

Toward Housing for the Elderly in Indonesia

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Abstract

Nearly almost all countries in the world face the increase of the elderly population, particularly in urban areas. In this case the housing that can sustain the needs of the elderly becomes the primary concern. Developed nations such as United Kingdom (UK), United State of America (USA) and Japan are examples of countries with their economic development has tried to develop integrated policies for the welfare of the elderly so that elderly can exist safely and comfortably wherever they live. As a developing country, Indonesia is also facing the same problems with the growth of the urban elderly population. This paper is a study that aims to determine what extent and how Indonesian issues facing the elderly and housing, what potentials owned by Indonesia which can be considered as approaches to the provision of housing in accordance with the needs of the elderly? To accomplish these objectives, used methods of literature review related to the provision of housing for the elderly, in particular by studying the example of the UK, the USA and Japan, as the basis for a SWOT analysis, which then can lead to the conclusion. From the conclusion showed Indonesia needs to create an integrated policy in dealing with the problem of the elderly and housing by taking into account the local cultural values that can strengthen the policy.

Keywords: elderly in Indonesia, elderly welfare policy, housing policy

1. Introduction

United Nations Population Fund (UNFPA) in a report made in 2012 with the title of *Aging in the Twenty-First Century: A Celebration's Challenge*, explained that the maturation of the elderly population of the globe remains to increase significantly in the 21st century due to declining birth rates and rising survival in old age stages. In addressing the growth in the elderly population, both in the developed and developing countries have introduced policies to ensure the long-term welfare of the elderly. But in Southeast Asia as well as in Indonesia, Malaysia and Thailand, the long term care assurance remains to be improved compared with developed nations in East Asia such as Japan and Korea (UNFPA, 2012).

In developed countries, the economic development advanced earlier than the increasing of the aging population, so that the developed countries are better prepared to face the problems associated with the elderly compared to developing countries (UNFPA Indonesia, 2014). One of the long-term care policy for the elderly in developed countries is the provision of housing that can accommodate the needs of the elderly with a variety of complete facilities and services, including policies for the elderly who prefer to live in their own homes (aging at home). Based on these conditions the community system and family-based care should be encouraged, which is intended to the care system in the environment where the elderly live (United Nations, 2007; WHO, 2013).

An environment where the elderly live has to be environmentally friendly to the elderly (age-friendly physical environment) that use the advanced technologies, especially to support to the elderly with limited mobility, vision and listening. Affordable housing where the elderly become independent and get the opportunity for social contact and remain active in community activities also important to be noted (UNFPA, 2012). The Age Friendly City is the concept can answer those needs (WHO, 2007).

This concept encourages the elderly can be healthy and active (active aging). Indonesia as a developing country has become a country that is experiencing growth in the elderly population over time. This paper is a study based on a literature review aimed to answer the question how Indonesia is facing the elderly and housing problems and what considerations have to be paid attention in relation with the provision of housing in accordance with the needs of the elderly?

2. Study Methods

To answer the study questions presented in this paper it will be examined the literature that addresses the well-being of the elderly and housing policy in developed countries that already have experience in anticipating the problems of the elderly with regard to the provision of housing that supports their welfare. In this case, United Kingdom (UK), United State of America (USA) and Japan are the case studies concerned with how these countries started their attention to the importance of housing for the elderly. On this basis, the study of literature can not be separated from the history of the development of housing for the elderly and accompanying policies. To achieve the aim of the study, the SWOT approach will be used in the analysis process based on a literature review. With this approach can be inferred about the potential and the steps that need to be done well in advanced studies and in determining policy in order to provide the friendly housing for the elderly especially in Indonesia.

3. Housing and Elderly Issues And Policies in the UK, USA and Japan

In the UK, according to the Office of National Statistics (2012), the elderly population aged 65 years or older is increasing from 15% of the overall population in 1985, to 17% in 2010, and in 2035 increased to 23%. Along with the addition of an aging population, housing in England has a relation with the fulfillment of the needs of the elderly person's welfare. History shows that the housing developments with regard to the growth of the elderly population can be traced from the UK in the 18th century, when the industrial revolution took place.

