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ORIGINAL ARTICLE

TURKISH CULTURAL ADAPTATION AND VALIDATION OF THE SYMPTOMS OF EARLY DEMENTIA-11 QUESTIONNAIRE

ABSTRACT

Introduction: Dementia is a major public health challenge worldwide and in Türkiye, where the aging population is rising. Early detection enables timely management and caregiver support. The Symptoms of Early Dementia-11 Questionnaire is a brief informant-based screening tool developed in Japan but has not been validated for Turkish use.

Materials and Method: This methodological, cross-sectional study translated and culturally adapted the Symptoms of Early Dementia-11 Questionnaire into Turkish. Between August and September 2025, 200 community-dwelling adults aged 65 years or older were enrolled. Informants completed the questionnaire, and participants underwent the Mini-Mental State Examination. Internal consistency was measured with Cronbach's alpha and McDonald's omega. Construct validity was tested with confirmatory factor analysis, and convergent validity with Spearman correlation.

Results: The Turkish version showed strong internal consistency (Cronbach's alpha 0.834; McDonald's omega 0.823). Confirmatory factor analysis supported a one-factor model with excellent fit (Comparative Fit Index 1.000, Tucker–Lewis Index 1.001, Root Mean Square Error of Approximation 0.000, Standardized Root Mean Square Residual 0.086). Questionnaire scores were strongly and inversely correlated with Mini-Mental State Examination scores (rho –0.911, p<0.001). Higher scores occurred among women, those with lower education or socioeconomic status, unmarried participants, and individuals with a family history of dementia (all p<0.01).

Conclusion: The Turkish Symptoms of Early Dementia-11 Questionnaire is brief, culturally appropriate, and reliable, supporting early detection of cognitive decline and timely interventions to reduce the burden of dementia.

Keywords: Dementia; Early Diagnosis; Neuropsychological Tests; Validation Study; Aged; Turkey.

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INTRODUCTION

Dementia is one of the leading public health challenges of the 21st century, with its prevalence rising in parallel with the global trend of population aging. According to the World Health Organization, more than 55 million people worldwide are currently living with dementia, and nearly 10 million new cases are diagnosed each year. This number is expected to triple by 2050, with the most rapid increase observed in low- and middle-income countries where demographic transitions occur faster (1). In Türkiye, where the proportion of older adults is steadily increasing, dementia represents a growing burden not only for the health system but also for families and society at large (2). The rising demand for diagnostic, therapeutic, and supportive services necessitates strengthening early detection strategies, particularly in primary care settings where most older adults are first evaluated (3).

Early recognition of cognitive decline provides critical opportunities for timely intervention (4). Although no curative treatment for dementia currently exists, early diagnosis allows for better management of comorbidities, initiation of non-pharmacological interventions, caregiver education, and more effective planning of health and social care services (5). Early detection can help preserve older adults' quality of life and autonomy while reducing stress for their families (6,7). However, achieving timely diagnosis remains challenging in everyday practice, as symptoms of early dementia are often subtle, nonspecific, or dismissed as normal aging by patients and their families (8). This highlights the importance of systematic and structured screening in the first line of care.

Primary care occupies a central position in this process. Family physicians are usually the first health professionals to encounter older adults with memory complaints or subtle functional decline (6). Moreover, family medicine is built on holistic care, addressing health's biological, psychological, and social dimensions (9). This makes primary care the ideal context for the early detection of dementia, as it enables evaluation of cognitive changes in relation to the broader life circumstances of patients. At the same time, primary care consultations are often limited by time and workload constraints. In Türkiye, as in many other countries, physicians must assess multiple health needs during brief encounters, leaving little room for lengthy cognitive testing (10). Therefore, there is a pressing need for screening instruments that are short, easy to administer, culturally appropriate, and psychometrically sound.

Existing tools for cognitive assessment vary in their suitability for primary care. Widely used instruments such as the Mini-Mental State Examination (MMSE) or the Montreal Cognitive Assessment (MoCA) require direct patient testing and often take longer than feasible in a routine consultation. Furthermore, factors such as education, language, and sociocultural background can influence performance-based cognitive tests, potentially leading to under- or overdiagnosis in specific populations (11). In busy primary care settings, there is a preference for tools that can be applied quickly, are sensitive to early changes, and integrate seamlessly into the overall evaluation of the patient.

