical and mental well-being of individuals, underscoring the importance for healthcare providers to be knowledgeable about the prevalence of loneliness and the factors influencing it.

However, the majority of studies conducted in Indonesia concerning loneliness have focused on the general population or adolescents. Few studies have specifically examined the prevalence of loneliness among older adults living in communities in Indonesia. Therefore, the objective of this study was to investigate the prevalence of loneliness and the factors associated with it among older adults residing in Jakarta, Indonesia. The main hypothesis of this study was that there are correlations between the

demographic characteristics of older adults and their experiences of loneliness. (Susanty et al., 2022)

Government officials, healthcare providers, and community leaders need to recognize the significant impact of social isolation and loneliness on people's health. These factors can contribute to an increase in cardiovascular problems and mental health issues, ultimately leading to higher rates of morbidity and mortality. It is crucial to implement prevention strategies that involve both public and voluntary sectors, utilizing an asset-based approach to address these issues effectively.

Loneliness is a prevalent health concern, especially among the elderly population in Indonesia. It is essential for the government, social workers, and healthcare professionals to address this issue promptly. The study also underscores the importance of developing specific strategies to prevent loneliness in the future.

## 2. Research Method

This cross-sectional study employed a quantitative approach as part of an operational research project aimed at reducing loneliness among older adults in Jakarta, Indonesia. A total of 106 participants aged 60 and above were selected from various community groups, aged care facilities, and private residences in East Jakarta, specifically in the Cipayung sub-district. Data were collected through structured interviews using a questionnaire that assessed social and emotional loneliness, measured by the De Jong Gierveld scale. Predictor variables included socio-demographic factors such as age, gender, education, marital status, income, living arrangements, and community affiliation. The analysis involved cross-tabulation, chi-square tests, and logistic regression to identify correlations between these factors and loneliness levels. Loneliness was categorized as low or high, with a cutoff score of 42.42 based on Booyesen's formula, determined by responses to 11 Likert-scale questions.

## 3. Result and Discussion

The Loneliness scale of the Older Adults in urban communities

Through the analysis of loneliness levels using the De Jong Gierveld scale, it was determined that the loneliness index for elderly individuals in urban areas is 35.15 (see Table 1). These findings suggest that a significant portion of older adults in urban settings are experiencing feelings of

loneliness. Further examination based on the type of living environment revealed that older adults residing in public aged care facilities reported the highest level of loneliness at 39.96, surpassing those living in other community settings or institutions. Conversely, older adults participating in senior school/SL programs exhibited the lowest loneliness index at 29.61 when compared to their counterparts in different community settings or institutions.

Table 1. The Loneliness Scale of the Older Adults in Urban Community

Variabel	The Loleliness scale							
	Always, every time		Often		Sometime		Never	
	N	%	n	%	n	%	n	%
1. I miss having a close friend	12	11,4	21	20	44	41,9	28	26,7
2. I have a feeling of emptiness	1	1	7	6,7	43	41	54	51,4
3. I miss the pleasure of being with someone else	7	6,7	20	19	39	37,1	39	37,1
4. I feel my friends are very limited	5	4,8	12	11,4	19	18,1	69	65,7
5. I miss having someone else around me	10	9,5	15	14,3	33	31,4	47	44,8
6. I feel ignored by family nor friends or neighbors or surroundings	1	1	4	3,8	14	13,3	86	81,9
7. There's someone I can talk to about everyday problems.	33	31,4	33	31,4	22	21	17	16,2
8. There are a lot of people that can be a place to lean when I have a problem	21	20	27	25,7	35	33,3	22	21
9. There are a lot of people I can trust completely	17	16,2	28	26,7	32	30,5	28	26,7
10. There are a lot of people close to me	18	17,1	47	44,8	31	29,5	9	8,6
11. I can call my friends whenever I need th em	18	17,1	39	37,1	26	24,8	22	21

Older individuals in urban areas tend to experience more social loneliness than emotional loneliness, with a social loneliness index of 48.25 compared to 24.23 for emotional loneliness. The highest emotional loneliness is found among older adults in the BKL community (31.94), while the lowest is in the general community (20.00). Social loneliness is highest in public-aged care facilities (57.50) and lowest in senior schools (34.85). Elderly individuals are particularly vulnerable to loneliness due to declining health, reduced mobility, and loss of social connections, which can lead to harmful behaviors, increased stress, disrupted sleep, and worsened physical and mental health.