Based on Ruggles (1987), with the industrial revolution, capitalist industry caused the elderly do not have a part in it and also caused the further fragmentation of the extended family into the nuclear family because of the situation that the parents were left alone while the children looking for their livelihood. Then, the elderly with economic limitations should eventually supported by the government and live in a special house for the poor (almshouse) where they were given the opportunity to be productive. This housing is a forerunner of a nursing home.

In its development, Rudlin et al (1999) described the development of housing in the UK ahead of the 21st century that indirectly provide the comfort for the elderly. Starting in the mid-19th century, there were mass housings and terrace housings built for the the nuclear families, especially for the categories of the workers in industrial cities. With a high population density, environmental quality decline and it encourageed the people, mainly from the middle class looking for a comfortable place to live in the suburbs. In the early 20th century housings with a garden city concept that allows people to stay comfortably and can bersoialisasi more inclusive were built. In these housings the elderly can live together with other generations.

According to Heumann et.al (1982) along with the provision of such housing, poor elderly are still considered to live in housing for the poor (almshouses or workhouses) and the government also provided hospital facilities for them. After the second world war, it was developed a senior housing called residential home that was a model of medical accommodation which was supported by the charity, but not like a nursing home managed by the health care providers. This housing was designed based on the barrier free concept so that the elderly can move independently. In the 1950^s sheltered housings were developed and based on Peace et al (2001), and the basic idea was to offer a good quality place to the elderly and as a fulfillment of the physical and social needs and also giving the elderly have a sense of security and independence until the elderly need of assistance and should move into nursing home. Based on Ruggles (1987), until the 1970^s such kind oh housings were still developed in the UK. Towards the end of the 20th century that was the 1980s housings with the concept of lifetime home and smart home were developed.

According to Peace (2001) lifetime home is a multi-generational housing that is accessible and able to adapt to the changing needs of each family member with age. The smart home, based on Demiris et al (2009), is a housing equipped with sensor systems or other devices to monitor the residents of the house so that the occupants can increase quality of life and independence.

In USA, based on Ortman (2014), ratio of the elderly population aged 65 years or more of the overall population, population increased from time to time but in 2050 has decreased. In 2012 and 2016, its recorded at 13.7% and 16.8%. Subsequently, in 2030 amounted to 20.3%, 2040 amounted to 21.0%, and in 2050 amounted to 20.9%. The increase in the elderly population has prompted the US government make housing policy that anticipates the needs of the elderly and long-term care assurance policy on an ongoing basis.

Based on the thesis written by Sek (2011), the initial provision of housing for the elderly in America are also growing in line with what happened in England in the 18-19 centuries, so that the housing system that supports the needs of the elderly follows the pattern developed in the UK. In the 1900^s it was developed a convalescent home, a house of healing, which is the forerunner of a nursing home. As for the long-term policy for the elderly, affecting housing delivery system is as follows:

1. The adult day care, programs that provide social services and recreational opportunities for the members.
2. Age in place, a system that allows the elderly to remain at home as long as they want. This system also allows for the execution of redesigning the home can follow the program of elderly service agencies around the house.
3. Assisted living, systems of housing for the elderly who need help with daily activities but not in a medical surveillance for 24 hours. The elderly in control service agencies that will ensure state of health, safety and welfare.
4. Group homes, the system are in the form of housing that provides support for the life of a group of the elderly who are unable to live alone and should be monitored, but unlike the existing system in the nursing home.
5. Congregate housing, a system service that has a system similar to nursing homes in a housing design as well as apartments. Within 24 hours, the service staff is ready to assist the elderly when needed. Each apartment unit is connected with an emergency system that is connected with the management, as well as alarm and intercom (Heumann, 1982)
6. Continued care retirement community is a selection of aged care facilities such as housing with services such as the case when elderly live in their own homes (aging in place), namely the possibility of changes in the room due to the adjustment needs of the elderly.
7. Elder Cottage Housing Opportunity (ECHO), is a system in the form of a small house that stands alone, was built near her family and still provide an opportunity for the independent elderly.
8. Hospice Care is a system of care in the home, in hospitals, in nursing home or private nursing homes that provide services diamana is a member of his own family.

