

Elderly Adaptive City Planning-Bringing the Age-Friendly City Concept to Live

NUR AULIA ROSNI
ROSILAWATI ZAINOL
AISYAH ABU BAKAR
ZAKIAH PONRAHONO
HAZA HANURHAZA MD JANI

MASA POLICY DEVELOPMENT PROGRAMME

POLICY BRIEF 11

Elderly Adaptive City Planning-Bringing the Age-Friendly City Concept to Live

Nur Aulia Rosni
Rosilawati Zainol
Aisyah Abu Bakar
Zakiah Ponrahono
Haza Hanurhaza Md Jani

2022

MASA POLICY DEVELOPMENT PROGRAMME

Elderly Adaptive City Planning-Bringing the Age-Friendly City Concept to Live

© INSTITUT MASA DEPAN MALAYSIA, 2024

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic, or mechanical, including photocopy, recording, or any other information storage, and retrieval system without prior permission in writing from Institut Masa Depan Malaysia.

Publisher:



Institut Masa Depan Malaysia (MASA)
192, Jalan Ara, Bukit Bandaraya,
59100 Kuala Lumpur.
Tel: 03-23881059 Fax: 03-23881049
E-mail: mpdp@institutmasa.com

Advisor:

Azril Mohd Amin

Editorial Team:

Marhaini Kamaruddin

Hamidah Atan

Mohamed Azmi Mohd Rasheed Khan

Mohd Noor Musa

Lili Fariza Ariffin

Sim Why Jean

Nurul Aqilah Azman

Muhammad Fadzil Anif

Nur Zalikhaa' Zainal Abidin

Liwani Che Long

Muhammad Haqimie Aiman Rosli

Muhammad Akmal Hamdan

PREFACE

Institut Masa Depan Malaysia (MASA) is an independent think tank that brings together experts in government and academia to provide quality research, policy recommendations, and analysis on the full range of public policy issues guided by the shared prosperity values.

Since its inception, MASA has been actively involved in shaping national policies and frameworks. MASA Policy Development Programme (MPDP) was introduced as a pioneering initiative aimed at promoting policy research among researchers from public and private universities across the country, in alignment with the Shared Prosperity Vision 2030 and the Sustainable Development Goals, which are integrated with the 12th Malaysia Plan.

Through the MPDP 1.0 initiative, 30 Policy Briefs have been successfully produced, encompassing policy input and recommendations across sectors such as economics, social issues, education, and sustainable development.

MASA expresses its gratitude to Dr. Nur Aulia Rosni and her team for the production of this policy brief. The commitment of the MPDP grant recipients, along with close cooperation with relevant stakeholders, is highly appreciated and is hoped to continue making a positive impact on national policy development.

Azril Mohd Amin

Chief Executive Officer

Institut Masa Depan Malaysia

ABOUT MASA

Institut Masa Depan Malaysia (MASA) is an independent think tank that brings together experts in government and academia to provide quality research, policy recommendations, and analysis on the full range of public policy issues guided by the shared prosperity values.

MASA was established in January 2019. The formation of the organisation was inspired and mandated by the Seventh Prime Minister, YABhg. Tun Dr Mahathir Mohamad and the Eighth Prime Minister, YB Tan Sri Dato' Haji Muhyiddin Bin Haji Md Yassin. It was founded out of a passion to forward the philosophy of shared prosperity in Malaysia and this region.

MASA also was commissioned by the government of Malaysia to author and develop the Shared Prosperity Vision 2030 plan as the new socioeconomic plan for Malaysia.

Our Vision

To be a thought leader on policy ideas and analysis guided by shared prosperity values.

Our Mission

To create a world where no one is left behind by influencing policymakers to develop data-driven policies that ensure equitable wealth distribution and continuous improvement of people's well-being.

ABOUT MPDP

MASA Policy Development Programme (MPDP) is a pioneering effort in promoting policy research that has become part of MASA's flagship project, in line with the 12th Malaysia Plan which is aligned with the Shared Prosperity Vision and the Sustainable Development Goals.

The research grant, introduced for the first time in 2021, received an encouraging response public and private institutions of higher learning as well as non-governmental organizations.