Demographic data reveal that most participants are aged 60-69 (64.8%), female (60%), and have a lower education level (41%). Additionally, 52.4% are unmarried, 47.6% have more than two children, and 85.7% still have income sources. Many live with family or caregivers in elderly care facilities (71.4%), 60% own homes, and 40% are active in community groups. However, a significant number report poor health (67.6%) and poor social relationships (50%).

Table 2 Socio-demographic characteristics, community settings, health condition, and the SRC of older adults in urban communities (N=105), 2023

Variables/Category	n	%
<b>Age group</b>		
60-69	68	64.8
70+	37	35.2
<b>Gender</b>		
Male	42	40.0
Female	63	60.0
<b>Married Status</b>		
Married	50	47.6
Not Married (ever & never married)	55	52.4
<b>Number of Children</b>		
No Children	15	14.3
1-2 Children	40	38.1
> 2 Children	50	47.6
<b>Educational Level</b>		
Low (No Educ-Completed primary)	43	41.0
Middle (Secondary & High)	39	37.1
High (Diploma/Univ)	23	21.9
<b>Income Sources</b>		
No	15	14.4
Yes	90	85.7
<b>Living Status</b>		
Living with spouse/family/Aged care	75	71.4
Living alone	30	28.6
<b>House Ownership</b>		
Yes, having one's own house	63	60.0
Not having own house	42	40.0
<b>Community Setting</b>		
Aged care	30	28.6
Community groups (Senior school, BKL)	42	40.0
Not involved in any communities	33	31.4
<b>Total</b>	<b>105</b>	<b>100</b>

*Source: Calculated by the author, Research Data 2023*

Loneliness can be influenced by various social factors, including one's socio-economic status and the environment in which they live. Disparities in

loneliness levels may stem from inequalities in resources such as job opportunities, educational access, healthcare services, and transportation options. Limited financial means can result in individuals being unable to engage in social activities or participate in opportunities for social interaction.

Tabel 3. Results of bivariate analysis of chisquare test of socio-demographic characteristics on the level of loneliness of elderly people in urban areas (N=105)

Variables/Category	Loneliness			<i>p</i> -value
	low (16) n (%)	middle (76) n (%)	high (13) n (%)	
<b>Age group</b>				
60-69	7 (10.3)	53 (77.9)	8 (11.8)	0.137
70+	9 (24.3)	23 (62.2)	5 (13.5)	
<b>Gender</b>				
Male	4 (9.5)	31 (73.8)	7 (16.7)	0.278
Female	12 (19.0)	45 (71.4)	6 (9.5)	
<b>Marital Status</b>				
Married	8 (16.0)	39 (78.0)	3 (6.0)	0.217
Divorce	8 (16.3)	33 (67.3)	8 (16.3)	
Not married	-	4 (66.7)	2 (33.3)	
<b>Number of children</b>				
No children	2 (13.3)	8 (53.3)	5 (33.3)	0.011*
1-2 children	4 (10.0)	29 (72.5)	7 (17.5)	
> 2 children	10 (20.0)	39 (78.0)	1(2.0)	
<b>Education level</b>				
Elementary school	8 (18.6)	31 (72.1)	4 (9.3)	0.431
Junior High school	4 (10.3)	31 (79.5)	4 (10.3)	
Senior High school	4 (17.4)	14 (60.9)	5 (21.7)	
<b>Living arrangement</b>				
Living with spouse/children	12 (16.0)	57 (76.0)	6 (8.0)	0.098**
Living alone	4 (13.3)	19 (63.3)	7 (23.3)	
<b>Income</b>				
No income	2 (13.3)	8 (53.3)	5 (33.3)	0.067**
Own income from work	11 (18.3)	45 (75.0)	4 (6.7)	
Income from children/relative	3 (10.0)	23 (76.7)	4 (13.3)	
<b>Total</b>				

Source: Calculated by the author, Research Data 2023

\* statistically significant at  $p\text{-value} \leq 0.05$

\*\* statistically significant at  $p\text{-value} \leq 0.10$

Humans, as social beings, are influenced by the beliefs and ideas of their communities, which shape their thoughts and behaviors. These ideologies are often passed down to future generations, allowing for the continuation and evolution of societal beliefs.

