

# Assessment of Functional Impairment in Dementia with the Spanish Version of the Activities of Daily Living Questionnaire

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## Key Words

Activities of Daily Living Questionnaire, Spanish version · Alzheimer disease · Frontotemporal dementia · Functional impairment

## Abstract

**Background/Aims:** Functional assessment is essential in dementia as it provides an invaluable tool for diagnosis and treatment. To date, most scales of activities of daily living (ADL) have focused either on basic or instrumental activities, providing an incomplete profile of the patients' level of dependence on their caregivers. Some scales concentrate too intensely on the way in which physical impairment affects ADL, with a decreasing sensitivity to the detection of demented patients who do not necessarily present with physical impediments. The Activities of Daily Living Questionnaire (ADLQ) assesses functioning in self-care, household care, employment and recreation, shopping and money, travel and communication. The present study sought to determine the usefulness of the Spanish version of the ADLQ (ADLQ-SV) for assessing functional impairment in different types of dementia. **Methods:** The ADLQ-SV, the Clinical Dementia Rating (CDR) scale and the Functional Activities Questionnaire (FAQ) were administered to the caregivers of patients (n = 40) with different types of dementia. **Results:** Strong internal consistency (Cronbach's  $\alpha = 0.88$ ) and con-

current validity (significant correlations with CDR and FAQ, both  $p < 0.001$ ) were observed. **Conclusions:** The authors discuss response trends in the ADLQ-SV and show the utility of the scale in Spanish-speaking populations of patients with dementia.

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## Introduction

Dementia is a syndrome of progressive cognitive impairment that results in a decreased ability to perform activities of daily living (ADL) and is usually accompanied by the development of behavioral disturbances. Dementia is nowadays considered a major global health issue of uttermost concern with regard to the unrelenting increase in the older population [1]. This is not only because of the epidemiologic aspects of the disease per se, but also due to the considerable and challenging economic impact resulting from the high costs of its diagnosis and treatment [2, 3].

With the progressive nature of cognitive decline, patients with dementia also develop difficulties in carrying

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out ADL, which affects not only their own quality of life, but also that of their caregivers [4]. For this reason, being able to assess a patient's functionality is essential for diagnosing and treating dementia. For instance, recording data on a patient's ability to perform ADL can help adapt their environment, adjust functional activities, and train relatives and caregivers to provide better care. Moreover, functional assessment is now considered an essential component in the clinical diagnosis of dementia, even of non-Alzheimer types [5]. The assessment of ADL must therefore be able to detect individually the spared capacities of each patient in order to determine his or her autonomy and independence in the surrounding environment. By doing so, functional assessment can provide a further tool for health professionals to correlate the advancement of cognitive deficits with patients' performance of daily routine activities.

Over the past years, research in this field has focused on developing objective, yet sensitive, measures of general functioning in older adults. Two types of activities are usually measured by functional assessment tools: basic ADL (BADL) and instrumental ADL (IADL). BADL include activities that are performed universally and on a regular basis, representing the most basic level of functioning, and which are essential to keep us alive, including activities such as eating, dressing and bathing. IADL, on the other hand, require more complex abilities that reflect the capacity to live independently within the community, as they are more strongly dependent on a patient's ability to organize, plan and execute. IADL include housekeeping, shopping and using transportation, among others [6].

Perhaps one of the most widely used tools for the assessment of ADL, the Barthel index [7] was introduced as a way to measure the progress of patients with neuromuscular and musculoskeletal disorders, placing a strong focus on the spared activity of inferior extremities and their impact on functioning. The index measures dependence on 10 BADL including sphincter control. On the other hand, the Instrumental Activities of Daily Living scale developed by Lawton and Brody [6], which is yet another one of the most widely used scales, evaluates the impact on IADL functioning, but is not specific to cognitive-related impairment. The strong focus placed on the physical capabilities of patients to carry out such ADL on both of these popular scales may decrease their sensitivity in detecting functional impairments in patients with dementia, especially during the early stages [8]. On the other hand, alternative questionnaires place the focus more strongly on how cognitive impairments affect function-

