

### Kertas Asli/Original Articles

## Self-Care Skills between Institutionalised and Home Dwelling Older Adults: A Preliminary Study

Kajian Rintis Kemahiran Penjagaan Diri Warga Tua di antara institusi dan rumah kediaman.

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*Self-care is defined as activities performed by individuals, families, and communities to enhance their health, prevent diseases, limit illnesses, and restore health. Previous research has mainly focused on self-care skills of older adults in either institution or residential homes separately but limited studies have compared between both these settings. This study aimed to compare the self-care skills between institutionalised and home dwelling older adults at selected area in Malaysia. A total of 43 participants aged 60 years old and above were recruited in our study; (23 participants were home-dwelled older adults and 19 participants were recruited from institutionalised older adults located in Kuala Lumpur). The Malay Version of Performance Assessment of Self-Care Skills (M-PASS-HOME) 4.0 was used focusing on four main subtests of self-skills; oral hygiene, trimming toenails, house mobility and shower mobility. The differences in self-care skills between institutionalised and home dwelling older adults are statistically significant ( $p < 0.01$ ) in the aspects of independency for all self-care activities. The results of this study revealed that home dwelling older adults group are more independent in self-care activities of oral hygiene, trimming toenails, house mobility and shower mobility compared to institutionalised group.*

*Keywords: Self-care; older adults; institutionalised; home-dwelling*

#### ABSTRAK

*Penjagaan diri ditakrifkan sebagai aktiviti individu, keluarga, dan komuniti untuk meningkatkan kesihatan mereka, mencegah penyakit, menghadkan penyakit, dan memulihkan kesihatan. Penyelidikan sebelumnya telah memberi tumpuan terutamanya kepada kemahiran penjagaan diri orang dewasa yang lebih tua di salah satu institusi atau rumah kediaman tetapi kurang kertas penyelidikan yang membandingkan antara keduanya. Kajian ini bertujuan untuk membandingkan kemahiran penjagaan diri warga tua yang mendiami institusi dan tinggal di rumah kediaman di Malaysia. Sebanyak 43 peserta berusia 60 tahun ke atas telah direkrut dalam kajian kami. Seramai 23 orang peserta adalah orang dewasa yang tinggal di rumah sementara dan 19 peserta telah diambil secara rawak dari rumah orang tua swasta yang terletak di Kuala Lumpur. Prestasi Penilaian Kemahiran Sendiri (M-PASS-HOME) 4.0 Versi Bahasa Melayu telah digunakan untuk memfokuskan empat sub-ujian. Terdapat perbezaan kemahiran penjagaan diri di antara warga tua yang mendiami institusi dan di rumah kediaman secara statistik ( $p < 0.01$ ) dalam aspek kebebasan untuk semua empat sub-ujian aktiviti penjagaan diri. Hasil kajian ini menunjukkan bahawa kumpulan warga tua di kediaman rumah adalah lebih bebas dalam aktiviti penjagaan diri kebersihan mulut, kuku jari kaki, mobiliti rumah dan mobiliti mandi berbanding kumpulan di institusi.*

*Kata kunci: Penjagaan diri; warga tua; di institusi; rumah kediaman*

#### INTRODUCTION

In recent years, there has been a sharp increase in the number of older adults individuals worldwide. The number of older people with age 60 and above has increased substantially in recent years in most countries and regions, and that growth is projected to accelerate in the coming decades (WHO 2018). It has been projected to reach nearly 1.5 billion in 2050 with most of increase in developing

countries. In Malaysia, Department of Statistic (2020) the percentage of population of older adults age more than 65 years olds increased 6.7 percent in 2020 from 6.4 percent in 2019. The Department of Statistics estimates that the number of older Malaysians is projected to grow to nearly 5.1 million in 2034, making up about 15 per cent of the total population (Tyng & Hamid 2015). Rapid population ageing can be attributed to increase the survival of population to later life (Hamid 2015). However, as the

older population expands, one unavoidable consequence is that many of these individuals will continue to live in their own homes even with functional declines and advanced age, and probably, in many cases, this will be in accordance with the older persons' own preference (Burholt & Naylor 2005, Colón-Emeric et al. 2013).