MPDP researchers have produced studies across various strategic areas, including multidimensional poverty, education for the B40 group, sustainable urban planning for low-income communities, regional inclusivity in Sabah and Sarawak, social enterprise models for Micro, Small and Medium Enterprises (MSMEs), green economy potential and food security.

Other strategic areas of studies include empowerment of the ecotourism sector, climate change, health preparedness and crisis resilience, addressing learning loss, business acceleration, affordable housing and social protection.

All these are reflections of the initiatives and aspirations, inspired by the 8th Prime Minister and Chairman of MASA, Tan Sri Dato' Haji Muhyiddin bin Hj. Md. Yassin.

LIST OF MPDP 1.0 POLICY BRIEFS

NO	TITLE	PROJECT LEADER
1.	Family Digital Citizenship in Pandemic Recovery: Prospects, Challenges, and Policy Considerations	Assoc. Prof. Dr. Nor Diana Mohd Mahudin
2.	Kajian Kelestarian Perusahaan Sosial di Malaysia: Perspektif Pasca Pandemik COVID-19	Dr. Abu Hanifah bin Ayob
3.	Increasing Medical Specialists in Malaysia: Beware of Vicious Cycle	Asst. Prof. Ts. Dr. Chang Jing Jing
4.	Public Reactions and Acceptability on Carbon Tax Implementation in the Malaysian COVID-19 Economic Recovery Plan	Assoc. Prof. Dr. Izlawanie bt Muhammad
5.	Role of People with Disabilities towards Sustainability of Tourism Sectors in Malaysia	Ms. Kalai Vani A/P Kalimuthu
6.	Pelan Pembangunan Dasar Pengurusan Pendidikan Murid B40	Dr. Bity Salwana bt Alias
7.	The Adoption of Digital Technology in Micro-Retail Enterprises	Dr. Sharifah Muhairah Shahabudin

NO	TITLE	PROJECT LEADER
8.	The Impact of COVID-Malaysia's Emergency Mitigation Measure on 10 High-Value Crops	Assoc. Prof. Dr. Fatimah Kayat
9.	Towards Enhancing Sustainability Practices Among SMEs: Awareness and Challenges	Dr. Wahidah bt Shari
10.	The Role of the Share of Energy from Renewable Sources on FDI Inflows	Dr. Goh Lim Thye
11.	Elderly Adaptive City Planning-Bringing the Age-Friendly City Concept to Live	Dr. Nur Aulia Rosni
12.	Micro SMEs Rescue Plan: No One is Left Behind	Dr. Foo Lee Peng
13.	Revitalizing the Urban B40 Communities Through The Development of a Multidimensional Integrated Community Sustainability Planning (ICSP) Framework	Dr. Peter Aning anak Tedong
14.	Grey Matter - An Examination of Malaysians Perspectives Towards Ageism and Impacts of Health	Prof. Dr. Choo Wan Yuen

NO	TITLE	PROJECT LEADER
15.	Road Safety and Health Risks of Food Delivery Riders During COVID-Implications and Recommendations	Dr. Laila Suriya Ahmad Apandi
16.	Exploring the Determinants of Community Well-being in Endemic Period: A Comparison Study between Rural and Urban Community	Dr. Naziatul Aziah Mohd Radzi
17.	Social, Economic, and Environmental Factors Determining COVID-19 Severity in Malaysia: Lessons Learnt From Non-Pharmaceutical Interventions (NPIs)	Dr. Teh Bor Tsong
18.	Human Capital Transformation in Talent Management Affecting Kelantan State Employee Performance During Pandemic COVID-19	Dr. Iskandar Hasan Tan bin Abdullah
19.	Pembangunan Sabah ke Arah Mencapai Kelestarian Hidup Masyarakat dan Kunci Kepada Malaysia Sebagai Negara Maju 2025	Dr. Mohd Ikbal bin Mohd Huda

