# Comparative Study of Layout Design of Non- Profit Senior Care Centres in Cheras

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The increase population of elderly has become a topic to be concerned in many developing countries. In Malaysia, the population is ageing and our country is forecasted to become an aged nation by 2030 due the rapid demographic shift. Seniors from wealthier background have much more options to choose from private and profit orientated care centres, which generally have better facilities and environment than the others. From the perspective of elderly who cannot afford this option, design of the accommodation that caters for this ageing community usually neglected their comfort and needs. This paper focuses on the three non-profit care centres in Cheras, evaluating their appropriateness of the layout design in creating a senior friendly environment as well as identifying their limitation and opportunities to support healthy ageing. Observation and photography record was carried out in the care centres to analyse its layout design through its accessibility, safety and comfortably. It is found out that the design scheme have much more to improve in order to support the health and well-being for elderly. This paper outlines the challenges of current non-profit care centres for elderly in Cheras and highlights aspects crucial for consideration in creating a senior friendly environment for their healthy ageing.

Keywords: Non-profit Care Centre, Layout Design, Elderly, Cheras

### 1. INTRODUCTION

# 1.1. Ageing Phenomenon in Malaysia

Malaysia is currently undergoing a rapid demographic shift improved living condition. Most of them are better in terms of education and wealth. (Aini, Aziz, & Hanif, 2015). In fact, in 2015, 73.1 percent of persons' ages 60 and above living in urban areas.

It is our social norm that we as caregivers provide care services to our senior relatives who co- residing with us. In Malaysia, we have adopted both cultural and religious root which it is our natural duty as children to payback our parent for what they had sacrificed for us in the early years. This action was practice by Malay Muslim and also Indonesian as the filial duty of children. It is also equal to with what Confucianism thought and it follow by majority of Chinese in Malaysia. (Aini, Aziz, & Hanif, 2015). People do have negative perception towards old folk's home where it is a place irresponsible children dumped their parents in. Most of family find it is increasingly inconvenience to take care of older people (Zainab et al., 2012) the care centres are still the least option they would choose due to the

perception and the badly designed physical environment.

In the past, the policies have been emphasising on the sharing responsibility between the government, private sectors, non-government organisations. Apart from staying in their current family homes, there are ranges of institutional and private care options available to meet the needs of the senior community in Malaysia. This is provided by three parties: the government, Department of Social Welfare (DSW) who supervise the housing and action plans for elderly; the private sector, that response to the demands of market; and non-governmental organisations (NGOs), that support the needs of elderly as well as government initiatives. According to DSW it is noted that the number homes for the elderly and the elderly sent to the centres are on the rise. The idea of care service which advocates the integration of housing system with healthy ageing of seniors starts to show its appeal and marketability in the context of Malaysia.

Of course, seniors from wealthier background have much more options to choose from private and profit orientated care centres as their

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retirement homes, which generally have better facilities and advance care services than the others. From the perspective of elderly who cannot afford this option, design of the accommodation that caters for this ageing community usually neglected their comfort and needs. Therefore, this paper will be focusing on the three non- profit care centres in Cheras by analysing its design layout from the aspects of accessibility, safety and comfortably. It will help to examine the need to enhance current built environment design in a more affordable way to support healthy independent living with the provision of appropriate care facilities for the our elderly.

# 2. RESEARCH METHODOLOGY

# 2.1. Research Design

The qualitative method of research is adopted. Observation and photography record of the three selected non-profit care centres in Cheras will be carried out to learn more about the built environment of current care services from aspects of its accessibility, safety and comfortably. Then it tried to discuss its limitation and opportunities for non-profit care centres in creating a senior care environment. Finally, it evaluates the relevance of existing design scheme and necessity to develop a better scheme for future senior care accommodation based on them.

