**Appendix A.**

**Table A1.** Scoping ReviewSearch Strategy

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| --- | --- | --- | --- |
| **Database** | **Mesh terms / Subject headings** | **Search string** | **Results** |
| Medline (via OVID) | Dementia  Vascular Dementia  "Mental Status and Dementia Tests"  Frontotemporal Dementia  AIDS Dementia Complex  "Dementia, Multi-Infarct"  Alzheimer Disease | (alzheimer\* or dementia\* or cognitive impairment).ti,ab. or exp dementia/ AND (wander\* or missing or roving or wayfinding or missing incident\* or disappear\*).ti. or wandering.ab. or wandering/ | 742 |
| CINAHL (via EBSCO) | Dementia  Frontotemporal Dementia  Dementia, Vascular  Delirium, Dementia, Amnestic, Cognitive Disorders  Dementia, Multi-Infarct  AIDS Dementia Complex  Lewy Body Disease  Dementia, Senile  Dementia, Presenile Dementia Patients  Alzheimer's Disease | TI ( Alzheimer\* OR dementia\* OR "cognitive impairment" ) OR AB dementia OR MW dementia AND TI ( wander\* OR missing OR roving OR wayfinding OR "missing incident\*" OR disappear\* ) OR AB wandering OR MW wandering | 667 |
| EMBASE (via OVID) | Dementia  Vascular Dementia  "Mental Status and Dementia Tests"  Frontotemporal Dementia  AIDS Dementia Complex  "Dementia, Multi-Infarct"  Alzheimer Disease | (alzheimer\* or dementia\* or cognitive impairment).ti,ab. or exp dementia/ AND (wander\* or missing or roving or wayfinding or missing incident\* or disappear\*).ti. or wandering.ab. or wandering/ | 1,067 |
| SCOPUS | Alzheimer  dementia  cognitive impairment | ( ( TITLE ( alzheimer\* OR dementia\* OR "cognitive impairment" ) OR ABS ( dementia ) ) ) AND ( ( TITLE ( wander\* OR missing OR roving OR wayfinding OR "missing incident\*" OR disappear\* ) OR ABS ( wandering ) ) ) | 900 |
|  |  | Total | 3,376 |