ing, thus becoming more suitable scales for differentiating demented from nondemented patients. One such scale is the Functional Activities Questionnaire (FAQ) developed by Pfeffer et al. [9], which evaluates the level of assistance needed by a patient to perform 10 IADL. However, this scale is not capable of distinguishing between stages of dementia, especially between moderate and advanced [10]. Recently, the Activities of Daily Living Questionnaire (ADLQ), an informant-based assessment of functional abilities, was developed by Johnson et al. [11] for an outpatient clinical population. The ADLQ measures functioning in 6 areas: self-care, household care, employment and recreation, shopping and money, travel and communication, and evaluates BADL and IADL. With the Spanish-speaking community representing one of the largest populations affected by dementia worldwide, an ADL scale that assesses both basic and instrumental activities is essential to cognitive neurology clinics. Unfortunately, despite its clinical utility, to the best of our knowledge, the usefulness of the Spanish version of the ADLQ (ADLQ-SV) has not been demonstrated. For this reason, the present study aimed to demonstrate the usefulness of incorporating an ADLQ-SV in the functional assessment of different types of dementia. In order to do so, the original scale was translated into Spanish, and 2 back-translations into English confirmed the proper linguistic adaptation of the tool. Then, the questionnaire was administered to the caregivers of patients with different types of dementia, including Alzheimer disease (AD) and behavioral variant frontotemporal dementia (bvFTD). Their response trends were analyzed, as well as the psychometric properties of the scale. This study also sought to depict the functional impairment in different types of dementia. More specifically, we hypothesized that, while no quantitative differences may arise concerning the overall impairment, the subscores of the various ADLQ domains would provide qualitative information regarding the differential impact of the disease on ADL. Because of the improvements introduced by the ADLQ relative to alternative tools for assessing functional impairment, we hypothesized a moderate concurrent validity between the ADLQ-SV and other popular functional assessment questionnaires used in dementia.

## Methods

### *Participants*

Forty outpatients from the Institute of Cognitive Neurology (INECO; Buenos Aires, Argentina) were included in the present study. Their primary caregivers included spouses, adult children

and siblings. All participants and caregivers gave their informed consent prior to their inclusion in the study. Patients were grouped according to their diagnoses as follows: AD (n = 23), bvFTD (n = 10) and other forms of dementia including Lewy body and vascular dementia as well as posterior cortical atrophy (Other; n = 7). Diagnoses were established by a neurologist (F.M.) based on international consensus for each form of dementia, which included NINCDS-ADRDA criteria [12] for AD, Lund and Manchester criteria [13] for bvFTD, NINDS-AIREN criteria [14] for vascular dementia, criteria by McKeith et al. [15] for Lewy body dementia and by Benson et al. [16] for posterior cortical atrophy. The patients were matched for age, years of education, and gender in order to ensure that differences across the groups were not the result of different clinicodemographic profiles. All patients underwent neurological, neuropsychiatric and neuropsychological examinations supported by an MRI-SPECT in order to support the diagnosis. The patients were included in this study only if their neuropsychological performance was typical of the probable diagnosis established by neurological examination and if their MRI was characteristic of the disease (e.g. hippocampal atrophy for AD). Patients were excluded from the study: (a) if there was no informant (relative or caregiver) available to complete the questionnaire, (b) if they presented with physical impediments to their performance of ADL or (c) if they presented with psychiatric comorbidity. In order to ensure the reliability of the diagnoses for this study, all cases were reviewed in an interdisciplinary clinical meeting where 2 neurologists, 2 neuropsychiatrists and 2 neuropsychologists who were blind to the diagnosis gave their own opinion on each individual case. The interrater agreement for the diagnoses was very good (Cohen's  $\kappa = 0.91$ ). All the patients in this study had Clinical Dementia Rating (CDR) scores of 1.

#### Procedure

The study was originally approved by the ethics committee at the INECO based on international standards for medical research with human subjects. Patients and their caregivers who visited the Occupational Therapy Department at the INECO were informed about the study and gave their informed consent, after which patients were referred for diagnosis while caregivers received a package of questionnaires to complete. This included: (a) the ADLQ-SV introduced in this study, (b) the FAQ by Pfeffer et al. [9] and (c) the CDR scale [17].