### 2.2. Study Location

Based on the options available, case studies in Cheras, Kuala Lumpur will be selected because the one and only non- profit care centre under Government in KL region is located in Cheras. For this study, three non-profit oriented residential care centres in Cheras were selected on carried out a comparative study, mainly on its design layout and some other criteria. These three selected care centres are under different non profit organisations and received help from the public. The care centres chosen are St. Francis Xavier Home for Elderly, Bodhi Homecare Centre and Kuk Tai Wah Si Temple Old Folks Home.

a) St. Francis Xavier Home for Elderly was motivated by Jeanne Jugan who founded the Little Sisters of the Poor in 1839 in France, which then arrived in Kuala Lumpur in 1965. It is treated as the home for seniors where they can do anything just like what they did in their

- own home. This home restores their dignity by taking care of the privacy of each residents.
- b) Bodhi Homecare Centre was established in 1989 to look after handicapped and abandoned children, elderly folks as well as provide other charitable services to the needy people in this area of low cost housing blocks.
- c) Kuk Tai Wah Si Temple Old Folks Home, located in the near to the residential area, was establish in 2008. It allows seniors to spend their time in a peaceful and quiet environment. Initially, it was a left place beside Kuk Tai Wah Si Buddhist Temple, but it was then extended and renovated to provide care services and facilities to seniors.

#### 3. RESULTS AND DISCUSSION

# 3.1. St. Francis Xavier Home for Elderly

# 3.1.1. Design Layout

In overall, St. Francis Xavier Home for Elderly which occupying 70 seniors currently has a thoughtful layout design for the efficiency of work being carried out. The layout of the whole building is planned to be as compact as possible to ease the caregivers to control the centre as they do not need to walk very long distance to the rooms. The central space is the dining area which is also more friendly to the seniors and all the rooms are arranged in the same level.

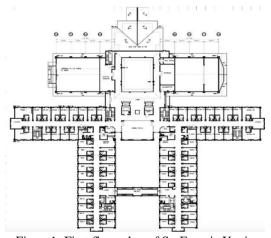


Figure 1: First floor plan of St. Francis Xavier Home for Elderly showing the layout of rooms and dining area in the middle

The other facilities equipped on ground floor which are handicraft room, library, salon, dental

room, medical clinic, pharmacy, physiotherapy room, chapel and activity hall.

Every senior have their own individual room with attached bathroom. There are 24 infirm rooms for seniors who need extra care; 35 single bed rooms with bathrooms attached; 4 couple bed rooms with bathroom attached. The room is 3750mmx 6090mm each and the bathroom is equipped with safety features. The corridor is 2820mm wide, spacious enough to allow seniors to move around with wheelchair.

However, the caregivers' rooms were allocated on the second floor and therefore emergency bells and other safety features were installed. No where else can afford and provide this kind of luxurious layout in a non-profit oriented care centre but this LSP home make it. Indeed, they got a lots of help and love from the public but most importantly is the providence by the caregivers. They contribute their life to God and provide care services for the senior from the bottom of their heart.

## 3.1.2. Accessibility

In term of accessibility from existing road network and transport facilities, the site location is 5 minutes away from the nearest hospital and it is located within residential area. It is a gated centre, equipped with CCTV.

In term of accessibility from occupants' movement aspect, there is no extreme steps or level difference in same floor. The building is equipped with lift as vertical transportation. The lift is equipped with foldable seat, press button at lower height and metal handrail which is friendly for elderly use.





Figure 2: Lift and the safety feature inside Source: Author

# **3.1.3.** Safety

Architect designed according to MS1184 Malaysian Standard. In toilet, the water closet and work surface is suitable for wheelchair user. The toilets are fully equipped with safety features such as grab bars, emergency bell. Tilted mirror to allow elderly on wheelchair to use it.



Figure 3: safety feature inside the toilet Source: Author

In bedroom, the safety features are important as well. Nurse call is designed specially in the bedroom to notify the caregivers who sleep in second level. It is located beside the light switches, fan control and power socket for the ease of occupants to reach them.



