Creating Supportive, Dementia-Friendly Communities Through Design: A Scoping Review Pistritto, S.C; Fatima, K; Lemonde, M; Gamble, B; Kay, K; Omlin, S; Barrie, G, Sun, Winnie *Gerontechnology* 25(s*)*

Purpose Dementia is a progressive neurodegenerative condition that impairs memory, communication, and judgment. People living with dementia (PLwD) are highly sensitive to their physical environments, which can enhance or hinder cognitive, emotional, and functional well-being, yet existing literature is fragmented across different care models and lacks a consolidated understanding of how architectural and environmental features influence outcomes at multiple levels. This scoping review examines the architectural and environmental design characteristics of dementia-friendly care models, including small-scale living and dementia villages, and their outcomes at individual, organizational, and system levels. **Method** Four databases (OVID Medline, EBSCO CINAHL, Scopus, and ProQuest Nursing and Allied Health Fields) were searched for English-language literature published between 1937 and 2025. The timeframe was chosen to capture literature preceding the first Dementia Village Model of Care in the Netherlands (2009). A total of 443 articles were retrieved; after removing 128 duplicates, 315 articles were screened independently by two reviewers. Conflicts in inclusion decisions were resolved through discussion. Inclusion criteria for full-text review required that studies: (1) addressed dementia village settings (day-use or residential), (2) involved a defined PLwD population, and (3) reported on concepts relevant to the Dementia Village Models of Care, implementation strategies or experiences, encompassing primary studies, systematic/scoping reviews, and grey literature from Canada and internationally. Following screening, 39 studies met inclusion. **Results** Purposeful design elements were consistently associated with enhanced outcomes for PLwD. Key features included private bedrooms, home-like communal living and dining spaces, accessible outdoor areas, optimized lighting, clear wayfinding, and multisensory stimuli, which supported autonomy, orientation, engagement, and social participation. Technological innovations, such as adaptive lighting, sensor-based monitoring, and smart-home features, enhanced safety and independence. Notably, several studies reported innovative approaches such as adaptive smart environments that adjust lighting and sensory cues to individual needs, nature-integrated programs including green care farms, and technology-assisted monitoring systems that support autonomy and safety, representing newer directions beyond traditional design principles. International examples demonstrated diverse approaches, including neighbourhood-style layouts, integrated amenities, and green care farms, promoting activity, social involvement, and quality of life. Organizational benefits included flexible care practices, improved staff engagement, and enhanced service delivery. At the system level, models that integrate community participation reduced caregiver burden and informed evidence-based policy. **Discussion** Beyond confirming well-established design principles, this review highlights emerging trends toward personalization, technological integration, and community-connected models of care. Innovations such as adaptive smart environments and nature-based programs represent evolving strategies for improving social inclusion, well-being, and autonomy for PLwD. These findings provide actionable insights for designers, care providers, and policymakers seeking to advance dementia-friendly infrastructure. **Conclusion** Thoughtful architectural and environmental design is critical for person-centered dementia care, supporting PLwD's well-being, dignity, and social interaction while enhancing caregiver and staff outcomes. Limitations include heterogeneity in study designs and outcome measures, which constrain direct comparisons. Future research should evaluate long-term impacts, cultural adaptability, and cost-effectiveness to guide evidence-informed policy, design standards, and dementia care practices.

Keywords: dementia-friendly design, dementia-village, holistic health, architectural design
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