Based on Wardrip (2010), in the United States, the concept of "livable community" to be put forward in determining housing policy that is friendly to the elderly. This concept is an overall concept of affordable housing economically and in accordance with the needs of the elderly, has a variety of community-scale service facilities are easily accessible, the availability of choices of transportation system that facilitates mobility, so that the elderly can live independently and fully participate in the social life. In principle the concept of "livable community" will provide the opportunity for the elderly to get the facility environment that has a meaning in life. Some things to note in this concept are: 1) application of the concept of Universal Design for the design of the house and the environment and tools that support the completeness of the building, which will provide convenience, security and minimize the occurrence of accident in the elderly; 2) the application of the concept of visitability, where a house had to have the main receiving room without trap (one zero-step), the doors are wide and a bathroom accessible (half-bath); 3) the restructuring of residential areas that promote the function of the mix, transit oriented development (TOD) and housing ranging from elderly residential care facilities-based service that can be used also by the elderly who remained in their house.

Based on Lilley (2002) at the beginning of the 21st century, Japan has the structure of population aged 65 years or over 17% of the total population. Kose (2000) also stated that in 2015 the elderly population will continue to increase and will peak at a ratio of more than 25%, so that Japan will become the number one in the world in achieving the mass ratio. Lilley (2002) adds that the ratio continues to increase and will reach 27% in 2030. Since the end of World War 2 in 1945, industrialization and urbanization in Japan were advancing rapidly. This development was followed by the changes of the family structure and resulting the increased difficulty in caring the elderly, which previously as a traditional responsibility done by the family. As a consequence is the large proportion of the elderly living alone between the years 1975-1995.

Commencing from 2002, based on Lilley (2002) Japan has had 40 years of experience in housing policies for the elderly. During this time various policies that have been developed are policies issued by different departments (Health, Welfare, Construction). Based on Ohara (2004), in the 1970^s, public housings were developed specially for elderly and further could also be inhabited by other generations. In the 1980^s, the elderly who live alone could also occupy the public housings. In the late 1980^s, the demand for residential neighborhoods that have service centers needed by the elderly were increased and prepared by the ministry of land, infrastructure and transport (LIT = Land, Infrastructure, and Transportation) data relation to support housing policy. Ministries of Health, Labor And Welfare (HLM) also play a role in housing policies for elderly. Examples of housing are called "Silver Housing" which was built in 1987, and "Care Houses". In 1989 it was developed a merger between residential facilities (housing facilities) and day care centers (day centers) at the center of welfare services for the elderly (the Living Welfare Center for the Elderly). On the other hand, LIT ministry also issued regulations for the design specification residential buildings intended for the elderly and persons with disabilities, so that they could continue their lives in their own homes. Based on Lilley (2002), that policy is an attempt to reduce the aged care in the hospital and is directed to the concept of design for all ages which has also promoted the establishment of a friendly housing design for elderly (elder-friendly housing). Based on Ohara (2004), since April 2000, under the Long-term Care Insurance Law, it was issued a policy of house adaptation which was adjusted to the needs of the frail elderly, especially at home.

From the experience of the UK, USA and Japan discussed above that can be learned are:

- The existence of the phenomenon of culturally family shift due to the influence of modernization, which the family pattern of the extended family shifted to the family nucleus family patterns.
- Shifting patterns of the family causes problems with how the child's care for the parents who over time will increase their dependence as a result of the reduced physical abilities and the possibility of the emergence of a disease that weakens the physical condition, while on the other hand the parents still want to stay at home with the environment and the communities that have been making them feel at home.
- The tendency of the elderly to remain at home until their late life (aging in place/ aging at home).
- Wise completion is to coordinate policies that can encourage the welfare of the elderly to be able to live in the dwelling correspond with their economic capacity and provision. In this case, the policy for the welfare of the elderly is the integration between the policy of providing housing and long-term assurance policies that have been prepared when the people enter their productive period.
- Housing that suitable for the life of the elderly is the housing that has the principle of the Age Friendly City which supports the existence of elderly wherever they live, in their own homes or in the special housing for the elderly, as well as the community based livable housing where the elderly can live independently, healthy, active, able to engage in social activity, and has meanings. In addition, wherever elderly live, they also have to live in a safe and comfortable home which has the facilities needed to support their daily life which can be reached safely and easily. This can be driven by the application of the system of Transit Oriented Development.

4. Housing Policy in Indonesia Related to the Problem of the Elderly

a. Elderly Population in Indonesia

The elderly population in Indonesia is based on WHO projections from 1990 to 2050, will experience the largest growth in Asia, which amounted to 414%, while Thailand 337%, 242% India, and China 220% (Komnaslansia, 2014).

