

## Elderly Care Centre

**Aliani Wagiman , Hazrina Haja Bava Mohidin, Alice Sabrina Ismail<sup>1</sup>**

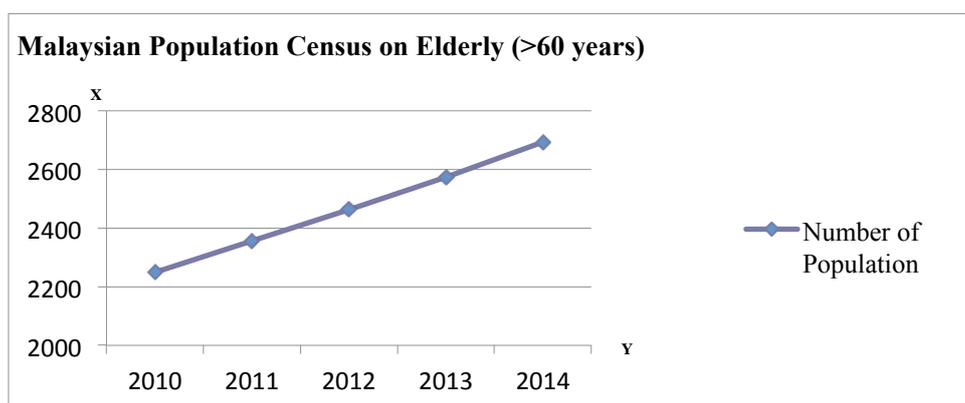
Department of Architecture, Faculty of Built Environment, Universiti Teknologi Malaysia, Skudai. 81310, Johor, Malaysia

E-mail: hazrinahaja@gmail.com

**Abstract.** The demand for elderly centre has increased tremendously abreast with the world demographic change as the number of senior citizens rose in the 21st century. This has become one of the most crucial problems of today's era. As the world progress into modernity, more and more people are occupied with daily work causing the senior citizens to lose the care that they actually need. This paper seeks to elucidate the best possible design of an elderly care centre with new approach in order to provide the best service for them by analysing their needs and suitable activities that could elevate their quality of life. All these findings will then be incorporated into design solutions so as to enhance the living environment for the elderly especially in Malaysian context.

### 1. Introduction

As mentioned by the World Health Organization (WHO), the age of an elderly is referred to 60+ years (Sim, 2002). According to the population census on elderly age group, the number rose gradually each year and it is predicted that this number will continue to grow at an accelerated rate approaching year 2020<sup>2</sup> (Sim, 2002).



**Figure 1.** Malaysian population census on elderly (Source: Malaysian Centre of Statistics, 2014)

<sup>1</sup> To whom any correspondence should be addressed.

<sup>2</sup> Malaysian Centre of Statistics, 2014.



The increase is predicted on four main reasons; improved health, longer life expectancy, declining fertility and low mortality (Rashid and Tahir, 2015; Ong et al., 2009; Sim, 2002). Due to this increase, the government has come up with National Policy for the Elderly under the Ministry of Women, Family and Community Development. Most elderly have moved to the city together with their children as a result of urbanization (Malaysian Centre of Statistics, 2014). As Malaysia has become more developed, more and more elderly have decided to reside in the urban areas. Due to this massive advancement, the government has to cater for the increasing number of elderly left in the city centre be it by themselves or run by the private sector. It is a known fact that the elderly's ability in mental and physical decreases as they age (Rashid and Tahir, 2015; Ong et al., 2009; Sim, 2002). The deterioration of mental and physical ability in elderly caused some children to feel distress in taking care of their aging parents while being too busy with their everyday duties. This is the reason why more and more elderly care centre mushroomed in the city centre. This rapid growth made it essential for elderly care centre provider (public and private sector) to cater this demand (Akil et al., 2014).

In Malaysia there are two types of elderly care centre; the first is welfare elderly home for the poor which is usually state-run and the second type of care centre are the ones being catered by the NGO (Non-Government Organization). Both typologies are increasing each year as the number of elderly increases. However, the quality of these centres may not necessarily be the best provided for the elderly. This is because; today's care centres are not crafted to stimulate movements, activities and thinking which could be resolved architecturally. They are merely homes that provide a place to stay, eat and sleep. Due to this reason, these centres are usually money-centric which caused the elderly to have a mundane lifestyle adding to their already miserable lives. As a result, most of these elderly are facing mental, emotional and health problems (Tohit et al., 2012; Barnes et al., 2002).