The Symptoms of Early Dementia-11 Questionnaire (SED-11Q) is a brief informant-based screening tool designed to detect early dementia. Initially developed in Japan, the SED-11Q consists of 11 items addressing changes in daily activities, memory, communication, and social behaviour. Its administration requires only a few minutes and relies on input from family members or caregivers familiar with the patient's everyday functioning. By focusing on observable behaviours rather than formal test performance, the SED-11Q minimizes patient burden and allows for a more ecological assessment of cognitive decline (12). Several studies have demonstrated its sensitivity and specificity in distinguishing individuals with early dementia from those without, suggesting its potential as a practical screening tool in real-world clinical practice.

Despite its demonstrated utility in other contexts, the SED-11Q has not yet been validated

for use in Türkiye. Without cultural and linguistic adaptation, direct application of such tools risks misinterpretation of items and reduced diagnostic accuracy. Cultural norms, daily life activities, and social expectations differ across populations, and screening instruments must reflect these variations to ensure validity (13). Moreover, psychometric evaluation in the target population is necessary to establish reliability, internal consistency, and factor structure. Given the increasing demand for dementia screening in Türkiye, adapting the SED-11Q to Turkish and evaluating its psychometric properties is both timely and essential.

Another key consideration is the role of primary care physicians in integrating dementia screening into everyday practice. In the Turkish health system, family physicians are expected to provide comprehensive care to all registered patients, including older adults with chronic conditions and functional decline (14). However, in the absence of validated, brief, and user-friendly screening tools, the detection of dementia often occurs late, after functional impairment has already progressed (15). This limits opportunities for early intervention and places additional strain on health and social care services. Establishing a validated Turkish version of the SED-11Q will equip primary care physicians with a practical instrument that can be easily implemented during routine visits, supporting efficiency and comprehensiveness in care.

The present study was conducted to address this gap. Specifically, our objective was to translate, culturally adapt, and evaluate the psychometric properties of the Turkish version of the SED-11Q in a primary care setting. By assessing validity and reliability in a representative sample of older adults, this study aims to provide family physicians with an evidence-based tool for the early detection of dementia, thereby contributing to holistic patient care and strengthening the capacity of primary care to respond to the growing challenge of cognitive decline in aging populations.

MATERIALS AND METHOD

Study design
This study employed a methodological and cross-sectional design to evaluate the validity and reliability of the Turkish version of the Symptoms of Early Dementia-11 Questionnaire (SED-11Q). The study was conducted between August and September 2025.

Setting
The research was conducted at Dokuz Eylul University Training Family Health Centers, Izmir, Türkiye. These centers provide comprehensive primary care services and constitute an appropriate setting for dementia screening, as they serve a large and diverse population of older adults.

Participants and sample size
The target population consisted of community-dwelling older adults aged 65 years and above who presented to the participating family health centers during the study period. Sample size was determined based on recommendations for psychometric validation studies, which suggest at least 5–10 participants per item for internal consistency analysis (16). Since the SED-11Q includes 11 items, a minimum of 110 participants was required. In addition, confirmatory factor analysis (CFA) is generally recommended with a sample size of at least 200 participants to ensure stable model estimation (17). Accordingly, the study aimed to include 200 participants.

Eligible participants were approached during their visits to the centers, informed about the study, and invited to participate voluntarily. Written informed consent was obtained from all participants before data collection.

Inclusion and exclusion criteria
The inclusion criteria were 65 years or older, willingness to participate voluntarily, and adequate proficiency in Turkish. Exclusion criteria included

a history of psychiatric illness (such as major depression or schizophrenia) or advanced sensory impairment (vision or hearing loss) that would prevent the completion of the questionnaires. The absence of such diagnoses was confirmed through the national electronic health record system.

Instruments

Sociodemographic Information Form. The researchers prepared a short form to collect demographic and health-related characteristics, including age, gender, education, marital status, occupational history, socioeconomic level, chronic diseases, family history of dementia, and household context.

