

Adjustment and Reliability of Katz Daily Life Activity Measures for Elderly in Turkish

Yaşlılar için Katz Günlük Yaşam Aktiviteleri Ölçeğinin Türkçe'ye Uyarlanması ve Güvenilirliği

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Abstract

Objectives: Aging; refers to a process in which the physiological reserve capacities gradually decrease and become worn out after the maturation process of the creature has been completed, and accordingly the function of life is interrupted. Aging is the process of restricting function and competence in a way that is irreversible. In 1963, the Daily Living Activities (DLA) Index was developed by Katz et al. In order to be used in the treatment and prognosis assessment in chronic diseases and in the elderly. In this study, we aimed to evaluate the reliability and validity of the Katz Daily Activities Scale.

Materials and Methods: The study was conducted in Eskisehir Osmangazi University Clinical Practice and Research Hospital Family Medicine and General Internal Polyclinics. A total of 173 elderly patients were included in the study. It has been taken into consideration that; the sample size should be at least 5-10 times the number of questions in the scale. Elderly patients were asked to answer the Turkish version of the questionnaire and were asked to report if they encounter confusing expressions.

Results: A total of 173 elderly patients were included in the study, 63% of them were female, 37% were male (109 female, 64 male). The average age was 74.17 ± 6.71 . (Mean age of women were 74.73 ± 7.04 , mean age of men were 73.21 ± 6.05). The mean Katz score for all elderly patients included in the study was calculated as 5.14 ± 1.5 . Of the elderly patients, 60% were completely independent and 8.70% had severe dysfunction. The Cronbach Alpha coefficient of scale was 0.83, indicating that the scale was reliable.

Conclusion: Our study demonstrates the Turkish reliability of the Katz Daily Life Activities Scale. With this study, we believe that the Katz Index can be used in the evaluation of dysfunctions of the elderly.

Key words: Daily life activities, elderly dysfunctions, Katz

Öz

Amaç: Yaşlanma; canlının olgunlaşma süreci tamamlandıktan sonra fizyolojik yedek kapasitelerinin giderek azaldığı, yıprandığı ve buna bağlı olarak yaşam fonksiyonlarının aksadığı bir süreci ifade eder. Yaşlanma, geri dönüşü olmayan bir şekilde fonksiyon ve yeterliliklerde kısıtlanmaya neden olur. Yaşlıların sağlık durumlarını değerlendirmenin en kolay yollarından biri, düşkünlüğü gösteren ve objektif veriler sağlayan fonksiyonel değerlendirmenin yapılmasıdır. Kronik hastalıklarda ve yaşlılarda tedavi ve prognozun değerlendirilmesinde kullanmak amacıyla 1963 yılında Katz ve arkadaşları tarafından Günlük Yaşam Aktiviteleri (GYA) İndeksi geliştirilmiştir. Bu çalışmada amacımız; Katz Günlük Yaşam Aktiviteleri Ölçeğinin Türkçe'ye uyarlanması ve güvenilirliğinin değerlendirilmesidir.

Materyal ve Metot: Çalışma; Eskisehir Osmangazi Üniversitesi Klinik Uygulamalar ve Araştırma Hastanesi Aile Hekimliği Polikliniği ve İç Hastalıkları Polikliniği'nde yürütüldü. Çalışmaya 173 yaşlı hasta dahil edildi. Örneklem hacminin belirlenmesinde, ölçekte yer alan soru sayısının en az 5-10 katı olması gereği dikkate alınarak hareket edildi.

Bulgular: Çalışmaya 173 yaşlı dahil edilmiş olup, bunların 109' u kadın (%63), 64'ü erkekti (%37). Yaş ortalamaları 74.17 ± 6.71 olarak saptandı (Kadınların yaş ortalaması 74.73 ± 7.04 iken erkeklerin yaş ortalaması 73.21 ± 6.05) idi. Çalışmaya dahil edilen tüm yaşlı hastaların ortalama Katz skoru 5.14 ± 1.5 olarak hesaplandı. Yaşlı hastalardan %60'ı tamamen bağımsızken, %8,70'si ağır işlev bozukluğuna sahipti. Ölçeğin Cronbach Alpha katsayısı 0,83 olup bu değer ölçeğin güvenilir olduğunu gösterdi.