The objective of this paper is to discuss what are the relevant architectural design approaches that could be adopted in order to identify and solve the problems of today's elderly care centre. Based on the National Policy for Elderly, architectural design approaches are best fitted into two of the most important aims of this policy. The first aim is to review the picture of ageing in Malaysia from the perspective of social security, health, community care and social services and the second aim is to review the policies and programmes for older persons, including long-term care (Akil et al., 2014; Ong et al., 2009; Torrington, 2006; Sim, 2002).

The scope of the research will be based on elderly residing in urban areas with regards to their health condition. The first group of elderly is those without complication and sickness, while the second group of elderly is those with disabilities such as intellectual impairment, immobility, senile or dementia and many more.

## **2. Methodology**

This research will be using multiple case study method where comparison and observation will be done in two stages. The first stage will be focusing on architectural characteristics while the second stage will be focusing on the programs of selected elderly care centre. Interpretivism paradigm is chosen as the research method as it involves researchers to interpret elements. It is therefore encouraging human involvement into study of interpretation (Bevir and Rhodes, 2012). Semiotic is

paired with interpretivism as it involves the study of meaning and sign (Mohidin and Ismail, 2015). This proposed methodological framework is considered as an important contribution as it introduces new ways of looking at elderly care centre as a system of 'sign' as well as proposing various indicators in order to investigate this matter in depth. This study builds upon the theories and concepts outlined by Saussure on sign relations, Barthes on levels of signification and Gottdiener on reading the material culture as reliable ways for analysing and understanding the residential cum institutional building (Ismail, 2008). By using this framework as highlighted below, this study could be further enhanced the quality of life of the occupants staying at an elderly care centre.



**Figure 2 Methodology framework**

The first stage of observation focuses on spatial quality as well as form of the building while the second stage of observation focuses on adoption of suitable programs to elevate the quality of life of the elderly chosen for the study. Data collected will be used to propose the best possible design and program suitable to achieve the objective of the study.

### 3. Findings - Data collection – Case Study

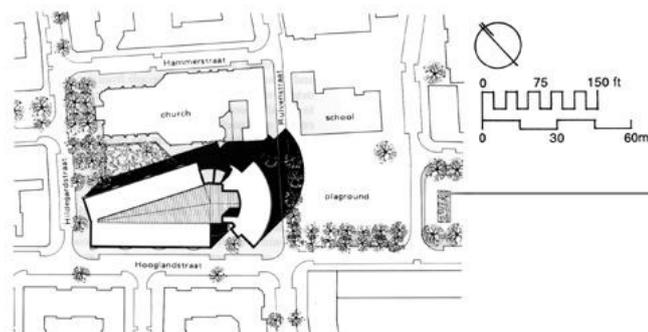
Below are the data collected on multiple case studies:

#### 3.1 Jan van der Ploeg, Rotterdam, Netherlands

Jan ver de Ploeg is an elderly care centre located in Netherlands. Community buildings such as a church, a school, and a playground surround it. This particular neighbourhood in an urban area which practices mix land use that incorporates commercial, recreational, community and residential areas. The centre is comprises of 79 units dormitory and composed in two complexes with 4 and 7 storeys respectively. The form of the building plays with solid and void where there is an atrium as the centre of the building. Based on figure 4, the building takes the shape of a cone. The atrium enables optimum daylighting to penetrate into the building, which brings an outdoor feeling for the occupants as well as promoting interaction between occupants, as the atrium is equipped with indoor garden facilities. There are also rooms with balconies facing inward that made it convenient for the occupants to interact freely with each other; making them feeling accompanied. Apart from providing shelter, Jan van der Ploeg offers an extensive day care program for the elderly such as nurse stations, therapeutic and podiatry facilities, not only for the elderly at the care centre but also for the surrounding community.



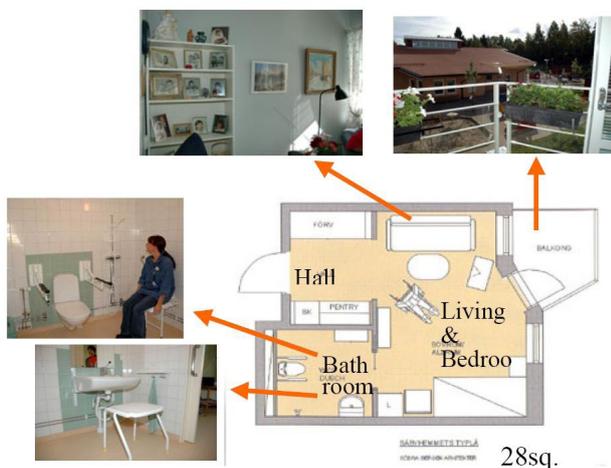
**Figure 3.** The indoor interaction areas at the atrium