Symptoms of Early Dementia-11 Questionnaire (SED-11Q). In Japan, Maki et al. (2013) originally developed the SED-11Q as an informant-administered screening tool to detect early dementia (12). It consists of 11 dichotomous (yes/no) items evaluating changes in cognition, behaviour, and daily functioning over the past year. Higher scores indicate a greater likelihood of cognitive decline. The original instrument demonstrated strong reliability (Cronbach's α=0.89) and validity. In the clinical setting with physicians and other medical staff, the statistically optimal cut-off value is 2/3. In contrast, in community-dwelling older individuals, a cut-off value of 3/4 is recommended for detecting dementia. In addition, two supplementary questions—concerning the presence of delusions and illusions—are included but not scored; if either is present, medical consultation is recommended.

Translation and cultural adaptation

The translation and adaptation process followed internationally accepted guidelines for cross-cultural adaptation of self-report measures (18). First, two independent researchers conducted the forward translation into Turkish. Although they were not fully bilingual, both were academically competent and experienced in the field, with sufficient proficiency in English and expertise in health-related terminology. The research team synthesized a consensus version. This version was then back-translated into English by an independent bilingual translator who was blinded to the original instrument. A committee of family medicine and geriatrics experts reviewed translated version ensure semantic, conceptual, and cultural equivalence. The prefinal version was pilot tested with a small group of older adults (n=20) to assess clarity and cultural appropriateness. Minor adjustments were made based on participant feedback, resulting in the final Turkish version of the SED-11Q.

Data collection

Data were collected face-to-face by trained family physicians at the participating health centers during routine patient visits. Informants (family members or caregivers) completed the SED-11Q based on their observations of the participant's behavior and functioning over the past year. In addition, the MMSE was administered to assess cognitive status.

Statistical analysis

Descriptive statistics (mean, standard deviation, frequency, and percentage) were used to summarize participant characteristics. Internal consistency of the SED-11Q was assessed using Cronbach's alpha and McDonald's omega coefficients. Item–total correlations were examined to evaluate the contribution of each item to the overall scale. Construct validity was examined through confirmatory factor analysis (CFA). Model fit was evaluated using both badness-of-fit and goodness-of-fit indices, including the Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), Goodness-of-Fit Index (GFI), Normed Fit Index (NFI), Non-Normed Fit Index or Tucker–Lewis Index (TLI), Comparative Fit Index (CFI), Incremental Fit Index (IFI), Relative Fit Index (RFI), and McDonald Fit Index (MFI).

Acceptable model fit was defined as CFI, TLI, NFI, IFI, RFI, and GFI values ≥ .95, RMSEA< .05 (90% CI< .08), and SRMR< .10.

Known-groups validity was tested by comparing SED-11Q scores across sociodemographic subgroups (e.g., gender, education, marital status, occupational history, socioeconomic level, presence of chronic disease, family history of dementia, and household context) using Mann-Whitney U or Kruskal-Wallis tests, as appropriate. Correlations between SED-11Q and MMSE scores were assessed using Spearman's rank correlation coefficient. The significance threshold was set at p< 0.05.

Ethics

The study protocol was reviewed and approved by the Dokuz Eylul University Faculty of Medicine Ethics Committee (Decision No:2025/25-03, Date: 30.07.2025). All participants and their informants provided written informed consent. Data were collected anonymously, and confidentiality was maintained throughout the study.

RESULTS

The analysis included 200 participants aged 65 years and older. Table 1 compares SED-11Q and