Table 4 highlights the activities of older individuals, showing that most engage in daily tasks like household chores, reading, watching TV, and exercise. However, only a small percentage have specific hobbies, with passive activities like watching TV or playing games being most common. More active hobbies like farming, animal care, or crafts are less frequent. When they have free time, seniors prefer reading, sports, and household chores over activities like traveling or fishing. Engaging in these activities is widely seen as helping to reduce feelings of loneliness among the elderly.

Table 4 Daily Activities of older adults in urban communities (N=105), 2023

Variables/Category	N	%
<b>Household chores</b>		
Yes	87	82.9
No	18	17.1
<b>Reading</b>		
Yes	83	79.0
No	22	21.0
<b>Watching TV</b>		
Yes	94	89.5
No	11	10.5
<b>Recreation</b>		
Ya	79	75.2
Tidak	26	24.8
<b>Exercise</b>		
Yes	94	89.5
No	11	10.5
<b>Art and Craft</b>		
Yes	44	41.9
No	61	58.1
<b>Maintain &amp; caring for plants/animals</b>		
Yes	63	60.0
No	42	40.0
<b>Play chess, cards or other games</b>		
Yes	13	12.4
No	92	87.6
<b>Total</b>	<b>105</b>	<b>100</b>

Source: Calculated by the author, Research Data 2023

Table 5. Results of bivariate analysis of chisquare test of daily activities on the level of loneliness of elderly people in urban areas (N=105)

Variables/Category	Loneliness			p-value
	low (16) n (%)	middle (76) n (%)	high (13) n (%)	
<b>Do house chores</b>				
Yes	14 (16.1)	65 (74.7)	8 (9.2)	0.091**
No	2 (11.1)	11 (61.1)	5 (27.8)	
<b>Reading</b>				
Yes	11 (13.3)	62 (74.7)	10 (12.0)	0.508
No	5 (22.7)	14 (63.6)	3 (13.6)	
<b>Watching TV</b>				
Yes	16 (17.0)	69 (73.4)	9 (9.6)	0.021*
No	-	7 (63.6)	4 (36.4)	
<b>Recreation</b>				
Yes	13 (16.5)	60 (75.9)	6 (7.6)	0.034*
No	3 (11.5)	16 (61.5)	7 (26.9)	
<b>Exercise</b>				
Yes	16 (17.0)	65 (69.1)	13 (13.8)	0.096**
No	-	11 (100.0)	-	
<b>Art and Craft</b>				
Yes	8 (18.2)	30 (68.2)	6 (13.6)	0.701
No	8 (13.1)	46 (75.4)	7 (11.5)	
<b>Maintain &amp; caring for plants/animals</b>				
Yes	14 (22.2)	43 (68.3)	6 (9.5)	0.040*
No	2 (4.8)	33 (78.6)	7 (16.7)	
<b>Play chess, cards and other games</b>				
Yes	3 (23.1)	7 (53.8)	3 (23.1)	0.263
No	13 (14.1)	69 (75.0)	10 (10.9)	
<b>Total</b>				

Source: Calculated by the author, Research Data 2023

\* statistically significant at  $p\text{-value} \leq 0.05$

\*\* statistically significant at  $p\text{-value} \leq 0.10$

The process of societal aging has the potential to impact various aspects of economic development, employment trends, family dynamics, government



and community support for the elderly, as well as the incidence of long-term health conditions and disabilities.

#### 4. Conclusion

The study on the effects of daily activities on loneliness among older adults in urban communities of Jakarta reveals key factors contributing to loneliness, including social isolation, limited mobility, and lack of meaningful connections. To address these challenges, it is essential to promote social engagement, support networks, and intergenerational connections. Implementing community engagement programs, establishing support networks, organizing intergenerational activities, and improving accessibility and mobility options can significantly reduce loneliness among older adults. Additionally, providing tailored mental health services and counseling can offer crucial support to those experiencing isolation, ultimately enhancing their overall well-being.

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