Figure 4: nurse call and other switches Source: Author

In term of flooring material and other safety features, timber handrail equipped all over the space at accommodation level. Flooring material is homogeneous tiles which are rough and safe for elderly to walk but the flooring material in dining area is reflective surface, which make some elderly scare to walk on it as it looks like water spills on ground.





Figure 5: Timber handrail and Dining hall

## 3.1.4. Comfortably

Privacy matter should also take into consideration even though it is a communal living environment. Every elderly has their own room, closet and attached bathroom, ensuring high level of privacy.



Figure 6: Furniture in a single room Source: Author

Natural air ventilation and air condition are available on residents' needs. A comfortable outdoor environment is designed for elderly to exercise and walk during their leisure time but in reality it is lack of usage by elderly. Elderly normally did not go too far away from their living room.

# 3.2. Bodhi Homecare Centre3.2.1. Design Layout

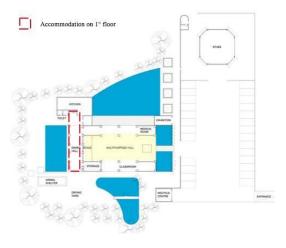


Figure 7: Ground floor plan of Bodhi Homecare Centre showing the layout of spaces surrounded the multipurpose hall Source: Author

For Bodhi Homecare Centre, it was initially a Buddhist religious space, therefore it is not designed specifically to serve its current function. However, the layout design is simple with the multipurpose hall as the central point yet effective in clear way-finding. Other

functional spaces are dining and food preparation space at the rear of building as well as the accommodation space on the first floor. The home is surrounded by lush of greenery and pond, creating a calm environment.

Multipurpose hall is located in the centre of the building, inviting all the social interaction to happens across different groups of people. Children were having their class in the hall while seniors casually resting and walking, doing their own activity here. Dining space is where people enjoy food and communicate. This is also place where poor families collect their daily sundry goods and the committee distribute free food to the public. In general, the space here is too small to allow the activity to carry out smoothly.

First floor is not accessible for outsider but from the exterior view of first floor, the façade are temporary enclosed with timber strip and bamboo blinds. The elderly do not have specific location for their accommodation because they do not like to be fixed at a place. Some seniors like to sleep in dining area and some like to sleep at the hall because the environment is cosy and breezy.



Figure 8: Exterior of first floor Figure 9: Elderly sleeping at the hall Source: Author

To date there are about 20 children with ages ranging from 2-21 years and about 15 elderly being taken care of at Bodhi Homecare Cheras. Caregivers stay together with the children and seniors under the same roof.

### 3.2.2. Accessibility

In term of accessibility from existing road network and transport facilities, the site location is 10 minutes away from the nearest hospital and it is located within low income residential area. It is open to public and the elderly are free to go out themselves.

In term of accessibility from occupants' movement aspect, there is certain level difference to the outdoor (600mm) at the aisle of building. There are also few steps dividing the

dining area with the outdoor space, which are not so friendly for the elderly.





Figure 10: level difference to the outdoor Source: Author

# **3.2.3. Safety**

As it was not serve as a homecare centre previously, the toilets are not designed specifically for elderly as well. Elderly would find difficultly to bend their legs and shower with water pill which is heavy. Flooring is always wet and danger for elderly. There are only 2 washrooms cater for all occupants, which is not enough for the needs.





Figure 11: the sanitary fittings and flooring Source: Author

There is not specially designed facility cater for emergency cases. The caregivers sleep together with the elderly so they are aware if anything happens. Flooring material is homogeneous tiles which are rough and safe for elderly to walk but the flooring material for outdoor platform facing the pond is timber planks. It is also a temporary storage place. There are small plastic pieces scattered around, which is danger for all the users. Cleaning is necessary.





Figure 12: Flooring of hall and outdoor space Source: Author

## 3.2.4. Comfortably

Most elderly do not have fix spot for sleep, some sleep in hall, and some sleep in first floor. The occupants gain low level of privacy. Only natural air ventilation with fans are available in this homecare centre. The outdoor environment is surrounded by pond and lush of green, creating a calm and peaceful environment for the well-being of occupants.