Indonesia since 2010 up to the next ten years into the category of an aging society, in the late 2030s into aged society and in the early 2040's has been entered in the category of super-aged society (Lee et al, 2011). Based on Hamid (2007), in 2010 the elderly in Indonesia reached 9.77% and in 2020 reached 11.34%. In 2020 the number of the elderly who exist in larger urban areas is as much as 11.20% compared with living in the countryside that is equal to 11.15%. Related to the issue of housing in the future is the tendency of most Indonesian people including the elderly still want to stay at home to spend their old age (Darmojo, 1999; Abikusno, 2007)

b. Elderly Welfare Policy in Indonesia

Based on the Commission further Age (2010), Article 5 of Law No. 13 Tahun 1998 on the Elderly Welfare, said that the elderly have the same rights in society, nation and state.

Then, as a tribute and respect to the elderly there are rights of the elderly to increase their social welfare, which includes, among others, the ease of use of facilities, equipment, and general infrastructure as well as office services building, trades building, accommodation building performances and religious buildings, restaurants and other other.

Giving homage and respect to the elderly are detailed in the Government Regulation No. 43/ 2004 on the implementation of the measures to improve the social welfare of potential elderly as well as the non potential elderly. The supports to the potential elderly are: 1) mental, spiritual and religious services; 2) health services; 3) employment services; 4) education and training services; 5) service to get the ease of use of facilities, equipment, and general infrastructure; 6) provision of facilities in service and legal aid; and 7) social assistance. While the supports to the non potential elderly are: 1) mental, spiritual and religious services; 2) health services; 3) service to get the ease of use of facilities, public facilities and infrastructure; 4) provision of facilities in service and legal aid; and 5) social protection.

General Director of Social and Rehabilitation services (2003), said that Law No. 13/ 1998 on the Elderly Welfare has a broader goal: give a boost to empower and improve the welfare of the elderly to the families and the communities in order to support the realization of the elderly become useful, qualified and independent in their environment. There are two ways of handling the growing problems of the elderly that is: an outside nursing home (community / family based care) and an inside nursing home (institutional based care). Inside nursing home include providing food, clothing, housing, health care, religious services and mental guidance, as well as the use of leisure time including recreation, sport and skills. While outside nursing home, the elderly remain in the family with meals and empowerment given assistance in the field of Productive Economic Business (UEP).

As for handling the outside nursing home, the family and the community are expected to be able to support the elderly. But things that have to be paid attention is the increasing of the shifting of the extended family structure becomes the nucleus family that will affect the public's perception of caring for the elderly. However, the Indonesian government still encourage the system of care of the elderly by promoting to the value system of "three generation in one roof". In the future, the family and even the community will become the basis of social services to the elderly. It is important to be noted also that there is a local cultural value with regard to the home-based community care, the so-called "*kekerabatan*" as a kinship system, which is a traditional system practiced in several regions in Indonesia, which need to be optimized as of one of the local cultural values which could provide a sense of security and protected for the elderly (Setiti, 2012).

c. Housing Policy in Indonesia

Urbanization is happening in Indonesia, followed by the increase of the elderly population in urban areas. As it is known that the increased urbanization affects the housing needs and housing. The housing needs increase over time. Based on the Directorate of Settlement and Housing, the Ministry of State for National Development Planning/ National Development Planning Agency (2008), house needs (backlog) reached 5.8 million units in 2004, an increase of 11.6 million units in 2009. According to Muh. Dimiyati the increase of urbanization since 2010 followed by the trend of urban housing needs (<http://bulletin.penataanruang.net>, accessed 16 November 2011). Under Regulation 38 of 2007, the government responsible for the provision of houses especially for the lower middle class. This is because the per capita income of the country of Indonesia is still low, which, according to the data of 2002 mentions Indonesia's per capita income reached 2,800 US dollars, which illustrates that the level of Indonesian society is still dominated by the low income level. The government in this case has appointed the Public Company of National Housing (*Perusahaan Umum Perumahan Nasional= Perum Perumnas*) to provide public housing. In the development of that public housing *Perum Perumnas* should pay attention to various aspects of starting point that the house is not a finished product or stagnant, but considering the times and the growth that occurs in the family or the community life, for example about the family and economic life cycle, the social cultural change, etc. (Tjahyono, 2004).