#### Adaptation and Structure of the ADLQ-SV

The adaptation of the ADLQ to Spanish was achieved by 2 translations from English to Spanish based on the original questionnaire by Johnson et al. [11], followed by 2 back-translations from Spanish to English that were shared with the corresponding author of the ADLQ. The forward- and back-translations were performed independently by different individuals, in each case by 1 bilingual expert in the field of dementia and by 1 bilingual layperson. The ADLQ-SV can be found in the Appendix. It maintains the structure and number of items of the original English version, and is grouped into 6 sections as follows: self-care activities (6 items), household care (6 items), employment and recreation (4 items), shopping and money (3 items), travel (4 items) and communication (5 items). Each item is rated on a 4-point scale from 0 (no problem) to 3 (no longer capable of performing the activity). For cases in which the patient never performed a specific activity or when information is not available to the rater, a

fifth option 'Never did this activity' or 'Don't know'(ND/DK, '9') is also available.

#### Scoring and Statistical Analyses

The scoring for each item was based on the procedure by Johnson et al. [11] and the overall functional impairment calculated for each domain as well as for the global questionnaire as follows: (sum of all ratings not ND/DK)/(3 × total number of items not rated ND/DK).

By doing so, those items rated as ND/DK are left out of the equation, ensuring a functional impairment score based on the actual functioning of patients in comparison with their own pre-morbid functioning. Psychometric properties of the ADLQ-SV were determined as follows: (a) internal consistency with Cronbach's  $\alpha$  value, (b) concurrent validity using Spearman's correlation coefficients between ADLQ-SV functional impairment and the FAQ and the CDR score. Factor analysis was conducted on the individual items of the questionnaire using varimax rotation. This type of rotation is used in order to reduce the dimensionality of the data set. Only factors with eigenvalues of  $>1$  were extracted, and factor loadings considered meaningful if  $r > 0.50$ . Test-retest reliability was determined using the bivariate Pearson correlation coefficient between test and retest total and subdomain scores (based on the components obtained by factor analysis) on the ADLQ-SV. Retest data were obtained during follow-up appointments for a subset of 15 informants, all of which had previously completed the first ADLQ-SV. The mean time elapsed between test and retest was 32 days (SD = 6.8 days). Interrater reliability was determined using Cohen's  $\kappa$  coefficient on the ADLQ-SV total score. Data for the interrater reliability analysis were obtained when the patients were accompanied by  $>1$  caregiver or relative. Demographic variables and scores were compared across the groups using one-way ANOVA with Bonferroni's post hoc analysis when relevant. For categorical variables (e.g. gender), the Freeman-Halton extension of the Fisher exact probability test for  $2 \times 3$  tables was used.

## Results

#### Demographic and Clinical Profile

Table 1 summarizes the demographic and clinical profile of the 3 patient groups included in this study. No significant differences were found across the groups in age ( $F_{2,39} = 0.57$ ;  $p = 0.33$ ), years of education ( $F_{2,39} = 0.28$ ;  $p = 0.76$ ) or male-to-female proportions ( $\chi^2 = 1.75$ ; d.f. = 2;  $p = 0.42$ ). Moreover, no significant differences were found between the groups in their total FAQ score ( $F_{2,39} = 2.40$ ;  $p = 0.15$ ) or CDR ( $F_{2,39} = 0.49$ ;  $p = 0.62$ ).

#### Factor Analysis

The appropriateness of the data set to be subjected to factor analysis was indicated by the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO = 0.72) and Bartlett's test of sphericity ( $\chi^2 = 722$ ; d.f. = 378;  $p < 0.001$ ). As shown in table 2, 6 factors were extracted as expected,

**Table 1.** Demographic and clinical variables for AD, bvFTD and other types of dementia patients

	AD (n = 22)	bvFTD (n = 10)	Other (n = 7)
Age, years	79.0 ± 5.9	75.4 ± 11.0	76.6 ± 8.9
Education, years	12.2 ± 4.7	12.9 ± 3.7	12.6 ± 4.1
Male gender, %	33	40	24
CDR score (max. 3)	1.67 ± 0.89	1.95 ± 1.0	1.71 ± 0.9
FAQ score (max. 30)	21.9 ± 5.8	23.1 ± 7.0	15.6 ± 12.2