NO	TITLE	PROJECT LEADER
20.	The Development of Youth Agropreneur Policy and Framework for Food Safety Sustainability and Poverty Reduction	Assoc. Prof. Dr. Sylvia @ Nabila Azwa bt Ambad
21.	Ketahanan dan Kapasiti Adaptasi Sektor Ekopelancongan Terhadap Pandemik COVID-19: Kajian Kes Komuniti Setempat di Pulau Tioman	Dr. Siti Nor Liyana bt Harun
22.	Input Polisi Bagi Penyelesaian Kemiskinan Situasi Untuk Keperluan Pelan Pemulihan Negara (PPN)	Assoc. Prof. Dr. Wan Ahmad Amir Zal bin Wan Ismail
23.	Ruang Hijau Bandar Sebagai Indeks Untuk Dasar Kesihatan Mental Mampan Semasa Pandemik	Assoc. Prof. Dr. Mohd Ramzi bin Mohd Hussain
24.	Assessing Organizational Resources for Post Pandemic Resiliency and Employees' Well-Being	Asst. Prof. Dr. Low Mei Peng
25.	Model T-Digital dalam Memupuk Perpaduan Masyarakat Majmuk di Malaysia	Dr Khairul Azhar bin Meerangani

NO	TITLE	PROJECT LEADER
26.	Mental Health Services Mapping for School Going Children and Adolescents	Dr. Tengku Amatullah Madeehah bt Tengku Mohd
27.	COVID-19 Outbreak-Analysis Visualization and Classification of Food Insecurity Among Vulnerable Groups	Assoc. Prof. Dr. Mohd Asrul Affendi Abdullah
28.	Government and Corporate Social Responsibilities for Malaysians' Livelihoods During COVID-19: A Retrospective and Prospective Reflective Analysis of Initiatives in 2020 and Beyond	Dr. Cheong Huey Fen
29.	Sustainable Development Goals (SDG): From STEM to Employability	Prof. Dr. Teoh Sian Hoon
30.	Big Data Analytics (BDA) Capability Model for SMEs: Post COVID-19	Dr. Mohammad Falahat

TABLE OF CONTENTS

Table of Contents	1
Biography	2
Executive Summary	4
Introduction and Problem Statement	7
Critique of Current Policy	8
Analysis and Findings	10
Policy Recommendations	16
References	22

BIOGRAPHY

NUR AULIA ROSNI

Nur Aulia Rosni is a Senior Lecturer at the Department of Urban and Regional Planning, Faculty of Built Environment, Universiti Malaya (UM). She obtained her Ph.D. at the International Islamic University Malaysia in 2018 and joined UM in the same year. Her research interests are in land use planning and urban analytics, transportation planning, planning law, and urban management. Her recent research projects focus on land use planning for urban parks, urban placemaking, and physical planning for elderly-friendly neighborhoods.

ROSILAWATI ZAINOL

Rosilawati Zainol is an Associate Professor at the Centre of Sustainable Urban Planning and Real Estate (SUPRE), Department of Urban and Regional Planning, Faculty of Built Environment, Universiti Malaya (UM). Her research interest is in urban analytics (the use of information technology in urban and regional planning and urban studies especially in geographic information systems), spatial analysis and statistics, circular and informal economy.

AISYAH ABU BAKAR

Aisyah Abu Bakar is a Senior Lecturer at the Department of Environment, Faculty of Forestry and Environment, Universiti Putra Malaysia. She is proficient in Statistical Data Analysis, Statistical Modeling, Data Visualization, and Data Collection, holding a Doctor of Philosophy in Built Environment with a specialization in Subjective Sustainable Well-Being, Human Interdependence, and Intangible Cultural Heritage.

ZAKIAH PONRAHONO

Zakiah Ponrahono is a Tutor and Research Assistant at Universiti Putra Malaysia. She obtained her Ph.D. in Built Environment from IIUM and a Master of Science in Environmental Planning and Management from UPM. Her research interests are focused on enhancing public stage bus services in Peninsular Malaysia and assessing sustainable development strategies in urban planning.

HAZA HANURHAZA MD JANI

Haza Hanurhaza Binti Md Jani is an Assistant Professor at International Islamic University Malaysia, Kulliyah of Architecture and Environmental Design. She obtained her Ph.D. degrees in Landscape Architecture, with a specialization in Applied Sciences and Technologies. Her research interests lie in various facets of Landscape Architecture and Planning, with a particular focus on Engineering Tech and Applied Sciences and Technologies.

Executive Summary

The World Health Organisation (WHO) has called to inspire cities to be more age-friendly, especially in developing countries where it was predicted that the global elderly population will rise to 2.1 billion in 2050 (United Nations, 2021).

Malaysia is one of the developing countries that is expected to become an aging nation by 2035 (Rashid et al., 2021). By the year 2056, Malaysia will be a “super-aged society”, with over 20% of its population above the age of 65 (World Bank, 2020).