Self-care is defined as "the ability of individuals, families and communities to promote health, prevent disease, and maintain health as well as to cope with illness and disability with or without the support of a health-care provider" (WHO 2020). It is a part of daily living and includes the actions individuals and carers take for themselves, their children, their families and others to stay fit and maintain good physical and mental health; meet social and psychological needs; prevent illness or accidents; care for minor ailments and long-term conditions; and maintain health and wellbeing after acute illness or discharge from hospital (Department of Health 2005, Yoo et al. 2019). In order for the increasing older population to live independently in their chosen environments, self-care ability is crucial as a health resource in older people, and it may be the decisive factor for managing daily life in their own homes (Høy et al. 2007). Participation in self-care activities is crucial for older adults as this will enable them to maintain a higher level of functioning, delay the disabling process of aging, and enjoy an independent lifestyle (Easom 2003, Colón-Emeric et al. 2013). The capacity of an individual to live independently and safely in the community is critically indicated by the ability of that individual to perform daily occupations inclusive of basic activities of daily living (BADL) and instrumental activities of daily living (IADL) (Turcotte et al. 2018). Similarly, life satisfaction in older adults is found to be reduced as self-care ability declines (Borg et al. 2006). Higher coping and self-care abilities are also positively related to a good mental health, self-esteem (Räsänen et al. 2014) and perception of high quality of life in older people (Borglin et al. 2006). Hence, it shows that self-care skills or behaviour are undeniably one of the most important factors for older adults to age successfully (Räsänen et al. 2014).

Rise in the number of older adult people increase the demand of the support and care services among families both in nursing homes and in the place of residence (Klimczuk 2016). Occupational therapists and other health-care professionals who are mainly deal with elderly play an important role in maintaining the self-care skills of older adults. Hence, it is of great importance for them to gain an insight into and understanding of self-care skills among older adults living in different settings. However, previous research mainly focused on self-care skills of older adults in either institutions or residential homes separately, but limited studies compared between both settings. One of

the comparison studies between these two settings found that type of dwelling was related to self-care ability. Older adults living in own homes showed a stronger self-care ability compared to those in other dwellings (Dale et al. 2012). Another study found statistically significant differences between institutionalised and non-institutionalised older adults in the domain of dependency, sadness and old-fashioned (Lopes et al. 2012). Physical inactivity and disability in older adults institutionalised patients affect their ability to perform activities of daily living (ADL) and worsen their quality-of-life status (Dechamps et al. 2010). On the other hand, for non-institutionalised people, older adult seems to be more associated with activity, autonomy and independence (De Araújo et al. 2006). A study conducted in Taiwan highlighted that the functional skills most often included in BADL scales are bathing, dressing, grooming, feeding, and mobility (Chang et al. 2007). Another article stated that the key activities included in BADLs are personal grooming (e.g., brushing teeth, cutting toenails, brushing hair, and bathing or showering); dressing and undressing; eating (feeding oneself; e.g., using eating utensils, drinking); transferring oneself from a bed to a chair and back; getting in and out of bed; walking around one's residence; climbing stairs; being able to lift around five kilograms; maintaining bowel and bladder continence; and using the toilet (Klimczuk 2016). Therefore, the aim of this study was to compare the differences of self-care skills between institutionalised and home dwelled older adults. The self-skills were mainly focussing on the aspect of independency and safety in area of oral hygiene, trimming toenails, house mobility and shower mobility, respectively.

## METHODOLOGY

### STUDY DESIGN AND SAMPLE

This quasi experimental study was approved by Universiti Kebangsaan Malaysia Ethics Committee with a project code number of NN-005-2014. All respondents recruited fulfilled the study's inclusion criteria, which were aged 60 years old and above with no significant and uncontrolled chronic diseases. Respondents from institutionalised and residential had similar criteria. Besides, all respondents had stayed in older adults care centres or in their own homes for at least three years and above. Respondents with cognitive impairment or any mental health problems, those with conditions that affected their understanding and those who were unable to understand Bahasa Melayu were all excluded from this study. Information sheets and consent forms were distributed to all the respondents involved. All consent forms were obtained from all respondents. The

respondents were then distributed into three age groups; 60–74, 75–89 and 90–104 prior to assessments.