No significant differences were found across the groups for any of the variables. Values denote means ± SD unless otherwise specified.

in accordance with the ADL domains of the English version. 81.6% of the total variance was explained with these 6 components, and all the items of the ADLQ-SV were loaded (>0.4 for all items). Factor 1 accounted for 24.1% of the variance and included the items under the ‘self-care activities’ subdomain. Factor 2 corresponded with the ‘household’ subdomain and was associated with 18.3% of the total variance. The ‘laundry’ item loaded into factor 1 as well, but loading was higher for factor 2 (0.433 vs. 0.698). Factor 3 accounted for 13.4% of the total variance and included the items of the ‘shopping and money’ subdomain. Factor 4 included the items corresponding to the ‘travel’ subdomain and accounted for 10.7% of the variance. The item ‘public transportation’ also loaded into factor 5, but the loading was slightly higher for factor 4 (0.403 vs. 0.419). Factors 5 and 6 were associated with the ‘recreation’ and ‘communication’ subdomains, and accounted for 8.9 and 6.2% of the variance, respectively. The item ‘understanding’ loaded into both factors 5 and 6, but loading was higher for factor 6 (0.432 vs. 0.497).

#### Response Characteristics

All caregivers in the study were able to complete the questionnaire without further assistance. The average completion time ranged between 4 and 9 min. The item most frequently rated as ND/DK was ‘3D-Travel’ (55% of the responses for this item), most likely because our patient population included a large number of housewives and work-from-home individuals. Two other items frequently rated as ND/DK were ‘3A-Employment’ and ‘3C-Organization’ (47% of the responses for this item in both cases), probably due to similar reasons. Across all items, the average percentage of caregivers rating ND/DK was 7.2%.

**Table 2.** Factor loadings following varimax rotation

	Factors					
	1	2	3	4	5	6
Eigenvalue	6.17	3.61	3.14	2.37	1.81	1.50
Eating	0.688					
Dressing	0.809					
Bathing	0.876					
Elimination	0.920					
Taking pills	0.445					
Personal appearance	0.922					
Meal preparation		0.477				
Setting table		0.596				
Housekeeping		0.780				
Home maintenance		0.766				
Home repairs		0.739				
Laundry		0.698				
Employment					0.634	
Recreation					0.657	
Organizations					0.739	
Travel					0.623	
Food shopping			0.443			
Handling cash			0.673			
Managing finances			0.642			
Public transportation				0.569		
Driving				0.419		
Mobility in neighborhood				0.787		
Travel outside the familiar				0.774		
Using telephone					0.751	
Talking					0.581	
Understanding					0.497	
Reading					0.745	
Writing					0.650	
Percent of variance	24.1	18.3	13.4	10.7	8.9	6.2
Cronbach’s α	0.96	0.92	0.89	0.88	0.91	0.82

Eigenvalues, percent variance and Cronbach’s α are shown for each component extracted.

#### Internal Consistency and Concurrent Validity

The internal consistency of the 6 factor subscores of the ADLQ-SV was very good (Cronbach’s α = 0.88). Cronbach’s α of the individual subdomains (table 2) showed that all factors had appropriate internal consistency (Cronbach’s α range = 0.82–0.96). Moreover, significant correlations were found between all the subdomains of the questionnaire as well as with the total ADLQ-SV functional impairment percentage (table 3). The concurrent validity was appropriate, with overall functional impairment significantly correlating with the

**Table 3.** Correlation coefficients and associated p values between ADLQ-SV subdomains and overall functional impairment

		Self-care	Household	Employment	Shopping	Travel	Communication	Total
Self-care	r	–						
	p							
Household	r	0.67	–					
	p	<0.001						
Employment	r	0.46	0.48	–				
	p	<0.001	<0.001					
Shopping	r	0.74	0.73	0.44	–			
	p	<0.001	<0.001	<0.001				
Travel	r	0.66	0.74	0.47	0.83	–		
	p	<0.001	<0.001	<0.001	<0.001			
Communication	r	0.52	0.39	0.72	0.41	0.39	–	
	p	<0.001	0.01	<0.001	0.01	0.01		
Total	r	0.89	0.80	0.67	0.83	0.78	0.70	–
	p	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	