Table 1. Comparison of SED and MMSE Scores by Sociodemographic Characteristics

Variable	Category	n	SED Median (min–max)	Test statistic (U/H)	p	MMSE Median (min–max)	Test statistic (U/H)	p
Gender	Female	105	3,24 (0-11)	U=3464,5	< .001	22,90 (6-30)	U=6249,5	.002
	Male	95	1,93 (0-11)	25,0 (7-30)				
Education	Literate	31	4,29 (0-10)	H=34,223	< .001	20,74 (11-30)	H =24,544	< .001
	Primary/Secondary	89	3,20 (0-11)			22,88 (6-30)		
	High school	43	1,72 (0-8)			25,81 (14-30)		
	University+	37	0,89 (0-4)			26,75 (14-30)		
Marital status	Married	133	2,18 (0-11)	U=5718,5	< .001	24,66 (6-30)	U=3279,0	.002
	Single	67	3,50 (0-10)			22,38 (11-30)		
Occupational history	Education	20	1,30 (0-7)	H=20,660	< .001	26,65 (16-30)	H=16,450	< .001
	Health	6	3,33 (1-5)			22,66 (19-28)		
	Service	105	2,17 (0-11)			24,62 (6-30)		
	Never worked	69	3,63 (0-10)			22,10 (10-30)		
Socioeconomic level	Low	37	4,32 (0-10)	H=31,943	< .001	20,35 (11-30)	H=28,451	< .001
	Middle	114	2,72 (0-11)			23,79 (6-30)		
	High	49	1,10 (0-7)			26,81 (16-30)		
Chronic disease	Present	183	2,70 (0-11)	U=1337,5	.331	23,79 (6-30)	U=1617,5	.785
	Absent	17	1,76 (0-6)			25,00 (18-30)		
Family history of dementia	Present	55	3,58 (0-11)	U=2913,5	.003	22,30 (6-30)	U=4787,0	.028
	Absent	145	2,26 (0-10)			24,50 (7-30)		
Living situation	Alone	34	3,00 (0-10)	U=2524,5	.324	23,17 (11-30)	U=3173,5	.251
	With family	166	2,54 (0-11)			24,04 (6-30)		

SED: Symptoms of Early Dementia-11 Questionnaire, MMSE: Mini-Mental State Examination, n: number, min: minimum, max: maximum

MMSE scores across sociodemographic and clinical subgroups.

Gender. Women had significantly higher SED-11Q scores (median=3.24, range 0–11) compared with men (median=1.93, range 0–11) (U=3464.5, p< .001), indicating more reported dementia-related symptoms. In contrast, men demonstrated higher MMSE scores (median=25.0, range 7–30) than women (median=22.9, range 6–30) (U=6249.5, p=.002).

Education. There were marked differences across education groups. Participants who were literate without formal education had the highest SED-11Q scores (median=4.29, range 0–10), whereas university graduates had the lowest (median=0.89, range 0–4) (H=34.223, p< .001). Conversely, MMSE scores increased steadily with education level, from a median of 20.74 (range 11–30) among literates to 26.75 (range 14–30) among those with university education (H=24.544, p< .001).

Marital status. Single participants had higher SED-11Q scores (median=3.50, range 0–10) compared to married individuals (median=2.18, range 0–11) (U=5718.5, p< .001). Similarly, married participants exhibited significantly higher MMSE scores (median=24.66, range 6–30) than single participants (median=22.38, range 11–30) (U=3279.0, p=.002).

Occupational history. Occupational background was also associated with both scales. Those who had never worked showed the highest SED-11Q scores (median=3.63, range 0–10), while participants with an education-related occupation had the lowest (median=1.30, range 0–7). Differences were statistically significant (H=20.660, p< .001). For MMSE, the highest scores were again observed among those with an education-related occupation (median=26.65, range 16–30), whereas the lowest were among those who had never worked (median=22.10, range 10–30) (H=16.450, p< .001).

Socioeconomic level. A clear gradient was observed by socioeconomic status. Participants in the low socioeconomic group had the highest SED-11Q scores (median=4.32, range 0–10), while those in the high group had the lowest (median=1.10, range 0–7) (H=31.943, p< .001). Similarly, MMSE scores were lowest in the low socioeconomic group (median=20.35, range 11–30) and highest in the high socioeconomic group (median=26.81, range 16–30) (H=28.451, p< .001).

Chronic disease. No significant differences were found in either SED-11Q (U=1337.5, p=.331) or MMSE scores (U=1617.5, p=.785) between participants with and without chronic diseases.

Family history of dementia. Participants with a family history of dementia had significantly higher SED-11Q scores (median=3.58, range 0–11) compared with those without (median=2.26, range 0–10) (U=2913.5, p=.003). MMSE scores were also lower among participants with a family history of dementia (median=22.30, range 6–30) than those without (median=24.50, range 7–30) (U=4787.0, p=.028).