Paying attention to the spirit of the community can play a role in determining their desired housing are also contained in the vision and mission of the National Housing and Settlement Policy and Strategy (*KSNPP- Kebijakan dan Strategi Nasional Perumahan dan Permukiman*) of the Decree of the Minister of Settlement and Regional Infrastructure No. 217 / Kpts / M / 2002. Nevertheless, in the policy no idea relates to the issues related to the increase of the elderly population that has been faced by Indonesia today and the future.

Based on SNI 03-1733-2004 about the procedures of housing planning in urban areas, there are standards of the provision of infrastructure, public facilities and social amenities in a neighborhood that are tailored to the number of the resident population, as well as the social, cultural and economic capitals,

5. Findings and Discussion

This discussion examines the potential of Indonesia relating to the elderly and housing as well as policies related to the SWOT analysis based on the literature review discussed earlier.

a. Strength (S):

Indonesian government already has several policies relating to the elderly care that is the outside nursing home and the inside nursing home. This policy gives chance to elderly to choose where they live. There is also the existence of community-based care system called "*kekerabatan*", a kinship system, that is the service to the elderly who are supported by the family. As well as the health facilities in neighborhoods that *Puskemas* and *Posyandu* provide the elderly to access the health facilities conveniently.

Associated with housing that enables people to live in their own homes, housing policy has provided an opportunity for every community can have their own house, especially for the middle and low income people who can use the housing loans. Indonesia also has a standard of the settlement that allows the public services and social facilities which can support the needs of the community. With these facilities the community can undertake activities according to their needs and to encourage the community can be active and participate in social activities on the environment, including the elderly. To encourage the elderly can be active and play a role in the social environment, the government has made a policy of accessibility to public buildings. Based on these potentials, it is in fact that Indonesia has had a foothold for the establishment of appropriate housing for the elderly as well as the concept of livable community housing as the developed countries had.

b. Weakness (W):

In Indonesia, the existing policies are expected to support the welfare of the elderly are still not integrated with each other, particularly with regard to the housing policy, the policies which support the care of the elderly, and the transportation policies that can support the mobility of the elderly. The policies that demonstrate the ease of access for the elderly is still limited to public buildings, while existing conditions are elderly spent more time at home, in the neighborhood where they live. With this condition it is needed policies relating to livable community housing that has an accessible housing system such as the transit system oriented development (TOD) which has an ease of accessibility based on the concept of the Age Friendly City.

c. Opportunities (O):

The increase in the elderly population in Indonesia can be a boost for the government to develop the well-being of elderly through the handling housing system to encourage elderly healthy, active and independent (active aging). The experience of developed countries is a reference for the Indonesian government to take a stand on issues facing the elderly and their housing. The local pontency of caring for the elderly in a system of "*kekerabatan*" that puts the community kinship can be a reference for the policy making of housing where the elderly live. Housing policies that favor the lower middle income society through the provision of public housing is also a potential for the development of public housing system that can be occupied by the inhabitants until their old age. It recalls the experience of developed countries which establishing the housing program for the elderly by providing the public housing for the people who are economically disadvantaged including the elderly.

d. Threats (T):

Indonesia is a developing country. As well as other developing countries, the growth progress of aging population is more prominent than the economic progress of the country. This would be an obstacle to the realization of housing as one of the aspects of the integration system of the elderly care. Yet coordinated of policies related to the elderly and housing issues as well as in developed countries, would be an obstacle to the realization of housing as a sub-system of the elderly care. The shifting culture of a family in which the extended family structure into a nucleus family is also a concern because this social phenomenon will affect the whole system of life in the elderly housing in which they live, and will further influence the planning and design of housing and the policy of physical environment where the elderly live .