Sonuç: Çalışmamız; Katz Günlük Yaşam Aktiviteleri Ölçeğinin Türkçe güvenilirliğini göstermektedir. Bu çalışmayla birlikte yaşlıların işlev bozukluklarının değerlendirilmesinde Katz İndeksinin kullanılabilmesi kanaatindeyiz.

Anahtar kelimeler: Günlük yaşam aktiviteleri, yaşlıların işlev bozuklukları, Katz

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Introduction

Aging, refers to a process in which the physiological reserve capacities gradually decrease and become worn out after the maturation process of the creature has been completed, and accordingly the function of life is interrupted.¹ Due to many important developments such as the way of treatment of diseases, the successful struggle with infectious diseases, the improvement of living conditions, the elderly population is increasing rapidly in our country as it is in the world due to the extension of life expectancy at birth.²

Aging is the process of restricting function and competence in a way that is irreversible. The early detection of these functional losses is important for the elderly, as well as for preventing life-threatening risks and contributing to health expenditures at the same time. Family doctors have a lot of duty in the care of the elder because they can follow the transportation of the patients and general health conditions more closely. Family physicians follow the patients periodically and provide health care by evaluating bed-dependent patients on site. One of the easiest ways to assess the health status of the elderly is to make a functional assessment that provides objective data. In 1963, the Daily Living Activities (DLA) Index was developed by Katz et al. in order to be used in the treatment and prognosis assessment of chronic diseases and in the elderly. In six sub-sections, the patient is assessed for his ability to independently perform functions related to bathing, dressing, toiletries, transportation, intestinal and bladder control and feeding. The level of dependency / independence in DLA is determined by assessing the ability of the patient to perform each function independently or with help.³ In this study, we aimed to evaluate the reliability and validity of the adaptation to Turkish of the Katz Daily Activities Scale.

Materials and Methods

There are two options for each function in the Katz Daily Life Activity Scale; with or without assistance. While the functions performed with help receive 0 points, the functions performed independently are 1 full point. 6 points indicates full function, 4 points indicates moderate function and 2 points indicates less severe impairment.⁴ This study was completed in 2 stages. Firstly, the scale has been translated from English to Turkish, then it was translated from Turkish to English. The final text obtained was compared with the original text. There was no difference between the text translated by the English expert and the original text. It was decided that there was no difference between the two texts in terms of meaning and comprehensibility. There was no difference between the Katz DLA Index and the index resulting from translations in terms of meaning and understandability. The study was conducted in Eskisehir Osmangazi University Clinical Practice and Research Hospital, Family Medicine and General Internal Polyclinics. A total of 173 elderly patients were included to the study.

Patients aged 65 years or older who applied to the polyclinic were recorded by the physician as 1 point and 0 point for the answers given to the 6 questions on the scale with the face to face interview method so that the Katz DLA Index scores could be determined. Patients who applied to Eskisehir Osmangazi University Clinical Practice and Research Hospital Family Medicine and General Internal Polyclinics were determined 15% of those who were 65 years or older. During the study period (2 months), approximately 10000 patients were admitted to our polyclinics and the number of patients who were 65 years and older was between 1500 and 1750. The number of patients with informed consent was found to be 173 because participation in my study was based on volunteerism. When the gender distribution was examined, it was seen that the number of women in the patients who were 65 years old or older and accepted to participate in the study was approximately 2 times higher than the male number.

It was being taken into consideration that the sample size should be at least 5-10 times the number of questions in the scale. Elderly patients were asked to answer the Turkish version of the questionnaire and to report if they encounter confusing expressions. The data evaluated with the SPSS 12.0 program in the computer environment were interpreted by using the Cronbach Alpha coefficient.

Results

A total of 173 elderly patients were included to the study, 63% of them were female, 37% were male (109 females, 64 male). The average age was 74.17 ± 6.71 . (Mean age of women was 74.73 ± 7.04 , mean age of men was 73.21 ± 6.05). The average Katz score of all aged workers were calculated as 5.14 ± 1.5 . 60.1% of elderly individuals were totally independent and 8.70% had severe dysfunction. The Cronbach Alpha coefficient of scale was 0.83 and it was overall scale value, indicating that the scale was reliable.⁵ The Cronbach Alpha values calculated for each question in the measurement were shown in Table 1. The Turkish version of Katz daily life activity measures for elderly in Turkish is given in Figure 1.