Household Context. No significant differences were observed in SED-11Q or MMSE scores between participants living alone and those living with family (p > .05 for both).

In addition to group comparisons, the relationship between SED-11Q and MMSE scores was examined using Spearman's rank correlation (Table 2). A strong, negative correlation was observed between total SED-11Q and MMSE scores (ρ=–0.911, p< .001). This indicates that

Table 2. Spearman's Correlation Between SED Total and MMSE Total

Variables	ρ (Spearman's rho)	p	95% CI	Effect size (Fisher's z)	SE (z)
SED total – MMSE total	–0.911	< .001	[–0.932, –0.884]	–1.535	0.079

SED: Symptoms of Early Dementia-11 Questionnaire, MMSE: Mini-Mental State Examination, SE: Standard Error

as dementia-related symptoms reported on the SED-11Q increased, cognitive performance as measured by the MMSE decreased. The correlation was statistically significant, with a 95% confidence interval ranging from –0.932 to –0.884. The effect size (Fisher's z=–1.535, SE=0.079) further confirmed the robustness of this inverse relationship.

The psychometric evaluation of the Turkish version of the SED-11Q demonstrated strong validity and reliability indices (Table 3). Bartlett's test of sphericity was statistically significant ($\chi^2(55)$=2200.72, p< .001), indicating that the data were factorable. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.830 overall,

with individual item values ranging from 0.774 to 0.915, exceeding the recommended threshold of 0.80 and confirming that the sample was adequate for factor analysis.

Confirmatory factor analysis (CFA) supported the one-factor structure of the scale. The chi-square test of model fit was non-significant ($\chi^2(44)$=41.91, p=.561), suggesting good model fit. All incremental fit indices were excellent: CFI=1.000, TLI=1.001, NFI=0.982, RFI=0.977, IFI=1.001, GFI=0.986, and MFI=1.005, all exceeding the recommended cutoff of 0.95. Absolute fit indices also supported the model: RMSEA=0.000 (90% CI [0.000, 0.044], p=.978), indicating excellent fit (< .05), and SRMR=0.086,

Table 3. Validity and Reliability Indices of the Scale

Test / Index	Value	Interpretation / Criteria
Bartlett's Test of Sphericity	$\chi^2(55)$ = 2200.72, p < .001	Factorable data
KMO (Overall)	.830	Meritorious (>.80)
KMO (items)	.774 – .915	Adequate sampling adequacy
Chi-square Model Fit	$\chi^2(44)$ = 41.91, p = .561	Good fit (non-significant)
CFI	1.000	Excellent (> .95)
TLI	1.001	Excellent (> .95)
NFI	.982	Excellent (> .95)
RFI	.977	Excellent (> .95)
IFI	1.001	Excellent (> .95)
RMSEA	.000 (90% CI [.000, .044]), p = .978	Excellent (< .05)
SRMR	.086	Acceptable (< .08–.10)
GFI	.986	Excellent (> .95)
MFI	1.005	Excellent (> .95)
Hoelter's N (α = .05)	288.15	Adequate (> 200)
Hoelter's N (α = .01)	327.22	Adequate (> 200)
Factor Loadings	0.409 – 0.951	good ≥ 0.40
Reliability – Cronbach's α	.834	Good (> .80)
Reliability – McDonald's ω	.823	Good (> .80)
Item-level Reliability	0.378 – 0.627	Good (> .30)

KMO: Kaiser–Meyer–Olkin, CFI: Comparative Fit Index, TLI: Tucker Lewis Index, NFI: Norm Fit Index, RFI: Relative Fit Index, IFI: Incremental Fit Index, RMSEA: Root Mean Square Error of Approximation, SRMR: Standardized Root Mean Square Residual, GFI: Goodness-of-Fit Index, MFI: McDonald Fit Index

within the acceptable range (< .08–.10). Hoelter's N was 288.15 at α=.05 and 327.22 at α=.01, above the 200 threshold, further supporting model adequacy and sample size sufficiency. The majority of items loaded strongly on the latent construct ($\geq$ 0.60), while only item 10 (0.409) approached the lower acceptable limit. All items exceeded the minimum recommended loading of 0.30, indicating that each item contributed meaningfully to the single-factor solution and confirming the construct validity of the scale.