**Table 4.** Percent functional impairment for each subdomain and overall functional impairment for AD, bvFTD and other types of dementia patients

	AD (n = 22)	bvFTD (n = 10)	Other (n = 7)
Self-care	37.2 ± 26.1	40.6 ± 27.3	43.7 ± 29.6
Household	69.6 ± 31.2	73.1 ± 29.9	61.6 ± 35.8
Employment	75.0 ± 35.4	69.4 ± 41.6	66.7 ± 25.9
Shopping	71.3 ± 34.6	84.4 ± 25.2	69.8 ± 38.9
Travel	74.1 ± 35.3	85.3 ± 20.8	74.2 ± 39.0
Communication	48.2 ± 22.0	63.6 ± 23.7	44.3 ± 33.7
Total	57.9 ± 22.5	65.7 ± 23.6	56.5 ± 29.7

Values denote means ± SD and were calculated for each patient according to the procedure detailed in the Methods, sectioned and averaged for each group. No significant differences were found across the groups.

FAQ total score ( $r = 0.67$ ;  $p < 0.001$ ) and the CDR score ( $r = 0.54$ ;  $p < 0.001$ ).

#### Test-Retest and Interrater Reliability

The test-retest reliability for the total score on the ADLQ-SV was excellent ( $r = 0.95$ ;  $p < 0.001$ ), as it was for the factor subscores ( $p < 0.05$  for all subscores): self-care activities ( $r = 0.98$ ), household ( $r = 0.93$ ), recreation ( $r =$

0.92), shopping and money ( $r = 0.95$ ), travel ( $r = 0.97$ ) and communication ( $r = 0.93$ ). The interrater reliability for the ADLQ-SV total score was remarkably high (Cohen's  $\kappa = 0.90$ ). Out of the 17 pairs of informants, 23% were a spouse and a sibling (intragroup Cohen's  $\kappa = 0.93$ ), 48% a spouse and a daughter/son (intragroup Cohen's  $\kappa = 0.88$ ), and 29% were 2 daughters/sons (intragroup Cohen's  $\kappa = 0.91$ ).

#### Functional Impairment

Table 4 shows the percent functional impairment for each subdomain and on the overall scale. Given the similar staging of dementia (CDR) and functionality (FAQ) of the 3 groups (as described above), as well as the great concurrent validity between said measures, no significant differences were found between the groups across the different domains of the ADLQ-SV.

#### Discussion

We confirmed that the ADLQ-SV has good psychometric properties for assessing functional impairment in patients with dementia and can be used in Spanish-speaking caregivers of these patients.

Observations by raters while completing the questionnaire revealed that the ADLQ-SV, like its English counterpart, is an easy-to-administer tool that does not pose any difficulties in the caregivers' perceptions of their rel-

ative's functionality. In fact, the ND/DK option provides the raters with an alternative in order to avoid rating items that they are uncertain of or that do not apply to their relatives. The fact that such items are not considered in the calculation of functional impairment makes this a reliable tool. One could argue that having this ND/DK option available could actually threaten the psychometric power of the questionnaire. However, based on the response characteristics from our study, an average of only 7.2% of the raters used the ND/DK option across the items. This is almost a 1-percent unit lower than the average registered in the English version of the ADLQ [11], which was a low value as well. Moreover, for those items that did show an increased percentage of ND/DK ratings – all of them belonging to the 'employment' subdomain – the occupational profile of our patient population was enough to explain such increases as the sample included many stay-at-home housewives and patients who had retired before the onset of the illness, which is reflected in the ND/DK on the 'employment' item. For that reason, items with high rates of ND/DK in this sample were not removed from the analysis because the occupational profile may differ substantially in other Spanish-speaking populations, making this information essential for the assessment of ADL.