Table 1. Distribution of Cronbach Alpha Values according to the questions

| Subscale | Cronbach Alpha Values |
|---------------------------|-----------------------|
| Taking a shower | 0.792 |
| Suit up | 0.761 |
| Toilet | 0.763 |
| Motion competence | 0.794 |
| Intensity-bladder control | 0.899 |
| Nutrition | 0.790 |

Discussion

The quality of life is a multidimensional and interdisciplinary phenomenon.⁶ Along with the aging process, there is a decline in the ability of the individual to act and the

ability to perform the actions necessary for their daily lives. As a result, the elderly people become dependent on external support to perform their life activities. Functional disability in the elderly requires public attention.⁷ The functioning of daily tasks of older patients depends on their mental activities and a comprehensive and holistic approach is needed to address the various problems that arise from aging.⁸

| Katz Günlük Yaşam Aktiviteleri İndeksi | | |
|--|---|---|
| Bağımsızlık Puan: | (1 Puan) Nezaret eşliği olmadan, yönlendirme olmadan ya da kişisel destek almadan | (0 Puan) Nezaret eşliğinde, yönlendirme ile kişisel destek alarak, ya da tam himaye ile |
| Banyo Yapma Puan: | (1 Puan) Kendi kendine banyo yapabilmek ya da sadece sırt, genital bölge gibi vücudun bir bölümünü ya da engelli bir uzvunu yıkarken yardıma ihtiyaç duyma | (0 Puan) Vücudun birden fazla bölgesini yıkarken yardım alma ihtiyacı ya da duşa veya küvete girerken veya çıkarken yardım alma, tüm banyo boyunca ihtiyaç duyma |
| Giyinme Puan: | (1 Puan) Elbiselerini dolabından veya çekmecedan alabilme ve elbise ve diğer giysilerini tamamıyla ilikleyerek giyebilme (Ayakkabılarını bağlarken yardım alabilir) | (0 Puan) Kendi kendine giyinirken yardım ihtiyacı ya da tamamen başkası tarafından giydirilme ihtiyacı duyma |
| Tuvalet Puan: | (1 Puan) Yardım almadan; tuvalete gidebilme, kendi başına kıyafetlerini çıkarıp giyinebilme ve giysilerini düzenleyebilme ve genital bölgeyi temizleyebilme | (0 Puan) Tuvalete giderken yardım ihtiyacı çekme, kıyafetlerini çıkarıp giyinirken yardım alma, sürgü vb. malzemelere ihtiyaç duyma, genital bölge temizliğinde yardım alma |
| Hareket Yeteneği Puan: | (1 Puan) Yataktan kalkabilme ya da sandalyeye yardım almadan oturabilme (Mekanik destek aletlerini kullanabilir) | (0 Puan) Yataktan kalkarken ya da sandalyeye otururken tamamıyla destek alma |
| İdrar ve Gaita Kontrolü Puan: | (1 Puan) İdrar ve gaita kontrolünü sağlama | (0 Puan) Kısmen ya da tamamen bağırsak ve mesane fonksiyonlarına hakim olamama |
| Beslenme Puan: | (1 Puan) Yemeği tabağından alıp ağzına götürebilme (Yemeğin hazırlanması başka insanlar tarafından yapılabilir) | (0 Puan) Kısmen ya da tamamen beslenirken destek ihtiyacı duyma ya da parenteral olarak beslenme |

Figure 1. Katz daily life activity measures for elderly in Turkish

One of the easiest ways to assess the health status of the elderly is to make a functional assessment that provides objective data. Katz Daily Living Activities Index is a widely used tool in different situations. In studies conducted in our country by Akdemir et al.⁹ and Karakuş et al.¹⁰ in the field of geriatric nursing, the Katz Daily Living Activities Index scale has been used to assess the activity status of the elderly at the provincial level. Several studies have shown that the Katz Index was used to assess the Daily Living Activities of the patients directly.¹¹⁻¹³ In a study performed by Flodin et al.,¹⁴ including the relationship between obesity and mortality in geriatric patients, the Katz Daily Living Activity Index of obese older adults was found to be lower than those without obesity. In patients with breast and colorectal cancer, Van Abbema et al.¹⁵ used the Katz Daily Living Activities Index for this purpose. Senility can be defined as a stage in which the physical and mental changes appear as a result of the life span. The assessment of elderly patients and the determination of their functional status have a major precaution, especially in primary care.

In conclusion, our study demonstrates the Turkish reliability of the Katz Daily Life Activities Scale. According to the results of this study, we believe that the Katz Index can be used in the evaluation of dysfunctions of the elderly.

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