

# Quick Reference Guide to the Progression of Behaviour Change in Dementia

## BEHAVIOURAL IMPAIRMENT

				ITEMS	DOMAINS
Low	>	>	High		
				1 No longer takes part in favourite pastimes.	<b>Daily Activities</b>
				2 Reduced personal hygiene .	
				3 Doesn't eat properly if left to prepare food.	
				4 Careless about home (kitchen/workshop) safety.	
				5 No longer uses some common objects properly.	
				6 Unable to handle personal finances.	
				7 Is unable to effect minor household repairs, or meals.	
				8 Gets confused in places other than home.	
				9 Overly dependent, wants more guidance than usual.	
				10 Trouble appreciating subtleties in conversations	
				11 Difficulty judging the passing of time.	
				12 Wanders aimlessly.	
				13 Hides things.	
				14 Hoards objects.	
				15 Fails to recognize family or friends.	
				16 Incontinence of urine/feces in clothes in daytime.	
				17 Voids in non-toilet areas.	
				18 Can't concentrate, pay attention for long.	<b>Atten /Conc /Memory</b>
				19 Misplaces things than usual.	
				20 Has difficulty organizing his/her time or daily activities.	
				21 Forgets activities, conversations of only a short time before	
				22 Forgets important everyday information.	
				23 Shows little or no emotion.	<b>Emotional</b>
				24 Mood changes with no apparent reason.	
				25 Expresses inappropriate emotions, either type or intensity.	
				26 Makes pessimistic statements.	
				27 Verbally abusive at times.	<b>Aggressive</b>
				28 Excitable, easy to upset; reacts catastrophically.	
				29 Attempts to hit/strike out at others.	
				30 Claims an object looks similar to, but is not the real one.	<b>Misperceptions</b>
				31 Claims a family member looks similar but is not the true one.	
				32 Thinks present dwelling is not their place of living.	
				33 Thinks people are present who aren't.	
				34 Suspicious of family and friends.	<b>Paranoid</b>
				35 Suspicious about money issues.	
				36 Accuses others of stealing his or her things.	
				37 Accuses spouse of infidelity.	
				38 Expresses suspicion around taking medication.	
				39 Shows poor judgement in social situations.	<b>Judgement</b>
				40 Shows poor judgement about driving.	
				41 Shows uncharacteristic change in concern about money.	
				42 Poor choices in dressing.	
				43 Makes inappropriate sexual advances.	
				44 Shows less self control than usual.	
				45 Unconcerned about personal safety.	
				46 Repeats same actions over and over.	<b>Perseveration</b>
				47 Repeats same words or phrases.	
				48 Repeatedly shouts or calls out.	
				49 Desire to pace or walk almost constantly.	<b>Motor Rest</b>
				50 Can't sit still, restless, fidgety.	
				51 Tries doors, windows.	
				52 Falls asleep at uncharacteristic times.	<b>Sleep</b>
				53 Gets up and wanders or awakens frequently at night.	
				54 Sleeps more.	
				55 Behaviour more agitated or impaired in late afternoon.	
				56 Poor coordination seen in limb/finger movements.	<b>Motor Spatial</b>
				57 Slowness of movement	
				58 Unsteadiness when walking.	
				59 Has trouble dressing, especially with buttons or shoelaces.	
				60 Difficulty judging object sizes or how near an object is ...	
				61 Reads far less frequently than in past.	<b>Language</b>
				62 Substitutes some words for others.	
				63 Does not watch or follow television.	
				64 Does not speak unless spoken to.	
				65 Often cannot find the right word.	
				66 Trouble pronouncing words.	
				67 Does not understand simple commands, explanations.	
				68 Does not produce meaningful speech.	

## HOW TO USE THIS CHART

This chart should be used as a guide to help patients and their families understand what may lie ahead in terms of behaviour changes as dementia progresses. Although a variety of behavioural changes may be encountered, certain behaviours are more commonly reported early in the disorder, while others tend to occur later. The behaviours marked with green are those that are usually seen first, followed by those in yellow. Those marked with orange are usually seen next, and finally those in red tend to be found in the later part of the disorder. While behaviour changes normally seen at later times may occur earlier, they tend not to be very common. The point at which a given behaviour becomes marked with a colour depends upon when it achieved an endorsement rate of 30% or more (i.e. it is reported by at least 30% of surveyed subjects in that group).

### NOTES:

- The data used in this chart were obtained using the Kingston Standardized Behavioural Assessment (KSBA). (See reference below.) Groups 1 to 4 are based on the accumulation of behaviour changes from fewest (group 1) to most (group 4). A sample of 200 cases were ordered by total score and divided into four equal groups. The 4 groups used in this chart are based on total KSBA score only and not on any theoretical disease stages. Theoretic stages usually lack empirical support, and most research suggests dementia to be a continuum.
- A coloured square indicates the point at which that behaviour is reported by at least 30% of the sample. Uncoloured items did not reach a 30% response level in any group.

### Related references:

Hopkins R, Kilik L, Day D, Bradford L, Rows C. 2006 "Kingston Standardized Behavioural Assessment" *The American Journal of Alzheimer's Disease and Other Dementias*, **21**: 339-346.

Kilik L, Hopkins R, Day D, Prince C, Prince P, Rows C. 2008 "The progression of behaviour in dementia: An in-office guide for clinicians." *The American Journal of Alzheimer's Disease and Other Dementias*; **23**:242-249. (First published online February 13, 2008).