Supplementary Table S1. Full Database Search Strings

Supporting information for: Dementia, Diabetes, and Physical Inactivity in Global Majority Populations: A Meta-Narrative Review and Recommendations

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Purpose: This file documents the search strings used to identify literature across dementia, type 2 diabetes, physical activity and Global Majority/minoritised population contexts. Syntax was adapted for each database interface. Because the study used a meta-narrative review design, searches were iterative and interpretive rather than a single linear PRISMA-style retrieval exercise.

Database / source	Search focus	Search string / strategy
MEDLINE / PubMed-adapted	Combined three-domain search	((dementia OR Alzheimer* OR "cognitive decline" OR "cognitive impairment" OR "vascular dementia" OR neurodegeneration) AND ("type 2 diabetes" OR T2D OR "diabetes mellitus" OR hyperglycaemia OR hypoglycaemia OR "insulin resistance") AND ("physical activity" OR exercise OR "physical inactivity" OR sedentary OR "sedentary behaviour" OR "lifestyle intervention"))
MEDLINE / PubMed-adapted	Population and inequality search	((dementia OR Alzheimer* OR "cognitive impairment") AND ("type 2 diabetes" OR diabetes OR "insulin resistance") AND ("Global Majority" OR "ethnic minorit*" OR BAME OR "Black Asian and Minority Ethnic" OR "South Asian" OR Bangladeshi OR Pakistani OR Indian OR Afghan* OR "Black African" OR "African Caribbean" OR migrant* OR "racial/ethnic" OR "health disparit*" OR inequ* OR deprivation))
MEDLINE / PubMed-adapted	Physical activity and diabetes search	(("physical activity" OR exercise OR "physical inactivity" OR sedentary OR "sedentary behaviour") AND ("type 2 diabetes" OR T2D OR "diabetes mellitus" OR "glycaemic control" OR "insulin sensitivity") AND (older OR ageing OR elderly OR adult*))
MEDLINE / PubMed-adapted	Physical activity and dementia search	(("physical activity" OR exercise OR "physical inactivity" OR sedentary OR "lifestyle intervention") AND (dementia OR Alzheimer* OR "cognitive decline" OR "cognitive impairment" OR "brain health"))
CINAHL	Health and care perspectives	TX ((dementia OR Alzheimer* OR "cognitive decline") AND ("type 2 diabetes" OR diabetes OR "insulin resistance") AND ("physical activity" OR exercise OR sedentary OR "physical inactivity") AND (ethnic* OR "South Asian" OR "Black African" OR "African Caribbean" OR migrant* OR "minority ethnic" OR BAME OR culture OR stigma OR language OR modesty OR "community-based"))
PsycINFO	Behavioural and psychosocial factors	(("physical activity" OR exercise OR "health behaviour" OR sedentary) AND (attitudes OR beliefs OR stigma OR norms OR "perceived behavioural control" OR "Theory of Planned Behaviour" OR intention*) AND (older adults OR ageing OR "South Asian" OR "Black" OR migrant* OR ethnic*))
Web of Science Core Collection	Interdisciplinary citation search	TS=((dementia OR Alzheimer* OR "cognitive decline" OR "cognitive impairment") AND ("type 2 diabetes" OR diabetes OR "insulin resistance") AND ("physical activity" OR exercise OR "physical inactivity" OR sedentary) AND (ethnic* OR "Global Majority" OR "South Asian" OR "Black African" OR "African Caribbean" OR migrant* OR inequ* OR disparit*))
AMED	Rehabilitation and allied health literature	((exercise OR "physical activity" OR rehabilitation OR walking OR sedentary) AND (diabetes OR "type 2 diabetes") AND (dementia OR cognition OR "cognitive impairment"))
ASSIA	Social science and inequality literature	((dementia OR ageing OR "cognitive impairment") AND (diabetes OR "type 2 diabetes") AND (culture OR ethnicity OR migration OR inequality OR deprivation OR stigma OR language OR gender OR modesty OR "built environment"))
Grey literature / policy sources	Policy and public health evidence	Targeted searches of official and organisational sources including WHO, Office for National Statistics, GOV.UK Ethnicity Facts and Figures, Diabetes UK, Alzheimer's Society and relevant local public health reports using combinations of: dementia; diabetes; physical activity; inactivity; ethnicity; Black, Asian and Minority Ethnic; Global Majority; South Asian; health inequalities; prevention; ageing.
Citation chasing	Snowballing from seminal sources	Backward and forward citation searching was undertaken from core methodological, epidemiological and intervention sources, including meta-narrative review methodology, diabetes-dementia systematic reviews, dementia prevention modelling, physical activity guidelines and community-based participatory research studies.

Note: These searches were used to map research traditions and identify exemplar sources for synthesis. Search strings were adapted to database-specific thesaurus terms and field tags where available.