Reliability analyses showed high internal consistency. Cronbach's alpha was 0.834 and McDonald's omega was 0.823, both exceeding the accepted criterion of 0.80, indicating good reliability. All coefficients exceeded the commonly recommended minimum of 0.30, indicating that each item contributed meaningfully to the overall internal consistency of the instrument.

DISCUSSION

This study translated, culturally adapted, and psychometrically validated the Turkish version of the SED-11Q for use in primary care. The findings demonstrated that the instrument possesses strong validity and reliability, confirming its suitability as a practical screening tool for the early detection of dementia in community-dwelling older adults. To our knowledge, this is the first study to adapt and validate the SED-11Q in Türkiye, addressing a significant gap in dementia screening tools available for primary care physicians.

Interpretation of Key Findings

The Turkish version of the SED-11Q demonstrated high internal consistency, with Cronbach's α and McDonald's ω both exceeding 0.80. These results are comparable to those of the original Japanese validation, where Cronbach's α was reported at 0.89 (12). This suggests that the Turkish adaptation retained the conceptual integrity and coherence of the original items, despite differences in language and cultural context.

CFA supported a one-factor model with excellent fit indices across multiple criteria (CFI, TLI, RMSEA, SRMR)(19). Reinforcing its conceptualization as a brief, focused measure of observable dementia-related symptoms. The adequacy of model fit, together with the high Kaiser-Meyer-Olkin value, underscores the appropriateness of applying this scale in the Turkish context.

Convergent validity was strongly supported by the significant negative correlation between SED-11Q and MMSE scores (ρ=–0.911, p <.001). This magnitude of correlation indicates a powerful correlation according to Cohen's guidelines (20). The strength of this relationship suggests that the SED-11Q captures clinically relevant changes that align closely with objective cognitive performance, while also reflecting real-world functional decline observable to caregivers.

Known-groups validity analyses further strengthened the evidence for construct validity. Higher SED-11Q scores were observed among women, participants with lower education or socioeconomic status, unmarried individuals, and those with a family history of dementia. These patterns mirror well-established epidemiological findings that female gender, lower education, and lower socioeconomic position are associated with higher dementia risk (21). Such associations may also reflect contextual or reporting biases rather than true cognitive decline. Lower education, limited health literacy, or cultural norms can influence how informants perceive and report daily functioning, potentially leading to overestimation of impairment. While the SED-11Q captures current cognitive functioning more directly than retrospective measures, sociodemographic disparities may still affect score interpretation. Thus, differences across groups should be interpreted with caution, and future studies should explore ways to adjust for these potential biases.

Comparison with Previous Studies

In Japanese cohorts, the tool has been shown to discriminate effectively between healthy individuals, those with mild cognitive impairment, and those with dementia (12). Similarly, our findings suggest that the Turkish version can differentiate between groups expected to vary in dementia risk, supporting its cross-cultural applicability. Furthermore, studies of other informant-based questionnaires, such as the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE), have demonstrated similar advantages in detecting early dementia across diverse cultural settings (22). The present study extends this literature by confirming that the SED-11Q offers comparable psychometric strength while retaining the practical advantage of brevity.

Similar validation and implementation studies conducted in different cultural settings have highlighted challenges such as varying levels of health literacy, differences in informant familiarity with the patient's daily functioning, and resource limitations in primary care. These cultural and practical factors should be considered when applying informant-based cognitive screening tools across diverse populations (23,24).

Implications for Primary Care

Primary care settings are uniquely positioned for early dementia detection (25), yet practical challenges such as limited time and competing health demands often impede systematic screening (26). The Turkish SED-11Q requires only a few minutes to administer and relies on informant input, reducing patient burden and consultation time. Its demonstrated validity and reliability suggest that it could be feasibly integrated into routine visits, particularly for patients with memory complaints or functional decline. Adopting this tool could help family physicians identify cases warranting further evaluation, initiate early interventions, and facilitate timely referral to specialized care.