6. Conclusion

The world is facing problems related to elderly how to provide housing in accordance with the option and the elderly needs. Developed countries have provided examples related to this matter. Indonesia, which now includes a country with a high population growth rate has a huge task in boosting the livelihoods of the elderly in relation to the provision of housing in accordance with the needs of the elderly. Therefore things to note are:

- The existence of the government's willingness to confront the problem by making policies integrated with each other. Reflecting the developed countries, housing policy and long-term care policies are integrated each other. The policies scale ranging from micro-home, meso-residential environment and macro-parts of the city. The policies regarding the aspects of ease, security, and comfort in all the environmental scale. The transport system as well as the arrangement of the territory that allows the development of integrated area (Transit Oriented Development) with facilities that support people's lives without exception, including the elderly are included in those policies.
- Indonesia with the potential and existing constraints with due regard to the existing phenomenon in which the elderly prefer to stay at home until the end of his life, should keep trying to encourage the establishment of housing that can support the needs of the elderly by paying attention the local values such kind of kinship system, "*kekerabatan*", especially when there is a shift in the culture of the extended family into the nucleus family. Housing is expected to be able to push the elderly into active aging as mandated by the WHO through the Age Friendly City concept, which can accommodate the needs of social, cultural, economic and spiritual elderly with complete facilities which can be reached safely, easily and conveniently.

References

- Abikusno, Nugroho. (2007). *Menua Secara Aktif, Kerangka Kebijakan, Terjemahan Komisi Nasional Lanjut Usia*. Komnaslansia, Jakarta.
- Bappenas. (2008). *Pembangunan Perumahan dan Permukiman*, Direktorat Permukiman dan Perumahan, Kementerian Negara Perencanaan dan Pembangunan Nasional /Bappenas. Bappenas, Jakarta.
- Bulletin. (2011). (Online) Available at <http://bulletin.penataanruang.net>, accessed on 16 November 2011.
- Crayonpedia. (2012). (Online) Available at <http://www.crayonpedia.org>, accessed on 16 Desember 2012.
- Darmojo, Boedhi, R. and H. Hadi Martono. (1999). *Buku Ajar Geriatri (Ilmu Kesehatan Usia Lanjut)*. Balai Penerbit Fakultas Kedokteran Universitas Indonesia, Jakarta.
- Demiris, George and Hensel, Brian. (2009). "Smart Homes" For Patients At The End Of Life, *Journal Of Housing For The Elderly*, 23:106–115, Taylor and Francis Group, Llc, Issn: 0276-3893 Print/ 1540-353x, (Online) Doi: 10.1080/02763890802665049.
- Departemen Sosial. (2011). (Online) Available at <http://www.depsos.go.id>, accessed on 24 December 2011.
- Direktur Jendral Pelayanan Dan Rehabilitasi Sosial. (2003). *Kebijakan Dan Program Pelayanan Sosial Lanjut Usia Di Indonesia*, disampaikan pada Loka Karya Nasional Pelayanan Lanjut Usia Di Rumah (*Home care*), 9 Desember 2003, Auditorium BKKBN, Jakarta. Direktur Jendral Pelayanan Dan Rehabilitasi Sosial, Jakarta.
- Elo, Satu; Saarino, Reetta; Isola, Arja. (2011). The physical, social and symbolic environment supporting the well-being of home dwelling elderly. *International Journal of Circumpolar Health*, 70:1 2011.
- Heumann, Leonard and Boldy, Duncan. (1982). *Housing for the Elderly, Planning and Policy, Formulation in Western Europe and Nort America*, Croom Helm, London and Canberra. St. Martin's Press, New York.
- Keputusan Menteri Permukiman Dan Prasarana Wilayah Nomor: 217/Kpts/M/2002, tentang Kebijakan Dan Strategi Nasional Perumahan Dan Permukiman (Ksnpp), Departemen Permukiman Dan Prasarana Wilayah. Direktorat Jenderal Perumahan Dan Permukiman, Jakarta.
- Komisi Nasional Lanjut Usia. (2010). *Aksesibilitas dan Kemudahan dalam Penggunaan Sarana dan Prasarana*, Jakarta. Komisi Nasional Lanjut Usia, Jakarta.
- Komnaslansia. (2014). (Online) Available at <http://www.komnaslansia.or.id>, accessed on 24 December 2011.
- Kose, Satoshi. (2000). *The Impact of Rapid Ageing in Japan on Accessibility issues*, unpublished paper, Shizuoka University of Art and Culture, Hamamatsu, Japan
- Lee, Sang-Hyop; Mason, Andrew; Park, Donghyun. (2011). Why Does Population Aging Matter So Much for Asia? *Population Aging, Economic Security and Economic Growth, in Asia*, ERIA Discussion Paper Series, ERIA-DP-2011-04