Malaysia’s population and housing census trends outlined the factors leading to the aging population: declining birth rate and increasing life expectancy rates (DOSM, 2017).

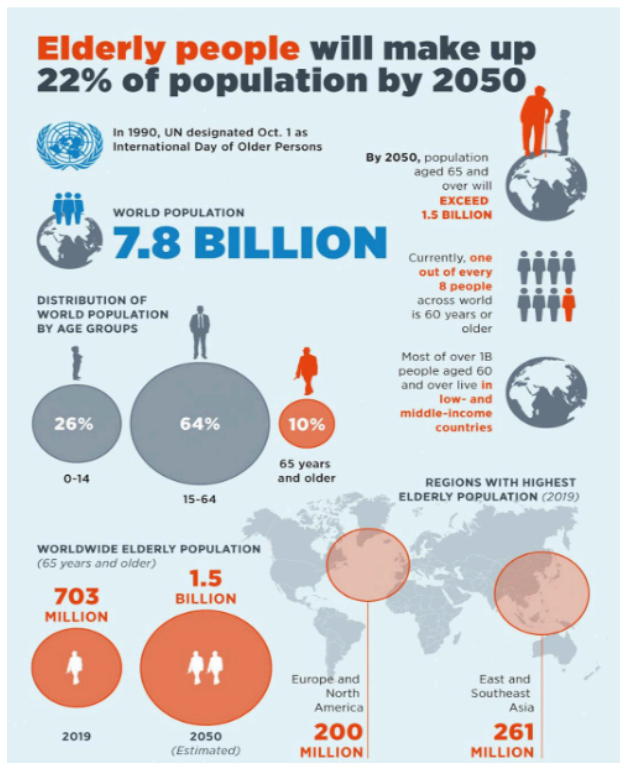
The rising elderly population in Malaysia is a positive sign of a prosperous nation, however, the living conditions accommodating the elderly at the neighborhood scale in Malaysian cities are still debatable.

The concept of “Aging in Place” or “Aging in Community” that allows the older generation to remain living in the community, with some level of independence, rather than in residential care or relocating to stay with relatives are missing in our urban neighborhoods.

This research seeks to look deeper into the design and built environment factors of neighborhood areas in Klang Valley, shaped by Malaysia’s economic boom in the 80s in an attempt to find solutions that can preserve the well-being and quality of life of elderly citizens at the neighborhood scale.

The output from this research response to objective 3 of the Older Persons Action Plan (PTWEN) which is to ensure elderly citizens can live in a safe and friendly neighborhood.

The recommendations are represented in three categories which are the short, medium, and long-term built environment interventions in PTWEN and also involved some suggestions to the current Physical Planning Guideline for Elderly by PLANMalaysia.



Key Messages and Recommendations

Recommendation 1

- To empowering local community through public-private partnership.

Recommendation 2

- To extend service by local planning authority at the neighbourhood scale.

Recommendation 3

- To support and independent elderly living.

Introduction and Problem Statement

According to von Faber et al., (2020), there are two global trends that bring a major impact on 21st-century society, namely urban aging and urbanization.

In addition, the COVID19 pandemic has somehow escalated the need to relook into the city planning scope to put more attention on this vulnerable group.

Urban aging is an emerging domain in social and health sciences, with implications that reach far beyond the borders of these disciplines.

It deals with both aging of the population and living in cities (van Hoof et al., 2018). As a comprehensive approach to staying in one's community/home, aging in place involves a variety of issues facing senior citizens, including housing, finance, health, education, recreation, and transportation.

Research confirms that mobility is a vital factor in the longer-term health and independence of older adults. In other words, transportation options typically decrease as people age (IPA, 2007)

Many older adults without a reliable, accessible, and affordable transportation mode are at risk of increased social isolation, decreased volunteer and economic opportunities, and overall poor health (IPA, 2007).

Critique of Current Policy Option

(1) Physical Planning Standard and Guideline for Elderly Community 2018

Malaysia is currently focusing heavily on elderly homes and aged care services. It is a positive move by the government, but it is far from being comprehensive, particularly regarding the identified built environment elements based on the WHO Elderly City Framework.