## INSTRUMENTS

A two-part instrument was used for data collection. The first part consists of a structured questionnaire relating to the following demographic characteristics: age group, gender, ethnicity, education level, marital and health status. The second part-instrument used for the main data collection was the Malay version of Performance Assessment of Self-Care Skills (M-PASS) (Asmuri et al. 2021). It was used for assessing the self-care skills among older adults populations. The M-PASS is a client-centred, performance-based, criterion-referenced, observational tool that assists occupational therapists in documenting occupational performance objectively and plan occupation-based interventions. The M-PASS is also designed to aid practitioners in treatment and discharge planning by identifying the type and amount of assistance needed for successful task performance, as well as risks to safety and the specific point of task breakdown. It consists of 26 core tasks and four core tasks out of the 26 core tasks in M-PASS-Home 4.0, which were oral hygiene, trimming toenails, house mobility and shower mobility. Patients will be observed for their performances in each core tasks and rated for independency, safety, and adequacy (Holm et al. 2008).

## STATISTICAL ANALYSIS

Statistical Package for the Social Sciences (SPSS) version 25 was used for statistical analysis. Descriptive statistics were used to describe sociodemographic characteristics of the sample using frequency (n) and percentages (%) for nominal data. The age of the study sample was described with mean values and standard deviations (SD). Mann–Whitney U-test for independent samples (two-tailed significance) was used to test the differences in self-care skills (i.e. oral hygiene, trimming toenails, indoor walking; bathroom and shower mobility) between institutionalised and home-dwelling older adults in the aspect of independency and safety with the significant level at  $p < 0.05$ .

## RESULTS

Table 1 shows a total of 43 respondents participated in our study of which 19 respondents were from older adults institutionalised care centres and another 23 respondents were those who lived in residential homes. They consisted of 27 women and 16 men, ranging in age from 62 to 96 years, with a mean age of 75.16 years (SD=8.4). The age difference between institutionalised group and home dwelling older adult group in our study sample was not statistically significant ( $p > 0.05$ ).

TABLE 1 Demographic characteristics of respondents (n=43)

	Institutionalised n(%)	Home-Dwelling n(%)
Age (Mean=75.16, SD=8.4)	Mean =77.21, SD = 6.779	Mean: 73.54, SD = 9.311
Gender		
Male	5(26.3)	11(45.8)
Female	14(73.7)	13(54.2)
Education		
No formal education	11 (57.9)	9 (37.5)
With formal education	8 (42.1)	15 (62.5)

### DIFFERENCES IN SELF-CARE SKILLS BETWEEN INSTITUTIONALISED AND HOME DWELLING OLDER ADULTS IN THE ASPECT OF INDEPENDENCY

Table 2 indicated that the differences in self-care skills between institutionalised and home dwelling older adults were statistically significant ( $p < 0.01$ ) in the aspect of independency for all self-care activities (i.e. oral hygiene, trimming toenails, indoor walking and shower mobility). The independency for oral hygiene was lower in the institutionalised group compared to the home dwelling

group ( $z = -3.324$ ,  $p = 0.001$ ,  $ES(r) = 0.51$ ). Meanwhile, the independency for shower mobility, was also lower in the institutionalised group compared to the home dwelling group ( $z = -3.3$ ,  $p = 0.001$ ,  $ES(r) = 0.50$ ). The independency for trimming toenails was similarly lower in the institutionalised compared to the home dwelling group ( $z = -2.931$ ,  $p = 0.003$ ,  $ES(r) = 0.45$ ).

TABLE 2 Differences of self-care skills between institutionalised and home dwelling older adults in the aspect of Independency

Independency	Median (IqR)	Median(IqR)	<i>p</i> value
	Institutionalised	Home-Dwelling	
Oral hygiene	2.69(0.3-3)	3.0(3-3)	0.001 <sup>a</sup>
Shower Mobility	1.00(0-2.8)	3.0(2.03-3)	0.001 <sup>a</sup>
Trimming Toenails	0.00(0-3)	3.0(1.31-3)	0.003 <sup>a</sup>
House Mobility	2.00(0-3)	3.0(3-3)	0.001 <sup>a</sup>

a: Mann-Whitney U Test, 0=Low independency; 1=Low to moderate independency; 2=Moderate to High Independency; 3=High independency

TABLE 3 Differences of self-care skills between institutionalised and home dwelling older adults in the aspect of safety

Safety	Median (IqR)	Median (IqR)	<i>p</i> value
	Institutionalised	Home-Dwelling	
Oral hygiene	3.00(1-3)	3.00(3-3)	0.008 <sup>a</sup>
Shower Mobility	1.00(0-3)	3.00(2-3)	0.018 <sup>a</sup>
Trimming Toenails	1.00(0-3)	3.00(1.25-3)	0.029 <sup>a</sup>
House Mobility	2.00(0-3)	3.00(2-3)	0.052 <sup>a</sup>

a: Mann-Whitney U Test, 0=High risk ; 1=Moderate risk ; 2=Low risk ; 3=Safe Practice