**Table A2**. Selected Studies: Study ID, authors, and study title.

|  |  |  |
| --- | --- | --- |
| Study ID | Author(s) | Study Title |
| 1 | Murata et al., 2021 | Incidence and Mortality of Dementia-Related Missing and Their Associated Factors: An Ecological Study in Japan |
| 2 | Bowen et al., 2011 | Prevalence of and Antecedents to Dementia-Related Missing Incidents in the Community |
| 3 | Sheth et al., 2014 | A New Tool to Asses Risk of Wandering in Hospitalized Patients |
| 4 | Chiu, 2002 | Getting lost behavior and directed attention impairments in Taiwanese patients with early Alzheimer's disease |
| 5 | Yao, 2004 | Locomoting responses to environment in elders with dementia: A model construction and preliminary testing |
| 6 | Neubauer & Liu, 2020 | Evaluation of antecedent behaviors of dementia-related wandering in community and facility settings |
| 7 | Mcshane et al., 1998 | Getting lost in dementia: a longitudinal study of a behavioral symptom |
| 8 | MacAndrew et al., 2017 | Observing wandering-related boundary transgression in people with severe dementia |
| 9 | Edgerly & Donovick, 1998 | Neuropsychological correlates of wandering in persons with Alzheimer's disease |
| 10 | Rowe et al., 2011 | Persons with dementia missing in the community: Is it wandering or something unique? |
| 11 | Martin et al., 2015 | French Validation of the Revised Algase Wandering Scale for Long-Term Care |
| 12 | MacAndrew et al., 2018 | People with dementia getting lost in Australia: Dementia-related missing person reports in the media |
| 13 | Logsdon et al., 1998 | Wandering: a significant problem among community residing individuals with Alzheimer's disease |
| 14 | Algase et al., 2009 | Empirical Derivation and Validation of a Wandering Typology |
| 15 | Algase et al., 2010 | Wandering and the Physical Environment |
| 16 | Algase, 2008 | Wandering in Dementia |
| 17 | Algase et al., 2003 | Wandering in Long-Term Care |
| 18 | Algase, 2006 | What’s new about wandering behaviour? An assessment of recent studies |
| 19 | Algase et al., 2004 | The Interrelatedness of Wandering and Wayfinding in a Community Sample of Persons with Dementia |
| 20 | Ali et al., 2016 | Risk assessment of wandering behavior in mild dementia |
| 21 | Aud, 2004 | Dangerous wandering: elopements of older adults with dementia from long-term care facilities |
| 22 | Ballard et al., 1991 | Wandering in dementia sufferers |
| 23 | Barnard-Brak & Parmelee, 2020 | Measuring risk of wandering and symptoms of dementia via caregiver report |
| 24 | Dawson & Reid, 1987 | Behavioral dimensions of patients at risk of wandering |
| 25 | Bantry White & Montgomery, 2016 | Supporting people with dementia to walkabout safely outdoors: development of a structured model of assessment |
| 26 | Beattie et al., 2005 | A Comparison of Wandering Behavior in Nursing Homes and Assisted Living Facilities |
| 27 | Jeong et al., 2016 | A Relationship between Depression and Wandering in Community-Dwelling Elders with Dementia |
| 28 | Hope & Fairburn, 1990 | The nature of wandering in dementia: A community‐based study |
| 29 | Sutin et al., 2018 | Self‐reported personality traits are prospectively associated with proxy‐reported behavioral and psychological symptoms of dementia at the end of life |
| 30 | Carlson et al., 1995 | Management of dementia-related behavioral disturbances: a nonpharmacologic approach |
| 31 | Schonfeld et al., 2007 | Wanderers with Cognitive Impairment in Department of Veterans Affairs Nursing Home Care Units |
| 32 | Vuong et al., 2014 | Conceptual Map and Technological Framework to Manage Dementia Wandering |
| 33 | Padilla et al., 2013 | The effectiveness of control strategies for dementia-driven wandering, preventing escape attempts: a case report |
| 34 | de Leon et al., 1984 | Wandering and Parietal Signs in Senile Dementia of Alzheimer’s Type |
| 35 | King-Kallimanis et al., 2010 | Longitudinal investigation of wandering behavior in department of veterans affairs nursing home care units |
| 36 | Hope et al., 2001 | Wandering in Dementia: A Longitudinal Study |
| 37 | Kiely et al., 2000 | Resident characteristics associated with wandering in nursing homes |
| 38 | Kikuchi et al., 2016 | A study on the mortality patterns of missing and deceased persons with dementia who died due to wandering |
| 39 | Kwok et al., 2010 | Getting lost in the community: a phone survey on the community‐dwelling demented people in Hong Kong |
| 40 | Rowe et al., 2012 | Missing Drivers with Dementia: Antecedents and Recovery |
| 41 | Goldsmith et al., 1995 | Problematic wandering behavior in the cognitively impaired elderly: a single-subject case study |
| 42 | Lee, 2011 | Relationship of emotion and cognition to wandering behaviors of people with dementia |
| 43 | Sheehan et al., 2006 | Outdoor wayfinding in dementia |
| 44 | Marcus et al., 2007 | Utility of the Algase Wandering Scale in an outpatient Alzheimer’s disease sample |
| 45 | Rowe & Glover, 2001 | Antecedents, descriptions and consequences of wandering in cognitively-impaired adults and the Safe Return (SR) program |
| 46 | Passini et al., 2000 | Wayfinding in a Nursing Home for Advanced Dementia of the Alzheimer’s Type |
| 47 | Puthusseryppady et al., 2019 | Geospatial analysis of environmental risk factors for missing dementia patients |
| 48 | Price et al., 2001 | Subjective barriers to prevent wandering of cognitively impaired people |
| 49 | Hong & Song, 2009 | Relationship between familiar environment and wandering behaviour among Korean elders with dementia |
| 50 | Bautrant et al., 2019 | Impact of Environmental Modifications to Enhance Day-Night Orientation on Behavior of Nursing Home Residents With Dementia |
| 51 | Neubauer & Liu, 2021 | Development and validation of a conceptual model and strategy adoption guidelines for persons with dementia at risk of getting lost |
| 52 | Volicer et al., 2013 | Involvement in Activities and Wandering in Nursing Home Residents with Cognitive Impairment |
| 53 | Davis & Weisbeck, 2016 | Creating a Supportive Environment using Cues for Wayfinding in Dementia |
| 54 | Detweiler et al., 2008 | Does a Wander Garden Influence Inappropriate Behaviors in Dementia Residents? |
| 55 | Dewing, 2005 | Screening for wandering among older persons with dementia |
| 56 | Lai & Arthur, 2003 | Wandering behaviour in people with dementia |
| 57 | Marquardt, 2011 | Wayfinding for people with dementia: a review of the role of architectural design |
| 58 | Lester et al., 2012 | Wandering and Elopement in Nursing Homes |
| 59 | Lucero, 2002 | Intervention strategies for exit-seeking wandering behavior in dementia residents |
| 60 | Okita et al., 2016 | Missing Incidents in Individuals with Dementia Attending a Memory Clinic |
| 61 | Rowe, 2003 | People with Dementia Who Become Lost |
| 62 | Thomas et al., 2006 | The Effect of a Supervised Walking Program on Wandering Among Residents with Dementia |
| 63 | Rowe et al., 2012 | Missing incidents in community-dwelling people with dementia |
| 64 | Hodgkinson et al., 2007 | Managing the wandering behaviour of people living in a residential aged care facility |
| 65 | Rowe et al., 2015 | The Concept of Missing Incidents in Persons with Dementia |
| 66 | Cipriani et al., 2014 | Wandering and dementia |
| 67 | Song & Algase, 2008 | Premorbid Characteristics and Wandering Behavior in Persons with Dementia |
| 68 | Gu, 2015 | Nursing Interventions in Managing Wandering Behavior in Patients With Dementia: A Literature Review |
| 69 | Passini et al., 1998 | Wayfinding and dementia: Some research findings and a new look at design |
| 70 | Song et al., 2008 | Wandering behaviour of persons with dementia in Korea: investigation of related factors |
| 71 | Chung & Lai, 2011 | Elopement among community-dwelling older adults with dementia |
| 72 | Klein et al., 1999 | Wandering behaviour in community‐residing persons with dementia |
| 73 | Caspi, 2014 | Wayfinding difficulties among elders with dementia in an assisted living residence |