The guidelines cover various planning principles, including harmony, affordability, community, health, safety, accessibility, and usability. But only limited to facilities in the daily care center and the residential care center (home for older people).

The guidelines for facility distance from the elderly's place of residence are primarily geared toward non-disabled and less physically disabled seniors, leaving out frail elderly.

Lack of focus on establishing elderly-friendly physical environments in the neighborhood to ensure that the current neighborhood can support the concepts of "independent aging" and "aging in place."

(2) Plan of Action for Older Persons (PTWEN)

The short-term program aims to empower the neighborhood organization in order to ensure a safe neighborhood but the stakeholders involved are the Ministry of Home Affairs, The Ministry of Women, Family and Community Development, and the Ministry of Health. There is a lack of public-private partnership (PPP) with the local community at the micro-scale to achieve this program/action.

The medium-term program and long-term program highlight most of the built environment factors that support the elderly-friendly neighborhood.

This is a good measure especially when this program tackles the most important part of elderly-friendly living such as the establishment of a safety network service, counter service, and seating area designated for elderly in different places such as open space and public transportation hub.

The only missing point in the program is on elderly mobility and how to ensure there is a good public transportation system that support independent mobility among elderly citizens.

Analysis and Findings

(1) Objective 1: To determine the key built environment factors preferred by the older community in order to promote an age-friendly environment in their neighborhood.

The investigation yielded two significant findings. The first finding addressed the study's initial objective, which was to determine the key built environment factors preferred by the older community in order to promote an age-friendly environment in their neighborhood.

Respondents were asked to rank the importance of eight (8) built environment determinants identified from the World Health Organization's Elderly Friendly City Framework.

The results of Kolmogorov–Smirnov and Shapiro–Wilk tests from the survey suggested that health care and community support were the most important built environment determinants.

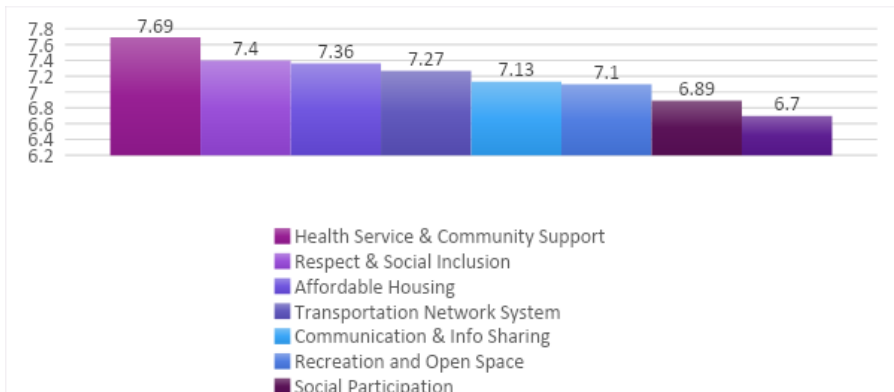
This finding tally with recent research output indicating that health services (availability, accessibility, and costs) and community support are important age-friendly city domain (Sun et al., 2018).

The elderly community has a higher and more frequent need for health care services as compared to other societal classes. Although clinics and hospitals are available to the elderly, most elderly in many countries' express dissatisfaction with the excessive delay in scheduling medical appointments and receiving treatment (Flores et al., 2019; K. H. Lee & Kim, 2020; Sun et al., 2018).

Many older people perceive community support and health services for the public to be insufficient due to a lack of assistance when seeking medical treatment and limited relevant community support services for the elderly. Other government healthcare facilities have insufficient medical resources, with increased waiting times that may delay diagnosis and treatment.

Table 1

Preferable Built Environment Determinant for Elderly Friendly Neighbourhood



The second most important built environment determinants for Elderly Friendly Cities are respect and social inclusion. Ronzi et al., (2020) and Hoof & Marston, (2021) suggested that respect and social inclusion are core to an age-friendly city, and relevant across all eight domains.

Ronzi et al., (2020) highlighted the absence of respect and social inclusion elements in the knowledge and practice of age-friendly city where this determinant needs to be translated into the urban environment so the elderly community can have the opportunities to cultivate social relationships, have access to resources and support, feel valued, respected and accepted as part of their community.

Affordable housing and a transportation network system are ranked third and fourth, respectively. Most middle-aged respondents intend to stay in their existing residence, demonstrating that the concept of aging in place is essential.