#### DIFFERENCES IN SELF-CARE SKILLS BETWEEN INSTITUTIONALISED AND HOME DWELLING OLDER ADULTS IN THE ASPECT OF SAFETY

Table 3 shows that the differences in self-care skills between institutionalised and home dwelling older adults were statistically significant in the aspect of safety for three self-care activities including oral hygiene, trimming toenails, indoor walking except for house mobility. The safety for oral hygiene was significantly higher in the institutionalised group compared to the home dwelling group ( $z=-2.634$ ,  $p=0.008$ ,  $ES(r)=0.40$ ). The safety for shower mobility was significantly lower in the institutionalised group compared to home dwelling older adult group ( $z=-2.360$ ,  $p=0.018$ ,  $ES(r)=0.36$ ). Furthermore, the safety for trimming toenails was also lower in the institutionalised group compared to the home dwelling group ( $z=-2.180$ ,  $p=0.029$ ,  $ES(r)=0.33$ ). Nevertheless, the differences in self-care skills in the aspect of safety for house mobility between institutionalised and home dwelling group were not statistically significant ( $z=-1.945$ ,  $p=0.052$ ,  $ES(r)=0.30$ ).

#### DISCUSSION

The aim of this study was to compare the differences in self-care skills (oral hygiene, trimming toenails, indoor walking; shower mobility) between institutionalised older adults and home dwelled older adults in the aspects of

independency and safety. In the aspect of independency, the median score of home dwelling older adult group was higher compared to the median score of institutionalised group, which indicates that home dwelling older adults were more independent in the functional activities of oral hygiene, trimming toenails, indoor walking; bathroom and shower mobility. Our findings are in line with a study conducted in 2012, which found statistically significant differences between institutionalised and non-institutionalised older adults in the domain of dependency (Lopes et al. 2012). Other than that, few studies comparing institutionalised older people with those living in the community also found higher level of dependency in the institutionalised group (Plati et al. 2006; Van Roosmalen & Marcoen 2007). Home dwelling older adults were more functionally independent than people living in institutions (Asakawa et al. 2009; Rodriguez-Blazquez et al. 2012; Trottier et al. 2000). Our findings could probably be explained by the fact that institutionalised older adults were more physically inactive compared to home-dwelling older adults. Studies showed that physical inactivity and disability in older adults institutionalised patients negatively affected their ability to perform activities of daily living (ADL) and worsened their quality of life (Dechamps et al. 2010; Scocco et al. 2006). Older adults at institutions had more sedentary life and this could be due to many barriers either at individual level or associated with organisation and social environment (Voss et al. 2020).

In the aspect of safety, the median score of home dwelling older adult group was higher compared to the median score of institutionalised group, which indicates that more home dwelling older adults showed safe practices

while performing the functional activities of oral hygiene, trimming toenails, indoor walking; bathroom and shower mobility compared to institutionalised group. One study found that institutionalised older adults had more negative self-concept and self-esteem prone to neglect their personal safety (Antonelli et al. 2000). A qualitative study performed by Voss et al. (2020) reported that resident in care homes felt discourage to be physically active by the staff due to concern about their safety. Increased age is associated with a significant muscle weakness (Amarya et al. 2018) as well as eye-sight problem (Saftary & Kwon 2018) which will increase their safety concerns, and these will affect their self-care activities.

### LIMITATIONS

This study has certain limitations. This study has relatively small sample size (n=43) and respondents were recruited from a single location. Due to small sample size and convenient sampling, this study greatly reduces the generalization of the population. Therefore, the institutionalised and home dwelling sample in our study cannot be considered as overall representative sample from those living in Malaysia.

### CONCLUSION

The results of this study revealed that home dwelling older adults are more independent in self-care activities of oral hygiene, trimming toenails, indoor walking; bathroom and shower mobility compared to institutionalised group. This conclusion leads to a better understanding of differences in self-care skills in institutionalised and home dwelling older adults and might have implications in helping to choose the most appropriate place for older adults care. It might also help in selecting suitable interventions to improve self-care and well-being of older adults from different setting.

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