The ADLQ-SV also shows strong psychometric properties as revealed by the proper clustering of individual items into 6 domains that match those proposed by the original ADLQ, by the high Cronbach  $\alpha$  coefficient for the total ADLQ-SV score as well as by the high Cronbach  $\alpha$  coefficients for each subscore. In addition, our results show significant correlations between subdomains, as well as moderate significant correlations with scales of dementia staging (CDR) and functionality (FAQ). As a result of these findings, the ADLQ-SV shows both very good internal consistency and concurrent validity. It is important to notice that these moderate correlations indicate that, while the ADLQ-SV demonstrates a proper concurrent reliability with other tools used to measure functional impairments of patients with dementia, it does not measure the same aspects as the CDR and FAQ. This is likely because of the intrinsic characteristics of these tools. On the one hand, the CDR places a strong focus on memory and is widely used as a scale to determine dementia staging because of its strong cognitive drive. On the other hand, the FAQ taps exclusively into instrumental activities and does not allow for much flexibility in terms of what patients were able to do before the onset of the disease.

Patients included in this study were grouped according to their diagnoses with the sole purpose of providing an

organized way to classify the data obtained by the ADLQ-SV. As we hypothesized, however, because the groups were successfully matched for age, years of education, gender, dementia staging (CDR) and instrumental functionality (FAQ), we did not expect the ADLQ-SV to be able to differentiate between types of dementia. In fact, such a distinction should be achieved in combination with a cognitive screening tool aimed at differentiating types of dementia. For instance, future studies should look at the way in which the combination of an executive functioning screening tool with functional assessment via the ADLQ-SV can differentiate between AD and bvFTD. The nonsignificant differences between the types of dementia most likely stem from the fact that all patients included in this study were in the mild (CDR score = 1) or lower stages of the disease. This was done in order to ensure that the ADLQ-SV was able to detect functional impairment even in the early stages. However, the wide variations within the groups (mean SD = 30.1) are indicative of some trends in our data that can be derived to characterize functionality in each of the groups. For instance, travel is the most severely impaired subdomain in AD patients, which can be strongly associated with the spatial disorientation that characterizes the disease from the early stages onward. Travel is also the most severely impaired subdomain in bvFTD patients, but their percent impairment is almost 10 units higher than that of the AD group. This is probably a reflection of both the behavioral disturbances and dysexecutive profile of the patients, which affect their capacity to travel. A similar trend can be observed for the 'Shopping' subdomain. In this case, it is likely that the difficulties with finances and transactions involving money, which are typical of AD, explain the high functional impairment scores for that group, but the even higher impairment scores for the bvFTD patients, again, most likely result from executive impairment. In this line, the association of the ADLQ-SV with a screening tool for executive functions is essential as it would allow for stronger conclusions that explain the differential impact of dysexecution in AD and bvFTD patients.

One could argue that the small sample size is a limitation to our study. In the present analysis, however, we aimed at replicating the good psychometric properties shown by the original English version of the ADLQ in a population of well-defined, strictly-diagnosed patients. Our results are in accordance with those of the original version of the tool. Also, we have further studied the properties of the ADLQ-SV by conducting a factor analysis to evaluate the factor structure of this adapted version, as well as by establishing test-retest and interrater

reliability. Our findings demonstrate the usefulness of the ADLQ in its Spanish version and are worthy of further replication in larger samples and other populations within the Spanish-speaking community. Moreover, the good psychometric properties of our adaptation to Spanish were similar to those of the ADLQ adaptation to Chinese [18], which is, to the best of our knowledge, the only other language to which the ADLQ has been adapted. Another limitation to our study, and of previous validations of the ADLQ in other languages, is the lack of information concerning ADLQ-SV scores for healthy controls or nondemented patients with a potential impact on

ADL. However, future studies should look at the sensitivity and specificity of cut-off scores for different levels of functional impairment, which will help to discriminate between functionally impaired patients and individuals without altered ADL.

In conclusion, the ADLQ-SV is a brief, yet useful, tool for assessing functional impairment in dementia. It is innovative, in that it examines both BADL and IADL, allowing for health professionals to obtain a thorough profile of the patient's functioning. We suggest the administration of this scale in Spanish-speaking caregivers of patients with dementia.

## Appendix

### Instrucciones

Haga un círculo en el número del ítem que mejor describa al paciente al día de la fecha.

