Dementia
Singapore

MEASURES ON DEMENTIA ATTITUDES & KNOWLEDGE

TOOLS FOR DEMENTIA PRACTICE & RESEARCH

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 the fostering of dementia-friendliness in societies to both increase the participation of persons living with dementia in their communities, and to maximise their autonomy.[1]

Measures of dementia attitudes and knowledge are helpful for ascertaining both the attitudes of individual persons towards dementia and their baseline understanding of the condition. By having the tools to measure these attitudes and levels of understanding in individuals, researchers can better evaluate the efficacy of dementia awareness workshops or educational interventions and 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 with family caregivers and professional caregivers. These reviews compare the domains which the different instruments measure, and state metrics that evaluate 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 the needs and purposes of their tasks.

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

Tool & Developer(s)	Items	Domains Measured	Strengths & Limitations	Psychometric Properties	Permission to Use
Alzheimer's Disease Knowledge[5] (ADK) Test Click here to access the journal article. The test's items and scale options are included in the article.	20	● Prevalence ● Etiology ● Diagnosis ● Symptoms ● Proposed cures ● Management of problem behaviours and symptoms ● Public policy affecting reimbursement ● Role of supportive services	**Strengths:** ● Provides information on participants' overall and domain-specific level of dementia knowledge; and ● Sensitive to changes in knowledge following educational interventions/programmes. **Limitations:** ● ADK is an older tool established in 1988; items may require updating.	**Reliability:** ● Multiple studies reported acceptable to good internal consistency, Cronbach's α = .71 to .92; and ● A study reported marginal test-retest reliability, r = .62. **Validity:** ● A study reports low to moderate convergent 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	Credit and cite the developers to use the tool. No other permissions are required.

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Alzheimer's Disease Knowledge Scale[6] (ADKS)
 	
Click here to access the scale, along with the documented answers.
	30	● Risk factors
		● Assessment and diagnosis
		● Symptoms
		● Disease progression
		● Life impact
		● Caregiving
		● Treatment and management
			Strengths:
			● Quick and easy to complete; and
			● Sensitive to changes in knowledge following educational interventions/ programmes.
			
			Limitations:
			● Does 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; and
			● Inconsistent reliability.
				Reliability:
				● A study reported good test-retest reliability, $r = .81$; and
				● Multiple studies report poor to good internal consistency, Cronbach's $\alpha = .32$ 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 report 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 (e.g. care professionals, members of the public) 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.	**Strengths:** ● Quick and easy to administer. ● Has been used in multiple studies; most of these studies were done 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 six-month interval):[7] ● Correlation coefficient = .76 for overall scale ● Correlation coefficient = .70 for Hope subscale ● Correlation coefficient = .69 for Hope subscale **Validity:** ● 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 Scale[11] (DAS)
 	
Click here to access the journal article. The instrument's items and scale options are included in the article.
	20	● Dementia knowledge
		● Social comfort
			Strengths:
			● Can be completed quickly (within 15 minutes).
			
			Limitations:
			● Possible ceiling effects; and
			● Social desirability may influence results.
				Reliability:
				● A study reports good internal consistency, total-scale Cronbach's α = .83 to .85.
				
				Validity
				● A study reports evidence of convergent validity: significant correlations (r = .44 to .55) between the DAS and:
				  o Kogan Attitudes toward Old People Scale
				  o Fraboni Scale of Ageism
				  o Attitudes toward Disabled Persons Scale
				  o Interaction with Disabled Persons Scale
				  o Marlowe-Crowne Social Desirability Scale
					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

Dementia Knowledge Assessment Scale[12] (DKAS)
 	
Click here to access the journal article. The scale's items and answers are included in the article.
	25	● Causes and Characteristics
		● Communication and Behaviour
		● Care Considerations
		● Risks and Health Promotion
			Strengths:[13]
			● High sensitivity;
			● Less ceiling effect among respondents who have adequate knowledge about dementia;
			● Broader representation of dementia-related topics; and
			● Developed and tested on a large, diverse sample (international respondents who included care professionals and members of general public).
				Reliability:
				● Acceptable to good internal consistency, with:
				  ○ Cronbach's α of .85 for the overall scale; and
				  ○ Cronbach's α of .65 to .76 for the subscales [12]
				
				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]
					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
Dementia Knowledge Assessment Tool Version 2 (DKAT2)[14] Click here to access the journal article. The tool's items and scale options are included in the article.	21	● Aetiology ● Course ● Prognosis ● Symptoms ● Psychosocial ● Management	**Strengths:** ● Can be completed in a short duration; ● Covers dementia knowledge and care rather than a specific dementia-related illness, thus more broadly applicable; and ● Provides indications of misunderstandings or where knowledge is lacking. **Limitations:** ● Possible ceiling effects.	**Reliability:** ● A study reported acceptable internal consistency, Cronbach's α = 0.79 **Validity:** ● A study reported evidence of content validity (established by experts); and ● Evidence of construct validity – significant differences between: ○ Professional and nonprofessional staff ○ Participants' baseline and scores following educational programme.	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

Dementia Knowledge 20[15] (DK-20)
 	
Click here to access the journal article.
	20	● Biopsychosocial dementia knowledge
		● Care-specific knowledge
			Strengths:
			● Quick to complete (within 15 minutes);
			● Can identify gaps in knowledge, thus highlighting areas for trainings or educational interventions; and
			● Possibly less ceiling effect among respondents who have adequate knowledge about dementia.[16]
			
			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:
				  o Approaches to Dementia Questionnaire
				  o Job Satisfaction Index	

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; and ● Accompanying behaviour changes.	**Strengths:** ● Sensitive to changes in staff knowledge following educational training programmes. **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 scale 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 oneself; and ● How one learnt about AD.	**Strengths:** ● Possibly less ceiling effect among respondents who have adequate knowledge about dementia.[16] **Limitations:** ● Validity has not been tested; and ● The scale has not been tested on a male sample.	**Reliability** ● A study reports acceptable to excellent Internal consistency for all 4 sub-scales and across different ethnic groups, Cronbach's α = .57 to .96. **Validity:** Nil; not tested.	

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