

Table 1: RR, prevalence and PAF for all 14 potentially modifiable dementia risk factors

	Relative risk for dementia, 95%CI	Risk factor prevalence %	Communality	Unweighted PAF	Weighted PAF %	Weighted PAF rounded to nearest whole number
Early Life						
Less education	1.6, 1.3-2.0 ²⁵⁹	23.2 ²⁶⁰	0.608	12.2%	4.50	5%
Midlife						
Hearing Loss	1.4, 1.0-1.9	59.0 ⁷¹	0.609	19.1%	7.03	7%
High Low Density Lipoprotein Cholesterol	1.3; 1.25 - 1.4 ³⁸	76.5*	0.469	18.7%	6.88	7%
Depression	2.25, 1.7- 3.0	7.2 ²⁶¹	0.452	8.3%	3.04	3%
Traumatic Brain Injury	1.7, 1.4-1.9 ¹⁰⁵	12.1 ²⁶²	0.423	7.8%	2.88	3%
Physical Inactivity	1.25, 1.2-1.3 ¹⁵¹	27.5 ²⁶³	0.567	6.4%	2.37	2%
Smoking	1.3, 1.2-1.45 ¹²³	22.3 ²⁶⁴	0.650	6.3%	2.31	2%
Diabetes	1.73, 1.65–1.8 ²⁶⁵	9.3 ²⁶⁶	0.493	6.4%	2.34	2%
Hypertension	1.2; 1.1-1.35 ²⁶⁷	31.1 ²⁶⁸	0.595	5.9%	2.16	2%
Obesity	1.3, 1.0-1.7 ¹⁷³	13.0 ²⁶⁹	0.622	3.8%	1.38	1 %
Excessive alcohol consumption	1.2, 1.0-1.5 ¹⁸¹	13.3 ¹⁸¹	0.772	2.6%	0.95	1%
Late Life						
Social isolation	1.6, 1.3-1.8 ¹⁸⁹	24.0 ²⁷⁰	0.408	12.6%	4.64	5%
Air pollution	1.1, 1.1-1.1 ²⁷¹	75.0 ²⁷¹	0.341	7.0%	2.57	3%
Uncorrected visual impairment	1.5, 1.4-1.6 ²²⁶	12.7 ²²⁵	0.553	6.0%	2.20	2%
Overall PAF for all risk factors					45.3%	45%

*Prevalence derived from 37,000 participants aged ≥ 45 years old from the Norwegian HUNT study

Table 2: RCTs of activity programmes for people with dementia

Citation	Intervention	Target population	Study Design	Key Outcomes
Ballard. ⁵²⁴	WHELD (Well-being and health for people with dementia) trained care staff to promote tailored person-centred activities and social interactions. System for changing inappropriate medications.	Staff trained by trial team. Staff and nursing home residents	Cluster randomised controlled trial (RCT) intention to treat with 69 UK care homes in 9-month clinical trial -847 participants	Improved quality of life, agitation and neuropsychiatric symptoms and cost savings
Gitlin ⁵²⁵	Tailored Activity Program (TAP) Carers trained to use activities. Disease education and stress reduction techniques	Trained occupational therapists (OT) provided activities tailored to interests and abilities at home	Single-blind, parallel, RCT 160 dyads of veterans with dementia and their family carers	For person with dementia, ↓behavioural symptoms, maintenance of daily function, and ↓pain. Carer distress from behaviours
Gitlin ⁵²⁶	TAP	OT provided 8 sessions TAP in the home to individuals with agitation with moderate dementia	Single-blind RCT 250 dyads with a dementia diagnosis and clinically significant agitation/aggression	Carers report TAP made life easier, ↑ ability to provide care, and person with dementia's life somewhat or very much. TAP group had fewer deaths/ hospitalisation
Gitlin ⁵²⁷	TAP programme with subsample of white and black dyads training carers	OT provided tailored activities and instructions at home.	Single-blind, two-arm RCT. 193 White and Black dyads	Behavioural benefits for people with dementia at 3 months. More for Black than White dyads.
Lamb ⁵²⁸	Aerobic and strength exercises tailored to fitness and health status. (DAPA trial)	Physiotherapists and exercise assistants prescribed and supervised interventions for people with dementia	Multicentre, pragmatic, investigator masked, RCT N=494	No effect on quality of life or neuropsychiatric symptoms. Greater cognitive impairment in exercise group.
Sanders ⁵²²	Research staff trained participants in combined walking and strength exercise Aerobic and strength training intervention ("exercise")	Health care staff selected participants with mild-to-moderate dementia in day or residential care.	RCT-91 participants	No effects on cognition, endurance, mobility, balance, and leg strength. Gait speed improved after high-intensity exercise.
Harwood ⁵²³	Dementia-specific programme focussing on strength, balance, physical activity and performance of ADL. Tailored and progressive.	Mild dementia or Mild Cognitive Impairment	RCT- 365 participants	Did not improve ADLs, physical activity, quality of life, reduce falls