#### 1 Actividades de auto-cuidado

##### A Alimentarse

- 0 Sin problema
- 1 Independiente, pero lento o con algún derrame
- 2 Necesita ayuda para cortar o servir; derrama con frecuencia
- 3 Debe ser alimentado la mayoría de las comidas
- 9 No lo sé

##### B Vestido

- 0 Sin problema
- 1 Independiente, pero lento o torpe
- 2 Secuencia incorrecta, olvida pasos
- 3 Necesita ayuda para vestirse
- 9 No lo sé

##### C Baño

- 0 Sin problema
- 1 Se baña solo, pero necesita que se lo recuerden
- 2 Se baña solo, con asistencia
- 3 Debe ser bañado por otros
- 9 No lo sé

##### D Evacuación

- 0 Va al baño independientemente
- 1 Va al baño cuando se lo recuerdan; algunos accidentes
- 2 Necesita asistencia para la evacuación
- 3 No tiene control sobre el intestino o la vejiga
- 9 No lo sé

##### E Tomar la medicación

- 0 Recuerda sin ayuda
- 1 Recuerda tomar la dosis si está en un lugar especial
- 2 Necesita recordatorios verbales o escritos
- 3 La medicación debe ser administrada por otros
- 9 No toma medicación regularmente O No lo sé

##### F Interés en su aspecto personal

- 0 Igual que siempre
- 1 Se empeña si debe salir, pero no si se queda en su casa
- 2 Se permite ser higienizado o lo hace solo a pedido
- 3 Resiste los esfuerzos del cuidador de arreglarlo/a o higienizarlo/a
- 9 No lo sé

#### 2 Cuidado y manejo del hogar

##### A Preparación de comidas, cocinar

- 0 Planea y prepara comidas sin dificultad
- 1 Algo cocina, pero menos de lo usual, o menos variedad
- 2 Prepara la comida si los elementos fueron preparados con anterioridad
- 3 No hace nada para preparar comidas
- 9 Nunca realizó esta actividad O No lo sé

##### B Poner la mesa

- 0 Sin problema
- 1 Independiente, pero lento o torpe
- 2 Olvida elementos esenciales o los pone en lugares equivocados
- 3 Ya no realiza esta actividad
- 9 Nunca realizó esta actividad O No lo sé

##### C Cuidados del hogar

- 0 Mantiene la casa de manera usual
- 1 Realiza al menos la mitad de su trabajo
- 2 Limpieza de polvo ocasional o pequeños trabajos
- 3 Ya no mantiene la casa
- 9 Nunca realizó esta actividad O No lo sé

##### D Mantenimiento del hogar

- 0 Realiza todas las tareas usuales por sí mismo
- 1 Realiza al menos la mitad de las tareas habituales
- 2 Ocasionalmente realiza trabajos menores, como cortar el pasto, barrer las hojas
- 3 Ya no realiza ningún mantenimiento
- 9 Nunca realizó esta actividad O No lo sé

##### E Arreglos del hogar

- 0 Repara todas las cosas como siempre
- 1 Realiza al menos la mitad de las reparaciones habituales
- 2 Ocasionalmente realiza reparos menores
- 3 Ya no hace ningún arreglo o reparación
- 9 Nunca realizó esta actividad O No lo sé

##### F Lavado de ropa

- 0 Realiza el lavado de la ropa como siempre (mismo horario, rutina)
- 1 Realiza el lavado de la ropa con menos frecuencia
- 2 Realiza el lavado de la ropa solo si se le recuerda, olvida poner el jabón, pasos
- 3 Ya no realiza el lavado de la ropa
- 9 Nunca realizó esta actividad O No lo sé

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**3 Empleo y recreación****A Empleo**

- 0 Continúa trabajando de manera habitual
- 1 Algunos problemas leves con sus responsabilidades rutinarias
- 2 Trabaja en un empleo más fácil o de media jornada, amenazado con perder su trabajo
- 3 Ya no trabaja
- 9 Nunca trabajó O Se retiró antes de la enfermedad O No lo sé

**B Recreación**

- 0 Igual que siempre
- 1 Se involucra en actividades recreativas con menos frecuencia
- 2 Perdió alguna habilidad necesaria para act. recreativas. Necesita persuasión para participar.
- 3 Ya no busca o persigue actividades recreativas
- 9 Nunca se involucró en actividades recreativas O No lo sé

