

Measures on Dementia Attitudes & Knowledge

In 2017, the World Health Organisation (WHO) launched the global action plan on the public health response to dementia from 2017 to 2025; one of the action areas calls for greater dementia awareness and education, and creation of dementia-friendly societies to increase the participation of persons living with dementia in the community and maximize their autonomy. Measures of dementia attitudes and knowledge are helpful for establishing individuals' attitudes towards dementia and their baseline understanding of it in order to evaluate the efficacies of dementia awareness workshops or educational interventions/programmes.²

The tables in the next few pages summarise the findings from two systematic reviews^{3,4} on measures of dementia attitudes and knowledge that have been administered on family and professional caregivers. These reviews compared the domains which the different instruments measure, and their strengths, limitations and psychometric properties. It should be noted that each tool measures different aspects of dementia. Care professionals may choose to use any of the following instruments that best meets their needs.



Click on the name of the tools and/or their developer(s) to access the instrument and its journal article:

ion to Use	Permission t	Psychometric Properties	ngths & Limitations	Domains Measured	;	Items	Tool & Developer(s)
cite the	Credit and cite	Reliability:	s:	Prevalence	•	20	Alzheimer's Disease
s to use th	developers to (Multiple studies reported 	provide information on	Etiology	•		Knowledge⁵ (ADK)
:her	tool. No other	acceptable to good internal	cipants' overall and	Diagnosis	•		Test
is are	permissions are	consistency, Cronbach's α	ain-specific level of	Symptoms	•		
	required.	= .71 to .92; and	entia knowledge	Proposed cures	•		Click <u>here</u> to access
		A study reported marginal	itive to detect change	Management of problem	•		the journal article.
		test-retest reliability, $r = .62$.	wing educational	behaviors and symptoms			The test's items and
			ventions/ programmes	Public policy affecting	•		scale options are
		Validia		reimbursement			included in the
		Validity:		Role of supportive	•		article.
		A study reported low to	services Limitations:	services			
		moderate convergent	r tool				
		validity with Alzheimer's					
		Disease Knowledge Scale, r					
		= .65, and Knowledge of					
		Memory Aging					
		Questionnaire, $r = .47$; and					
		Evidence of construct					
		validity – can differentiate					
		·					
		• ,					
		between groups with different levels of knowledge about AD					



Tool & Developer(s)	Items	Domains Measured	Strengths & Limitations	Psychometric Properties	Permission to Use
Alzheimer's Disease Knowledge Scale ⁶ (ADKS) Click here to access the scale, along with a documentation of answers.	30 • R • A • S • D • L • C	Risk factors Assessment and diagnosis Symptoms Disease progression Life impact Caregiving Treatment and management	Strengths: Quick and easy to complete Sensitive to detect change following educational interventions/ programmes Limitations: Did not cover some relevant domains, such as dementia progression, daily variability in dementia symptoms, genetics of dementia, and prevalence of dementia. Possible ceiling effects in more expert groups, such as dementia caregivers and dementia specialists Inconsistent reliability	 Reliability: A study reported good testretest reliability, r = .81; and Multiple studies reported poor to good internal consistency, Cronbach's α = .32 to .98. Validity: A study reported moderate convergent validity with ADK Test, r = .65; Evidence of construct validity – can differentiate between groups with different levels of knowledge about AD; and Multiple studies reported predictive validity: Overall: r = .50 Caregivers: r = .46 Care professionals: r = .39 Older adults: r = .41 Undergraduates: r = .20 	Credit and cite the developers to use the tool. No other permissions are required.



Tool & Developer(s)	Items	Domains Measured	Strengths & Limitations	Psychometric Properties	Permission to Use
Approaches to Dementia Questionnaire ⁷ (ADQ) Click here to access the journal article. The instrument is included in the article.	19	 Person-centredness: The extent to which individuals adopt a person-centered approach and understanding Hope: Individuals' level of optimism/hopefulness about the abilities and the future of the person affected by dementia 	 Quick and easy to administer. Has been used in multiple studies, where most of them took place in long-term care settings and some are large-scale studies.⁸ Limitations: Can be difficult to differentiate between genuine attitudinal differences and confounding influences such as level of knowledge and education.⁸ 	 Reliability: Multiple studies have established that the tool has good reliability: Good internal consistency:^{7,9} Cronbach's α = .78 and .83 for overall scale Cronbach's α = .73 and .76 for Hope subscale Cronbach's α = .74 and .85 for Person-centredness subscale Good test-retest reliability (correlation of two administrations with a sixmonth interval):⁷ Correlation coefficient = .76 for overall scale Correlation coefficient = .70 for Hope subscale Correlation coefficient = .69 for Hope subscale Validated against direct observation of the quality of staff care interactions.¹⁰ 	Credit and cite the developer to use the tool. No other permissions are required.