**Table A3.** Sample Details of the Selected Studies Classified by the Primary Medical Condition of Participants.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Primary Medical Condition (n)** | **Total sample size** | **Participant Type (n)** | **Participants** | | **Study ID** |
| **Age (SD)** | **N male (%) \*\*** |
| Dementia (34) | 10976 | Care partners (1)  Not applicable (15)  Other (2)  Persons living with dementia or cognitive impairment & care partners (5)  Persons living with dementia or cognitive impairment & care partners & service providers (1)  Persons living with dementia or cognitive impairment & Other (1)  Persons living with dementia or cognitive impairment (9) | 80.3 (7.5) | 2545 (25.1) | 1-2, 5-6, 14-18, 20, 25, 27-28, 32, 37-40, 42-43, 47, 49, 54-57, 59, 62-63, 65-66, 68, 70-71 |
| Dementia & Alzheimer (18) | 4813 | Care partners (1)  Not applicable (1)  Persons living with dementia or cognitive impairment & care partners (4)  Persons living with dementia or cognitive impairment (12) | 80.8 (7.1) | 1232 (34.5) | 7-13, 21, -23, 26, 36, 50, 52, 60-61, 67 & 72 |
| Alzheimer (10) | 440 | Care partners (1)  Not applicable (1)  Persons living with dementia or cognitive impairment & care partners (1)  Persons living with dementia or cognitive impairment & Other (1)  Persons living with dementia or cognitive impairment & service providers (2)  Persons living with dementia or cognitive impairment (4) | 79.8 (7) | 23 (41.8) | 19, 33-34, 41, 44, 46, 53, 58, 69 & 73 |
| Other (includes other combinations) \*\*, (4) | 6773 | Not applicable (2)  Other (1)  Persons living with dementia or cognitive impairment & service providers (1) | 72.5 (11.5) | 6673 (100) | 24, 30, 35 & 64 |
| Dementia & Alzheimer & Cognitive Impairment (3) | 4033 | Persons living with dementia or cognitive impairment & care partners (1)  Persons living with dementia or cognitive impairment & care partners & service providers (1)  Persons living with dementia or cognitive impairment (1) | 77.2 (9.7) | 919 (46) | 29, 48 & 51 |
| Cognitive Impairment (2) | 1592 | Not applicable (1)  Persons living with dementia or cognitive impairment (1) | 77 (12) | NR | 31 & 45 |
| Dementia & Cognitive Impairment (2) | 192 | Persons living with dementia or cognitive impairment & care partners (1)  Service providers (1) | 75.2 (5.6) | 66 (56.9) | 3 & 4 |
| Total | 73 | Type of participants per study:   * Persons living with dementia or cognitive impairment (27) * Persons living with dementia or cognitive impairment & care partners (12) * Care partners (3) * Other (3) * Persons living with dementia or cognitive impairment & service providers (3) * Persons living with dementia or cognitive impairment & care partners & service providers (2) * Persons living with dementia or cognitive impairment & other (2) * Service providers (1) * Not applicable (20) | Average age of participant 79.8, (SD = 7.6) | Total sample: 28,819,  Male, (%) 11,458, (50.8) |  |