



Title	Instrumental Activities of Daily Livings (IADL) and Depression in Community-Dwelling People Aged 60 Years or Older in Kandy District, Sri Lanka : With Special Reference to Ethnicity [an abstract of dissertation and a summary of dissertation review]
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## 学位論文内容の要旨

博士の専攻分野の名称 博士（医 学） 氏 名 ハルタル アマルトゥブシン

### 学 位 論 文 題 名

Instrumental Activities of Daily Livings (IADL) and Depression in Community-Dwelling People Aged 60 Years or Older in Kandy District, Sri Lanka

- With Special Reference to Ethnicity -

(スリランカ・キャンディ地区の地域高齢者における手段的日常生活動作とうつ  
－民族性の視点から－)

### 【Background and Objectives】

Ageing is one of the most important global agenda, facing a great challenge not only by developed countries but also by many developing countries. The world population ( $\geq 60$  years) increased from 9.2% in 1990 to 12.3% in 2015. The aged people ( $\geq 60$  years) in Sri Lanka accounted for 13.9% of the total population in 2015, which is considered to be one of the most rapidly ageing societies in South East Asia. In order for these people to be healthy, their active physical activities and continuing participation in social, economic, cultural, spiritual and civil affairs have been emphasized. One of the measures for these competences is good performance of instrumental activities of daily living (IADL) and absence of depression.

Sri Lanka is the multi-ethnic, multi-linguistic and multi-religious society. Almost three-quarters of the population are Sinhalese (73.9%), followed by Tamils (17.8%), Muslims (7.4%) and others (0.9%). Previous studies reported that there was a wide gap in health status among ethnic groups in the country. However, ethnic studies on IADL and depression status among community-dwelling people aged 60 years or older in Sri Lanka are still limited.

Therefore, we aimed to explore ethnic differences in IADL dependency and depression and its associated factors among community-dwelling people aged 60 years or older in Sri Lanka.

### 【Methods】

We conducted a cross-sectional survey in people aged 60 years or older living in a single divisional secretariat of Kandy district, Sri Lanka. The participants were asked about ethnicity (Sinhalese, Tamils and Muslims), sociodemographic characteristics, IADL and depression status by face-to-face interviews with a structured questionnaire. IADL was measured by Tokyo Metropolitan Institute of Gerontology (TMIG) Index of Competence and the total score of less than 10 were considered as “IADL dependency”. Depression was measured by Geriatric Depression Scale-15 items and the total score of 6 and above was considered as “depression”. The chi-square test, multivariate logistic regression model with two-way interaction terms and multilevel analysis were performed to identify factors associated with IADL dependency and depression.

## **【Results】**

Participants (n=778) consisted of 56.6% of Sinhalese, 22.1% Tamils, and 21.3% Muslims. The total prevalence of IADL dependency was 57.1% (Sinhalese-47.5%, Tamils-77.6%, Muslims-61.2%). After adjusting for covariates, age, education level, occupation and number of self-reported disease were shown to be IADL dependency-related factors among all ethnic groups. Economic status was significantly associated with IADL dependency only in Tamils. The IADL dependency-associated factors from the multilevel analysis were consistent with those from the multivariate logistic regression analysis.

Of all participants, the prevalence of depression was 31.8% (Sinhalese-27.3%, Tamils-42.1%, Muslims-32.9%). Multivariate logistic regression analysis showed that education level, marital status, economic status, perceived social support and number of self-reported diseases were significantly associated with depression in all ethnic groups. Regarding depression-related factors, the results from multilevel analysis were consistent with those from the multivariate logistic regression analysis.

## **【Discussion】**

The prevalence (57.1%) of IADL dependency of the present study was higher than the previous study (32.3%) conducted in Sri Lanka. The prevalence of depression (31.8%) was similar to the previous study (27.8%). However, there were several methodological differences. Non-Sinhalese represented 10.5% in the previous study and 43.4% in the present study, who had much higher prevalence of IADL dependency and depression than Sinhalese. The previous study used the Lawton and Brody scale rather than the TMIG Index of Competence to measure IADL dependency. These may partly explain the higher prevalence of IADL dependency and depression in this study.

Different ethnic groups showed different prevalence rates of IADL dependency and depression, especially Tamils tended to have higher rates of both health outcomes. IADL dependency-associated factors in all ethnic groups are consistent with the previous studies. In our study, Tamils had a lower social status in the all parameters than Sinhalese and Muslims. These differences may contribute to high IADL dependency among Tamils. Depression-related factors among all ethnic groups in our study are consistent with the previous studies. Tamils had a lower education level, other marital status, low economic status and low perceived social support than Sinhalese and Muslims. The different distribution of these characteristics may affect the varied prevalence of depression among ethnic groups.

## **【Conclusion】**

Our findings would offer guidance on the detection of subpopulations who are prone to IADL dependency and depression. Strengthening community health services should be focused on those at probable risks shown to be associated with these health outcomes. The significant interaction between sociodemographic characteristics and ethnicity were observed in IADL dependency, but not in depression. Its reason remains unexplained, but the distinct history from Sinhalese and Muslims of Tamils who eventually got assimilated to Sinhala society might be a potential factor. Further study is needed to explore the details taking into account the cultural/religious aspects and behaviours of Tamils population.