

What's New about Wandering?

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Guiding Questions

How does the quantity and rigour of wandering studies compare to that identified in earlier reviews?

How do the latest findings expand our knowledge of wandering?

Approach

- **Key terms: wandering, spatial disorientation, eloping, getting lost * dementia**
- **Data bases: Medline, CINAHL, PsychInfo**
- **Timeframe: 2003-2005 inclusive**

Inclusion Criteria

- **Research study**
- **Discrete findings about wandering**
- **Published in English**
- **Initial yield: 53 papers**
- **Final yield: 47 papers**

Quantity and Origin

Quantity

Country of Origin

			n	%
2003	20 papers	US	29	63
2004	21 papers	Asia	8	17
2005	6 papers	AU/NZ	7	15
		Canada	6	13
Mean = 15+ papers/yr		Europe	5	11
		Multinational	3	6

Designs

	n	%		n	%
Quantitative	42	89	Descriptive	26	55
Qualitative	2	4	Explanatory	2	4
Cross-sect.	27	57			
Longitudinal	5	11	Methodological	6	13
Experimental	11	23	Integrative review	2	4
Clinical trial	1	2	Pilot/feasibility	2	4
Case study	3	6	Secondary analysis	1	2

Participants with Dementia

<u>Dementia Types</u>	<u>n</u>	<u>%</u>
Any dementia	19	40
AD	14	29
DLB	1	2
MCI	1	2
<u>Dementia Behavior</u>		
Wanderers	1	2
Elopers	1	2

Other Participants

Type	n	%
Facility administrators	3	6
Facility staff	2	4
Caregivers	2	4
NH residents	2	4
Older women	1	2
Controls	8	17

Settings

	<u>n</u>	<u>%</u>
Nursing home	16	34
Community	10	21
Clinic	10	21
ALF	8	17
Residential care	4	9
Long-term care	2	4
Home	1	2
Hospital	1	2
Health care system	1	2

Content Areas

<u>Area</u>	<u>N</u>	<u>%</u>
Definition and measurement	6	13
Epidemiology	17	36
Associated factors	17	36
Intervention and management	16	34

Latest Findings: Definition/Measurement

- **First scale specific to wandering, AWS**
- **Four valid dimensions of wandering**
 - persistent walking
 - spatial disorientation
 - shadowing
 - eloping behaviors
- **Biomechanical activity meters**
- **Virtual and real world testing of spatial orientation**
- **New measures of related concepts**

Latest Epidemiological Findings: Incidence and Prevalence

- **39-57% in community, increasing with disease severity**
- **10-73% in RC, ALF**
- **Rates between 1st and 4th most frequent behavior in RC, ALF**
- **Higher odds ratio for Blacks, Hispanics**

Latest Epidemiological Findings: Impact

- **Associated with < fall risk**
- **Independent risk factor for mortality**
- **#1 reason for denying admission** #1
cause for discharge in ALF
- **A reason for transfer in 100% ALF**
- **No difference in expression btw NH and ALF or
across US, AU, CA samples**

Latest Epidemiological Findings: Elopement

- **>40% of elopers from ALFs had a history of attempts, successes, and showed intent**
- **Occurred when precautions ineffective, staff unaware of whereabouts, alarms used poorly**
- **If lost, 81% were on foot, 15% while driving, and 4% when on a normal outing.**
- **If died while lost: 67% male; 61% lived at home, 16% in NH and 21% in ALF.**
- **Causes of death: 68% exposure, 23% downing, 9% injury/falls, hit by vehicle, or asphyxiation.**

Latest Findings-Associated Factors: Specific Dementias

- **SD occurs in normal elderly, MCI, AD, and DLB**
- **Rate of SD is high in AD: 54-93%**
- **Rates do not differ between AD and DLB; rates increase with dementia severity**
- **SD is associated with specific visual deficits
visual deficits correlate with tests of visual-construction;
specific visual deficits lead to SD**
- **SD when driving parallels SD when ambulating**
- **PET studies implicate dopamine excess in activity and diurnal disruptions if AD patients**

Latest Findings-Associated Factors: Cognitive Functioning

- **W correlated with CI, not depression**
- **W associated with agitation and psychosis at all levels of dementia**
- **Getting lost predicted by impaired attention**
- **SD in AD not related to memory impairment**
- **AWS-SD subscale negatively correlated with effective wayfinding**

Latest Findings-Associated Factors: Environment

- **Environmental ambiance, especially the engaging subscale, had an effect on reducing locomoting behaviors.**

Latest Findings-Management: Environmental Modification

- **Mural significantly reduced door-testing; not significant for following others, agitated/hostile door testing.**
- **Cloth barrier reduced entries into a prohibited area by about 50%; redirection not successful w/o barrier.**

Latest Findings-Management: Individualized Interventions

- **Wayfinding intervention improved ability to find dining room within 3 mo. of relocation; benefits not sustained to 5 mo.**
- **Communication intervention decreased table-leaving, increased food intake and time at table during meals.**
- **Air mat therapy reduced agitated wandering**
- **Moderate intensity exercise reduced wandering (and other problem behaviors)**
- **Therapeutic touch did not reduce searching/wandering, but did reduce pacing/walking, but effect not significant.**

Conclusions

- Increased scientific interest in wandering extending throughout developed countries
- Improved quality of studies
- Associated factors concentrated on dementias and aspects of cognitive functioning.
- Wide range of intervention studies are reported, but often weakened by conceptualization, design flaws
- Better understanding of the basis for wandering and targeting of specific wandering behaviors and sub-groups of wanderers will improve outcomes of intervention work.