However, there is a critical need to provide suitable facilities to support aging because their needs and preferences change as people age. Some of them might choose to relocate to the suburbs, where housing and other costs of living are more affordable, while the remainder is then placed in elderly homes because there is no one to care for them (Aini et al., 2017; Lee et al., 2017; Sun et al., 2018).

A comprehensive transportation network is highly desired to assist the elderly in getting around independently and safely. Szeto et al., (2017) argued that the impact of aging on transportation systems should be given more attention than the other concerns that aging brings to the economy, health care, and retirement systems.

This is due to the existing transportation systems in most Asian countries being unable to support the expected growth in the older population in the near future.

There is no doubt that increases in older mobility promote general societal development, particularly in the transportation sector (Gomes et al., 2017; Lane et al., 2020; Loukaitou-Sideris et al., 2019; O’Hanlon, 2019; Soltani et al., 2018). As a response, more attention must be paid to the travel patterns of older adults, as their trip reasons differ from those of working age.

Work is no longer a part of most elderly people's lives. As a result, the changes brought about by retirement may have an impact on their travel habits.

Aside from living at home, the elderly enjoy visiting, shopping, and participating in recreational activities. More pedestrian-friendly street design and increased access to public transportation are required from policy to practice (Szeto et al., 2017). Following that, the rank successively went on to recreation and open space, communication and information sharing, social participation, and elderly employment and civic participation.

Lane et al., (2020) add to evidence showing that older people who live near a third place, such as a wet market, open spaces, and other social facilities, have better social health when there is increased concern about social isolation and loneliness among older age groups. This research also supports the elements of respect and social inclusion as the second most sought-after built environment aspect of an elderly-friendly city, as this feature facilitates social relationships.

(2) Objectives 2: Examining mobility-accessibility options of elderly to different social amenities within their neighborhood context

The second findings focused on examining the relationship of mobility-accessibility options of elderly to different social amenities within their neighborhood context.

The respondents were inquired about the preferable distance to 13 elderly facilities. The scale varies across six (6) ordinal categories of distance (1, ≤ 180 m; 2, ≤ 400 m; 3, ≤ 700 m; 4, ≤ 1.5 km; 5, ≤ 10 km; and 6, ≤ 20 km). Factor analysis was executed to determine the factorability of distance scale across 13 elderly facilities.

The data was screened for univariate outliers. The final output is categorized into three groups of preferred distances to reach 13 selected facilities and amenities.

These include motorable distance (<10 km), Cyclable Distance (≤ 1.5 KM) and walkable distance (≤ 400). Majority of the respondents agreed on Open Space, Community Hall and Religious Facilities to be within walking distance (400m) which resonate with the importance of the “Respect and Social Inclusion” element in the neighborhood.

The places that provide for daily necessities and health services such as grocery stores, restaurants, clinics, and bus stations are considered acceptable if those places were to be reached in cyclable distance.

Lastly, the respondents viewed facilities and amenities like hospitals, police and fire stations, elderly care facilities as relevant as long as those can be reached within 10 km distance via motorised vehicles.

Table 2

Preferred Distance of Elderly Facilities from The Neighbourhood

Preferred Distance	Elderly Facilities
Motorable distance ≤10km	<ol style="list-style-type: none"> 1. Elderly care facilities / elderly home 2. Elderly activity centre 3. Fire station 4. Hospital 5. Police station 6. Shopping centre
Cyclable distance ≤1.5km	<ol style="list-style-type: none"> 1. Restaurant 2. Grocery store 3. Clinic 4. Bus station
Walkable distance ≤400m	<ol style="list-style-type: none"> 1. Open space 2. Community hall 3. Religious facilities

Policy Recommendations

(A) SHORT TERM ACTION

Empowering Local Community Through Public-Private Partnership

(1) Safe Neighborhood for Elderly through Participative Surveillance

Elderly community needs more daily social interaction as compared to the working age group. This is because, after retirement, most of the elderly people need to suddenly shift their daily behaviors from the working environment to the home environment.

However, family members' concerns are on the safety of the elderly when they are going out (risk of crime and accidents). Without proper environmental support, most of the elderly individuals are at risk of mental and physical deteriorations due to isolation and neglect.