Tool & Developer(s)	Items	Domains Measured	Strengths & Limitations	Psychometric Properties	Permission to Use
Dementia Attitudes	20	Dementia knowledge	Strengths:	Reliability:	Credit and cite the
Dementia Attitudes Scale ¹¹ (DAS) Click here to access the journal article. The instrument's items and scale options are included in the article.			-	 Reliability: A study reported good internal consistency, total-scale Cronbach's α = .83 to .85. Validity A study reported evidence of convergent validity – significant correlations (r = .44 to .55) between the DAS and:	
				 Disabled Persons Scale Interaction with Disabled Persons Scale Marlowe-Crowne Social 	



Tool & Developer(s)	Items	Domains Measured	Strengths & Limitations	Psychometric Properties	Permission to Use
Dementia	25	Causes and	Strengths: ¹³	Reliability:	Credit and cite the
Knowledge		Characteristics	Higher sensitivity	Acceptable to good internal	developers to use the
Assessment Scale ¹² (DKAS)		Communication and Behaviour	 Lower ceiling effect among respondents who have 	consistency, with: o Cronbach's α of .85 for	tool. No other permissions are
Click here to access the journal article. The scale's items and answers are included in the article.		 Care Considerations Risks and Health Promotion 	 adequate knowledge about dementia Broader representation of dementia-related topics Developed and tested on a large, diverse sample (international respondents who included care professionals and members of general public) 	the overall scale; and Cronbach's α of .65 to .76 for the subscales. Validity: Has discriminative validity – significant differences between different groups of respondents (qualified nurses and healthcare professionals scored better than healthcare workers and students, and family carers). 12	required.



Tool & Developer(s)	Items	Domains Measured	Strengths & Limitations	Psychometric Properties	Permission to Use
Dementia	21	 Aetiology 	Strengths:	Reliability:	Credit and cite the
Knowledge		Course	Can be completed in a short	A study reported acceptable	developers to use the
Assessment Tool		Prognosis	duration	internal consistency,	tool. No other
Version 2 (DKAT2) ¹⁴		Symptoms	Covers dementia knowledge	Cronbach's $\alpha = 0.79$	permissions are
		 Psychosocial 	and care rather than a		required.
Click here to access the journal article. The tool's items and scale options are included in the article.		• Management	specific dementia-related illness, thus more broadly applicable Provides indications of misunderstandings or where knowledge is lacking Limitations: Possible ceiling effects	 Validity: A study reported evidence of content validity (established by experts); and Evidence of construct validity – significant differences between:	



Tool & Developer(s)	Items	Domains Measured	Strengths & Limitations	Psychometric Properties	Permission to Use
Dementia Knowledge 20 ¹⁵ (DK-20) Click here to access the journal article.		 Biopsychosocial dementia knowledge Care-specific knowledge 	 Quick to complete (within 15 minutes) Can identify gaps in knowledge, thus highlighting areas for trainings or educational interventions Possibly lower ceiling effect among respondents who have adequate knowledge about dementia¹⁶ Limitations: Developed for only unqualified care staff 	 Reliability: A study reported acceptable test-retest reliability, r = .73; and Marginal internal consistency, Cronbach's α = .63 Validity: Evidence of face validity – in-depth steps taken during the conceptual development process; Evidence of content validity – Attained experts' consensus on the "correct" answers for all items; Evidence of convergent validity – significant correlations between DK-20 and:	



Tool & Developer(s)	Items	Domains Measured	Strengths & Limitations	Psychometric Properties	Permission to Use
Knowledge in Dementia (KIDE) Scale ¹⁷ Click here to access the journal article. The instrument's items and scale options are included in the article.	16	 Facts and figures about dementia Signs and symptoms about dementia Communication with the person with dementia Accompanying behavior changes 	Strengths: Sensitive to detect changes in staff knowledge following educational training programme Limitations: Developed for only general hospital staff	Reliability: Multiple studies have reported acceptable internal consistency, Cronbach's alpha = .66 to .72; and Overall KMO = .70 to .76 Validity: Adequate face validity and Good content validity due to the discussion between authors regarding the items and the process of calculating KMO and alpha when a variable is deleted	Credit and cite the developers to use the tool. No other permissions are required.
Knowledge of Alzheimer Disease (KAD) Scale ¹⁸	42	 Epidemiology and etiology Perceived effectiveness of existing treatments Perceived threat of developing AD for oneself How one learned about AD 	Possibly lower ceiling effect among respondents who have adequate knowledge about dementia 16 Limitations: Validity has not been tested The scale has not been tested on a male sample	Reliability • A study reported acceptable to excellent Internal consistency for all 4 subscales and across different ethnic groups, Cronbach's α = .57 to .96. Validity: Nil	