**Figure 4.** Location plan of Jan ver der Ploed (Regnier, 1994)

### 3.2 "Säbyhemmet" Care Centre

"Säbyhemmet" is located not very far from community-centric facilities such as children day care centre, shopping mall, and residential areas. At "Säbyhemmet", there are several public interfaces that involve the community to interact with the occupants of "Säbyhemmet". The spatial layout at "Säbyhemmet" is divided into two zones. The first is the public area while the other is the private area where it is being reserved especially for the occupants. "Säbyhemmet" encourages two types of environment; first is to promote healthy surrounding between occupants and the community and the second is to be a community centre in "Säbyhemmet" itself. This is the best quality any care centre could adopt as it is stressed by Bamford and Bruce (2000), a care centre should incorporate and integrate the community into its program in order to enhance the livelihood of the elderly living in the centre. In the context of "Säbyhemmet", the children care centre is the main social contributor. These two centres work together in creating a better environment for the elderly, as the children will be the catalyst to better living for the elderly in "Säbyhemmet".



**Figure 5.** Spatial layout of private flats



**Figure 6.** Public area surrounded by private flats

### 3.3 Al-Jenderami Elderly Care Centre



**Figure 7.** The frontage of Al-Jenderami

Al-Jenderami Elderly Care Centre was built in 1995 in Malaysia especially to provide care and to support the needs of senior citizens of the surrounding area. Apart from providing shelter, Al-Jenderami Elderly Care Centre also emphasized on life-long learning. The centre encourages the occupants to participate Islamic teaching classes such as reading the Al-Quran, learning how to read

and write in Jawi and many more. Professional teachers are patronizing these classes. Other than that, the centre also provides full health monitoring to the occupants whenever required. The master plan layout of Al-Jenderami Elderly Care Centre is longitudinal. All the important and main spaces are being arranged in a sequence to provide a better movement and flow within the building. The centre starts off with private spaces, which includes residential areas, dining hall and followed by public interface spaces such as classrooms, mosque and a plaza.

### 3.4 Sri Kenangan, Cheras

Sri Kenangan elderly care centre is located in Kuala Lumpur. It is especially built to cater for people above the age of 60 years old. There are 50 occupants altogether living in Sri Kenangan. There are three category of occupants accepted in this centre, the first are those without any next of kin, second are those sent especially by the family members and the third group are homeless elderly. Sri Kenangan has special facilities such as clinic and physiotherapy as well as other therapy services apart from other necessary services such as music room, computer room, laundry room and many more.



Figure 3. Sri Kenangan entrance



Figure 9. Residential units



Figure 10. Some of the activities at Sri Kenangan

The design of Sri Kenangan elderly care centre emphasizes on sustainability architecture where natural ventilation, lighting are being applied throughout the building. It is also surrounded by greeneries and has therapeutic atmosphere.

## 4. Discussion

The research observed four case studies in Malaysia as well as globally. Each care centre displayed special quality of an elderly care centre. This study has made it possible to compare all four case studies and this enabled the researchers to point out the best possible design quality of an elderly care

centre. However, out of the four case studies, *Jan van der Ploeg, Rotterdam, Netherlands* is the best elderly care centre as it has most of the quality needed by the occupants. Below are the findings of a good and optimum elderly care centre.

- Provide all the basic and required needs of an elderly person such as shelter, healthy food and comfortable living
- Brain enhancement programs such as classes and activities that could encourage activities
- Community and public involvement be it by adult, peer or children.
- Natural environment such as sustainable design approach and landscapes.

With all four said optimum design characteristics of elderly care centre, the needs of elderly people are taken care of. It is therefore important for future elderly care centre designers to find it crucial to adhere to all four design qualities incorporated to provide the best facilities for the elderlies.

This study is of importance for future elderly care centre designers and owners to take note in order to cater for the increasing number of elder care centres around Malaysia and globally.

## 5. Conclusion

It can be concluded that a good and optimum elderly care centre should provide all of the combined facilities based on the four case studies. These four traits of an elderly care centre would be the best laid out design program to be incorporated into building design suitable for a better and healthier living in an elderly environment.

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