The concept of participative surveillance should be implemented at the community level, in accordance with the program outlined in PTWEN which is to “empower the community organization for monitoring the safety and security within their neighborhood”.

There should be a partnership between the local authority and community organizations, where they can work hand in hand to ensure a safe neighborhood and safeguard the welfare of the elderly/vulnerable community who need to be quarantined/treated (Risk Assessment and Control Order) as outlined in the National Recovery Plan.

(2) Public-Private Partnership in the Provision of Elderly Care Centre at Neighbourhood Scale

Countries that provide better supporting environments for the elderly such as Japan, Switzerland and Sweden show higher percentage of healthier and independent elderly citizen.

Some countries runs a program where they combine elderly activity centre with kindergarten and saw improving health among the elderly and good educational development for the children.

This program enabled the elderly to feel respected and included by the society which reduces the risk of psychological diseases such as dementia and at the same time help to develop the children's psychomotor development.

In Malaysia, we can make use the community hall, public library or musolla to be co-function with elderly activity centre.

Most of the public library nowadays have lack of visitation especially by younger generations, however, book café or hipster café that serve the same functions seem to attract the younger generation.

By utilising retired elderly as operator / guardian for these existing facilities, supported by the local authority and implementing the practice of placemaking, we can help to narrow the gap between different generation and create a higher quality living among community of different age group.

(B) MEDIUM TERM ACTION

Extend Service by Local Planning Authority at the Neighbourhood Scale

(1) Elderly Services and Benefits

The neighborhood concept must be built to meet the requirements of the elderly and easily supply essential services to them. These principles include enhancing communities, providing community services, developing all-age neighborhoods, constructing purpose-built structures, inventing small-scale intergenerational models, and investing in mobility, distribution, and communication technology (Khalid et al., 2020).

Many previous studies have found that elderly persons are facing lifestyle changes as a result of the current national economy, changes in the healthcare system, and the demand for better, more accessible mobility and transportation options (Rashid et al., 2021; van Hoof et al., 2018).

Mobile Health Facilities and Services should be provided by the local planning authority at the neighborhood scale as stated in Local Government Act 1976 (Act 171) under Part XII, subsection 101 (further services of the local authority).

The mentioned services include establish and maintain an ambulance service, establish, acquire, maintain and carry-on public transport services and conduct all things necessary for or conducive to the public safety, health and convenience.

LPA, supported by other stakeholders such as the Ministry of Home Affairs, and The Ministry of Women, Family and Community Development should provide mobile health care service from neighborhood to neighborhood so frail elderly or elderly that live alone can have access to health care and be able to be independent.

Home visits for frail elderly also can be conducted as the extended service from mobile health care services. It is vital to expand home care by providing a comprehensive service that fulfills all medical needs, not just their own, thereby favoring the prospect of continuing to remain in their homes (Flores et al., 2019).

Transportation facilities like shuttle bus for the elderly person are important as well to be provided at the neighbourhood scale as this service allow them to move around without being confined at their home. Confinement and isolation among elderly has greatly affected their physical and mental health.

It is also advised that a neighbourhood psychological advising and guiding service for the elderly be established, as well as increased visibility and information about healthcare options. Elderly people who live alone or with a high level of dependency should have automatic access to tele-help and tele-care services, as these can be difficult to obtain. Van Hoof et al. (2018) highlighted the importance of technological knowledge among elderly which can assist them in term of health and safety concerns. The mobility service should be added to the existing PTWEN Strategy 3 of Objective 3 which is to ensure elderly citizens can live in a safe and friendly neighborhood.

(C) LONG TERM ACTION

Supportive and Independent Elderly Living

(1) Elderly Mobility and Accessibility to Various Facilities

Extensive research suggested that to improve mobility among elderly, a few challenges such as deteriorated built environment, heavy traffic, homelessness, and crime need to be addressed (Loos et al., 2020; Loukaitou-Sideris et al., 2019). As people get older, their mechanized trips also decline significantly, therefore public transport facilities with shorter walking distance and less interchange required are most preferable among the elderly (Szeto et al., 2017).

There is a need to undertake actions in improving urban walkability conditions, as they are strongly related with the quality of life of older citizens. Urban planning challenges include an even and accessible distribution of services, including shops and health centers, which do not require large distances to travel (van Hoof et al., 2018).