**C Reuniones (eventos laborales)**

- 0 Asiste a reuniones, toma responsabilidades como habitualmente
- 1 Asiste con menor frecuencia
- 2 Asiste ocasionalmente, no tiene responsabilidades importantes
- 3 Ya no asiste
- 9 Nunca participó en este tipo de reuniones O No lo sé

**D Viaje**

- 0 Igual que siempre
- 1 Sale si otro lo lleva
- 2 Sale en silla de ruedas
- 3 Paciente con internación domiciliaria u hospitalizado
- 9 No lo sé

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**4 Compras y dinero****A Comprar comida**

- 0 Sin problema
- 1 Olvida cosas, o compra artículos innecesariamente
- 2 Necesita ser acompañado mientras compra
- 3 Ya no realiza las compras
- 9 Nunca tuvo responsabilidad en esta actividad O No lo sé

**B Manejo de efectivo**

- 0 Sin problema
- 1 Tiene dificultad para pagar montos apropiados, contar
- 2 Pierde o traspapela dinero
- 3 Ya no maneja dinero
- 9 Nunca tuvo responsabilidad en esta actividad O No lo sé

**C Manejo de finanzas**

- 0 Sin problema para pagar cuentas y manejo de la actividad bancaria
- 1 Paga tarde las cuentas; algún problema para escribir cheques
- 2 Olvida pagar cuentas; tiene problemas utilizando la chequera, necesita ayuda de otros
- 3 Ya no maneja finanzas
- 9 Nunca tuvo responsabilidad en esta actividad O No lo sé

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**5 Viajar****A Transporte público**

- 0 Usa transporte público como habitualmente
- 1 Usa transporte público con menos frecuencia
- 2 Se ha perdido usando transporte público
- 3 Ya no usa transporte público
- 9 Nunca usó transporte público regularmente O No lo sé

**B Conducir**

- 0 Conduce como siempre
- 1 Conduce más cautelosamente
- 2 Conduce con menos cuidado, se ha perdido mientras conducía
- 3 Ya no maneja
- 9 Nunca manejó O No lo sé

**C Movilidad en el barrio**

- 0 Igual que siempre
- 1 Sale con menos frecuencia
- 2 Se ha perdido en las inmediaciones del barrio
- 3 Ya no sale por el barrio sin compañía
- 9 Esta actividad fue restringida en el pasado O No lo sé

**D Viajar fuera del ambiente familiar (conocido)**

- 0 Igual que siempre
- 1 Ocasionalmente se ha desorientado en entornos extraños
- 2 Se desorienta mucho pero se maneja bien si es acompañado
- 3 Ya no puede viajar solo
- 9 Nunca realizó esta actividad O No lo sé

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**6 Comunicación****A Uso del teléfono**

- 0 Igual que siempre
- 1 Llama a unos pocos números familiares
- 2 Solo atiende el teléfono (no hace llamadas)
- 3 No utiliza el teléfono para nada
- 9 Nunca tuvo teléfono O No lo sé

**B Conversación**

- 0 Igual que siempre
- 1 Menos comunicativo, tiene problemas para encontrar las palabras o nombres
- 2 Presenta errores ocasionales en el discurso
- 3 El discurso es casi incomprensible
- 9 No lo sé

**C Comprensión**

- 0 Comprende todo lo que se le dice como siempre
- 1 Pide repetición
- 2 Tiene problemas para entender una conversación o palabras específicas ocasionalmente
- 3 No comprende lo que las personas dicen la mayoría del tiempo
- 9 No lo sé

**D Lectura**

- 0 Igual que siempre
- 1 Lee con menos frecuencia
- 2 Tiene problemas para comprender o recordar lo que leyó
- 3 Ha dejado la lectura
- 9 Nunca leyó mucho O No lo sé

**E Escritura**

- 0 Igual que siempre
  - 1 Escribe con menos frecuencia, tiene errores de ortografía ocasionales
  - 2 Firma pero no hace otro tipo de escritura
  - 3 Nunca escribe
  - 9 Nunca escribió mucho O No lo sé
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