Figure 13: Natural ventilation with fan Figure 14: outdoor space with greens Source: Author

# 3.3. Tai Kuk Wah Si Temple Old Folks HomeBodhi Home

# 3.3.1. Design Layout

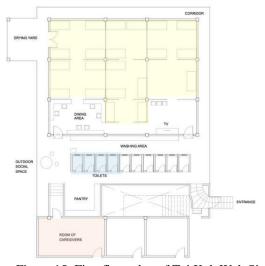


Figure 15: First floor plan of Tai Kuk Wah Si Temple Old Folks Home Source: Author

In this case, religious activity makes up the major routine of Tai Kuk Wah Si Temple and the old folks home acts as an additional service to contribute back to the community. Therefore, as compared to the previous two case studies, this care centre is much more smaller which only took up one level, accommodating the bedrooms, toilets and pantry area.

The layout design of Tai Kuk Wah Si Temple Old Folks Home concerns about the privacy of residents by grouping four beds into one cubicle. This is a more humane way not only ensure the privacy but also encourage interaction among the cubicles mates.

The care centre now accommodates about 18 seniors (17 females and 1 male), taken care by a maid and a caregiver This care centre does not have much outdoor activity space but the elderly loves to walk around the edge of building follows the corridor. This is their exercise and part of the daily routine, ensuring their healthy ageing in a simpler and affordable way. The caregivers' rooms are also located beside the toilet, allowing them to react promptly in case any emergency case happens.

# 3.3.2. Accessibility

In term of accessibility from existing road network and transport facilities, the site location is 15 minutes away from the nearest hospital and it is located a small distance away from residential area along the hillside. It is open to public for religious activity however the elderly showed less interest joining in.

In term of accessibility from occupants' movement aspect, No extreme steps or level difference in same floor but certain level difference to the outdoor. Ramp is available at entrance drop off point.



Figure 16: entrance ramp Figure 17: floor tiles Source: Author

## **3.3.3.** Safety

The maid will help the elderly to shower everyday which is by sitting on the toilet bowl. The toilet is equipped with simple plastic grab bar. Flooring is wet and danger for elderly. Door width (600mm) is too tight for elderly with wheelchair as well.



Figure 18: toilets features Source: Author

There is not specially designed facility cater for emergency cases. Thus, the caregivers sleep nearby to the elderly. In case anything happens, they can hear the shout and response quickly.

Flooring material is clay tiles which are rough and safe for elderly to walk. The outdoor flooring material is homogeneous tiles which will be a bit slippery during rainy day.





Figure 19: Flooring material Source: Author

### 3.3.4. Comfortably

Each cubicle has 4 occupants. Male and female residents are separated for privacy and yet have companion among the cubicle mates.





Figure 20: Cubicles arrangement Source: Author

Only natural air ventilation with fan available. Surrounded by greenery, this old folks home is peace and calm, ideal for the well-being of occupants.

## 4. CONCLUSION

This paper examined the three non-profit care Cheras, evaluating centres in appropriateness of the layout design in creating a senior friendly environment as well as identifying their limitation and opportunities to support healthy ageing. It is found out that each design schemes have much more to improve in order to support the health and well-being for elderly. Every care centre has their own strength to be praised and weakness to be improved. Even if it is under non-governmental organization, we still can have good design for our senior from lower income background. This study outlines the challenges of current non-profit care centres for elderly in Cheras and highlights aspects crucial for consideration in creating a senior friendly environment for their healthy ageing.

In Malaysia, the population is ageing and our country is forecasted to become an aged nation by 2030 due the rapid demographic shift. The accommodation for our seniors can no longer be neglected and required massive attention especially non profit care centres which needs help from the public. Overall, the research questions were answered and the data collection process was done as planned.

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