Many communities are concerned about the elderly's access to affordable and reliable transportation, particularly in rural areas where service is almost non-existent. While they desire to be active, many retirees are confined to their homes due to a lack of mobility. Only a small percentage of the elderly use public transit on a daily basis, with the great majority relying on friends and family for journeys.

As mentioned earlier in the first recommendation, there should be a public transportation service at the neighborhood scale that acts as shuttle service for elderly and even the disabled community to access various places and not be confined to their home. The local authority should work together with the bus operator to identify their route of services.

Some LPA in Malaysia like Petaling Jaya City Council (MBPJ) provide free bus service, but it operates at the same route as other bus operators leaving some neighborhood areas unable to reach the service provided within walkable distance.

Other than that, neighborhood facilities and amenities that provides daily goods and services (grocery stores, clinics, library, community center) should not be provided in bigger scale but out of reached, instead, its supposedly provided at smaller scales and clustered at neighbourhood context such as in South Korea where almost all of the apartment complexes are fully provided with smaller scale and clustered facilities. This neighbourhood design reduces travel distance and supports independent living among elderly communities.

References

- Aini, A. M., Aziz, W. N. A. W. A., & Zulkifli, N. F. (2017). Middle adults' housing expectations for old-age: A study of urban area of Greater Kuala Lumpur. *Journal of Design and Built Environment*, 17, 150–165. <https://doi.org/10.22452/jdbe.sp2017no1.13>
- Gomes, M., Figueiredo, D., Teixeira, L., Poveda, V., Paúl, C., Santos-Silva, A., & Costa, E. (2017). Physical inactivity among older adults across Europe based on the SHARE database. *Age and Ageing*, 46(1). <https://doi.org/10.1093/ageing/afw165>
- Hoof, J. van, & Marston, H. R. (2021). Age-friendly cities and communities: State of the art and future perspectives. *In International Journal of Environmental Research and Public Health*, 18(4), 1–13. MDPI AG. <https://doi.org/10.3390/ijerph18041644>
- Lee, S. J., Kim, D., Parrott, K. R., Giddings, V. L., & Robinson, S. R. (2017). Perceptions on residential environments for urban low-income elderly homeowners aging in place. *Housing and Society*, 44(1–2), 4–21. <https://doi.org/10.1080/08882746.2017.1384992>
- Ronzi, S., Orton, L., Pope, D., Valtorta, N. K., & Bruce, N. G. (2018). What is the impact on health and wellbeing of interventions that foster respect and social inclusion in community-residing older adults? A systematic review of quantitative and qualitative studies. *Systematic Reviews*, 7(1), 1–22. <https://doi.org/10.1186/s13643-018-0680-2>

Ronzi, Sara, Orton, L., Buckner, S., Bruce, N., & Pope, D. (2020). How is respect and social inclusion conceptualised by older adults in an aspiring age-friendly city? A photovoice study in the north-west of England. *International Journal of Environmental Research and Public Health*, 17(24), 1–30. <https://doi.org/10.3390/ijerph17249246>

Scharlach, A. E., & Lehning, A. J. (2013). Ageing-friendly communities and social inclusion in the United States of America. *Ageing and Society*, 33(1), 110–136. <https://doi.org/10.1017/S0144686X12000578>

Sun, Y., Phillips, D. R., & Wong, M. (2018). *A study of housing typology and perceived age-friendliness in an established Hong Kong new town: A person-environment perspective*. *Geoforum*, 88 (October 2017), 17–27. <https://doi.org/10.1016/j.geoforum.2017.11.001>

Szeto, W. Y., Yang, L., Wong, R. C. P., Li, Y. C., & Wong, S. C. (2017). Spatio-temporal travel characteristics of the elderly in an ageing society. *Travel Behaviour and Society*, 9, 10–20. <https://doi.org/10.1016/j.tbs.2017.07.005>



INSTITUT MASA
DEPAN MALAYSIA

© 2022 INSTITUT MASA DEPAN MALAYSIA. All rights reserved.

Institut Masa Depan Malaysia
192, Jalan Ara, Bukit Bandaraya,
59100 Wilayah Persekutuan Kuala Lumpur

For more information, visit our website:
www.institutmasa.com

eISBN 978-629-95648-5-0



9 786299 564850