Strengths and Limitations

This study has several strengths. It followed internationally recognized translation and cultural adaptation guidelines, ensuring semantic and conceptual equivalence across languages. The sample size was sufficient for both reliability testing and CFA, exceeding recommended thresholds.

Nonetheless, some limitations should be acknowledged. First, the cross-sectional design precludes assessing test–retest reliability and predictive validity over time. Second, although the MMSE is widely used, it has limitations related to educational and cultural bias, which may have influenced the strength of correlations observed. Additionally, no standardized diagnostic tool based on DSM classification was applied to verify the absence of psychiatric disorders, and the forward translators were not fully bilingual, both representing minor methodological limitations. Specific chronic conditions were not recorded, although most participants had at least one chronic disease, which may be clinically relevant. Additionally, in line with the original study, other informant-based instruments such as the IQCODE were not used for comparison, as they include items related to advanced dementia stages and no other informant-based tool with established Turkish validity and reliability was available. Finally, the study was conducted in a single metropolitan region, and findings may not fully capture cultural or linguistic nuances across Türkiye's diverse areas.

Future Directions

Multicenter studies including rural and culturally diverse populations will be essential to confirm generalizability. Additionally, implementation research could evaluate how best to integrate the SED-11Q into primary care workflows, including its acceptability among physicians and caregivers. Future studies should also include detailed data on chronic disease subtypes to better interpret their

potential effects on cognitive outcomes. Finally, research examining the tool's role in guiding early interventions, caregiver support, and health system planning would extend its impact beyond screening.

CONCLUSION

In summary, the Turkish version of the SED-11Q demonstrated strong validity and reliability, supporting its use as a brief and practical instrument for dementia screening in primary care. By providing family physicians with a culturally adapted, psychometrically robust tool, this study contributes to strengthening early detection strategies in Türkiye. Early identification of dementia can facilitate timely interventions, preserve quality of life for older adults, and reduce the burden on families and health systems.

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Supplementary Material 1.
Erken Dönem Demans Belirtileri-11 Anketi SED-11Q-TR
Lütfen aşağıdaki soruları uygun yanıtları daire içine alarak cevaplayınız.
(Fiziksel sorunlardan –örneğin ağrı– kaynaklanan güçlükleri hariç tutunuz).
Gerekirse lütfen yardım isteyiniz.
Hastanın son bir aydaki günlük yaşamı nasıldı?

Soru	EVET	HAYIR	Bilmiyorum / Geçerli değil
Hasta aynı şeyleri tekrar tekrar anlatıyor veya soruyor mu?	☐	☐	☐
Hasta olayların bağlamını anlamakta zorlanıyor mu?	☐	☐	☐
Hasta giyim kuşamına ve kişisel bakımına karşı ilgisiz hale geldi mi?	☐	☐	☐
Hasta musluğu kapatmayı, kapıyı kapatmayı unutuyor veya evi gerektiği gibi temizleyemiyor mu?	☐	☐	☐
Aynı anda iki şey yaparken birini unutuyor mu?	☐	☐	☐
Hasta ilaçlarını düzenli şekilde kullanamaz hale geldi mi?	☐	☐	☐
Daha önce hızlı yaptığı işleri (örneğin ev işleri) yapmak artık daha uzun sürüyor mu?	☐	☐	☐
Hasta plan yapamaz hale geldi mi?	☐	☐	☐
Hasta karmaşık konuları anlayamıyor mu?	☐	☐	☐
Hasta eskisi kadar istekli değil mi, hobilerini bıraktı mı?	☐	☐	☐
Hasta öncesine göre daha huzursuz veya şüpheci mi?	☐	☐	☐

TOPLAM SED-11Q SKORU

Soru	EVET	HAYIR	Bilmiyorum / Geçerli değil
Hasta sanrılar yaşıyor mu? (Örneğin, eşyalarının çalındığını iddia etmek gibi)	☐	☐	☐
Hasta olmayan şeyleri görüyor mu? (Örneğin, halüsinasyonlar)	☐	☐	☐

Bu iki sorudan herhangi birine "Evet" yanıtı verildiğinde, daha kapsamlı bir tıbbi değerlendirme önerilir.