- Lilley, Susan. (2002). Policies for Aging Populations: An International Perspective, Prepared for Population and Public Health Branch Atlantic Regional Office Health Canada, November 2002
- MacKinlay, Elizabeth. (2004). The Spiritual Dimension of Ageing, dalam Albert Jewel, 2004, Ageing, Spirituality and Well-being, Jessica Kingsley Publishers.
- Office for National Statistic. (2012). Population Ageing in the United Kingdom, its Constituent Countries and the European Union, 02 March 2012. Office for National Statistic, London.
- Ohara, Kazuoki. (2004). Housing Policy Towards A Super Aging Society: From Building Specifications To Special Needs Measures. INVITED Symposia, Geriatrics and Gerontology International 2004; 4: S210-S213.
- Ortman, Jennifer M., Velkoff, Victoria A., and Hogan, Howard. (2014). An Aging Nation: The Older Population in the United States, Population Estimates and Projections, Current.
- Ostwald, Sharon, and Carmel Dyer. (2011). Fostering Resilience, Promoting Health And Preventing Disease In Older Adults, dalam Ian Stuart-Hamilton, 2011, An Introduction To Gerontology. Cambridge University Press, Cambridge.
- Peace, Sheila M., and Holland, Caroline. (2001). Housing an egeing society, Innovative approach. The Policy Press, New York. Planning, Under The Advisement Of Professor Michael A. Burayidi, Ball State University, Muncie, Indiana.
- Rudlin, David, and Falk, Nicholas. (1999). Building the 21th Century Home, the Sustainable Urban Neighbourhood. Architectural Press, New York.
- Ruggles, Steve. (1987). Prolonged Connections-The Rise of the Extended Family in Nineteenth-Century England and America. The University of Wisconsin Press, Wisconsin.
- Sek, Steven T. (2011). Housing The Frail Elderly: History, Contemporary Practice, And Future Options, A Research Paper Submitted To The Graduate School In Partial Fulfillment Of The Requirements For The Degree Master Of Urban And Regional.
- Setiti, Sri Gati. (2012). Model Pelayanan Lanjut Usia Berbasis Kekerabatan, Studi pada Suku Bugis di Kabupaten Baru Sulawesi Selatan. Puslitbang Kesos, Jakarta.
- Standar Nasional Indonesia, SNI 03-1733-2004, Tata cara perencanaan lingkungan perumahan di perkotaan, ICS 91.020; 91.040.30, Badan Standardisasi Nasional
- Suardiman, Siti Partini, Sri Iswanti. (Online) Available at <http://staff.uny.ac.id>, accessed on 10 November 2011.
- Tjahyono, YP. Shodo. (2004). Perumahan Bagi Masyarakat Berpenghasilan Menengah k Bawah di Perkotaan, Sumbang Saran Bagi Kemajuan Perumanas Pada Ultah ke-29, Jurusan teknik Arsitektur, Fakultas Teknik Sipil dan Perencanaan – Universitas Kristen Petra <http://puslit.petra.ac.id/~puslit/journals>, 171-177).
- U.S. Census Bureau. (2014). Population Reports, Issued May 2014, P25-1140. U.S. Department of Commerce, Economics and Statistics Administration, Washington DC.
- UNFPA. (2012). Executive Summary, Aging in the Twenty-First Century: A Celebration an ChallengeSecara global.
- United Nations. (2007). World Economic and Social Survey 2007, Development in an Ageing World, Department of Economic and Social Aff airs, New York.
- Wardrip, Keith. (2010). Strategies to Meet the Housing Needs of Older Adults, AARP Public Policy Institute, 601 E Street, NW, Washington, DC 20049, www.aarp.org/ppi, 202-434-3890, ppi@aarpp.org, © 2010, AARP. Issues 38, March.
- WHO. (2013). WHO Global Forum on Innovations for Ageing Populations, 10-12 December 2013 Kobe, Japan. WHO, Geneva.
- World Health Organization. (2007). Global Age-friendly Cities: A Guide. WHO, Geneva.
- Yasuyuki, Shirakawa, Japan, ILC Japan. (Online) Available at ilcjapan@mba.sphere.ne.jp.