References

- 1. World Health Organization. (2017). *Global action plan on the public health response to dementia 2017 2025.*https://apps.who.int/iris/bitstream/handle/10665/259615/9789241513487-eng.pdf;jsessionid=C3FD854E674571BAEC0210EAFD4D59D4?sequence=1
- 2. Annear M. J., Toye C. M., Eccleston, C. E., McInerney, F. J., Elliott, K. J., Tranter, B. K., Hartley, T., & Robinson, A. L. (2015). Dementia Knowledge Assessment Scale: Development and preliminary psychometric properties. *Journal of the American Geriatrics Society, 63*(11), 2375-2381. https://doi.org/10.1111/jgs.13707
- 3. Resciniti, N. V., Tang, W., Tabassum, M., Pearson, J. L., Spencer, S. M., Lohman, M. C., Ehlers, D. K., Al-Hasan, D., Miller, M. C., Teixeira, A., & Friedman, D. B. (2020). Knowledge evaluation instruments for dementia caregiver education programs: A scoping review. *Geriatrics & Gerontology International, 20*(5), 397-413. https://doi.org/10.1111/ajag.12299
- 4. Sullivan, K. A., & Mullan, M. A. (2016). Comparison of the psychometric properties of four dementia knowledge measures: Which test should be used with dementia care staff? *Australasian Journal on Ageing*, *36*(1), 38-45. https://doi.org/10.1111/ajag.12299
- 5. Dieckmann, L., Zarit, S. H., Zarit, J. M., & Gatz, M. (1988). The Alzheimer's disease knowledge test. *The Gerontologist*, *28*(3), 402-408. https://doi.org/10.1093/geront/28.3.402
- 6. Carpenter, B. D., Balsis, S., Otilingam, P. G., Hanson, P. K., & Gatz, M. (2009). The Alzheimer's disease knowledge scale: Development and psychometric properties. *The Gerontologist*, 49(2), 236-247. doi: 10.1093/geront/gnp023
- 7. Lintern, T. C. (2001). Quality in dementia care: Evaluating staff attitudes and behaviour [PhD Thesis]. University of Wales Bangor.
- 8. De Vries, K., Drury-Ruddlesden, J., & McGill, G. (2019). Investigation into attitudes towards older people with dementia in acute hospital using the approaches to dementia questionnaire. *Dementia*, *0*(0), 1-19. doi:10.1177/1471301219857577
- 9. Schepers, A. K., Orrell, M., Shanahan, N., & Spector, A. (2012). Sense of competence in dementia care staff (SCIDS) scale: Development, reliability and validity. *International Psychogeriatrics*, 24(7), 1153-1162. doi: 10.1017/S104161021100247X
- 10. Macdonald, A. J. D., & Woods, R. T. (2005). Attitudes to dementia and dementia care held by nursing staff in U.K. care "non-EMI" homes: What difference do they make? *International Psychogeriatrics*, 17(3), 383-391. doi:10.1017/s104161020500150x



- 11. O'Connor, M. L., & McFadden, S. H. (2010). Development and psychometric validation of the dementia attitudes scale. *International Journal of Alzheimer's Disease*, 2010, 1-10. https://doi.org/10.4061/2010/454218
- 12. Annear, M. J., Toye, C., Elliott, K. J., McInerney, F., Eccleston, C., & Robinson, A. (2017). Dementia knowledge assessment scale (DKAS): Confirmatory factor analysis and comparative subscale scores among an international cohort. *BMC Geriatrics*, 17(168), 1-11. doi: 0.1186/s12877-017-0552-y
- 13. Annear, M. J., Eccleston, C., McInerney, F., Elliott, K., Toye, C., Tranter, B., & Robinson, A. (2016). A new standard in dementia knowledge measurement: Comparative validation of the Dementia Knowledge Assessment Scale and the Alzheimer's Disease Knowledge Scale. *Journal of the American Geriatrics Society, 64,* 1329-1334.
- 14. Toye, C., Lester, L., Popescu, A., McInerney, F., Andrews, S., & Robinson, A. L. (2014). Dementia knowledge assessment tool version two: Development of a tool to inform preparation for care planning and delivery in families and care staff. *Dementia (London)*, 13(2), 248-256. doi: 10.1177/1471301212471960.
- 15. Shanahan, N., Orrell, M., Schepers, A. K., & Spector, A. (2013). The development and evaluation of the DK-20: A knowledge of dementia measure. *International Psychogeriatrics*, 25(11), 1899-1907. doi: 10.1017/S1041610213001142.
- 16. Resciniti, N. V., Tang, W., Tabassum, M., Pearson, J. L., Spencer, S. M., Lohman, M. C., Ehlers, D. K., Al-Hasan, D., Miller, M. C., Teixeira, A., & Friedman, D. B. (2020). Knowledge evaluation instruments for dementia caregiver education programs: A scoping review. *Geriatrics & Gerontology International*. doi:10.1111/ggi.13901
- 17. Elvish, R., Burrow, S., Cawley, R., Harney, K., Graham, P., Pilling, M., Gregory, J., Roach, P., Fossey, J., & Keady, J. (2014). 'Getting to know me': The development and evaluation of a training programme for enhancing skills in the care of people with dementia in general hospital settings. *Aging & Mental Health*, 18(4), 481-488. doi: 10.1080/13607863.2013.856860.
- 18. Gray, H. L., Jimenez, D. E., Cucciare, M. A., Tong, H. Q., & Gallagher-Thompson, D. (2009). Ethnic differences in beliefs regarding Alzheimer disease among dementia family caregivers. *The American Journal of Geriatric Psychiatry*, 17(11), 925-933. doi: 10.1097/jgp.0b013e3181ad4f3c