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# Wandering and Elopement: A Comprehensive Approach

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One of the most challenging, life-threatening issues related to care of the person with cognitive loss is the occurrence of wandering, wherein the person strays into unsafe territories and may be harmed. The most dangerous form of wandering is elopement in which the confused person leaves an area and does not return. The risk of wandering has become a growing concern of families, assisted living (AL) facilities, and insurers. In addition to civil liability, care providers can be fined by the state regulatory agency for failure to prevent elopement.<sup>1</sup> The effects upon the population served and the staff are no less dramatic. The sense of security of those served and their families is severely shaken, and staff morale as well as the organization's reputation is dealt a devastating blow. The aim of this article is to summarize the scope of the problems in terms of prevalence and effect. The types and causes of wandering and generally accepted approaches to care will be discussed. Risk management considerations will also be presented.

## Types of Wandering

Wandering is a common behavioral problem involving cognitive impairment that includes difficulty with abstract thinking, language, judgment, and spatial skills.<sup>1</sup> Wandering is also associated with disorientation and difficulty relating to the



environment, and low social interaction, excessive pacing or increased motor activity. The person who wanders may also unknowingly trespass in another person's room and an altercation may result. There are two types of wandering: goal-directed and non-goal directed. In goal-directed wandering, the person appears to be searching for someone or something. The person may also be looking for something to do and may make gestures as if performing a task. In contrast, in non-goal directed wandering, the person may wander aimlessly, and has a very short attention span.<sup>2</sup>

A person who wanders is at risk for elopement—the act of leaving a

safe area unsupervised and unnoticed and entering into harm's way. Those who elope can be differentiated from those that only wander by their purposeful, overt, and usually repeated attempt to leave the building or premises. The person may go outside and experience hypothermia or other harmful conditions, including a traffic accident. Stairs are particular hazards, especially for the eloping person who has poor balance, decreased strength, or poor vision.

## Prevalence

Individuals at risk for wandering include those with dementia, generally in the early to mid-stage. Wandering is most often associated with

Alzheimer's dementia (AD), usually occurring two to four years after the onset of the disease. Statistics indicate that in the United States, more than 34,000 AD patients wander out of their homes each year.<sup>3</sup> Studies vary on the prevalence of wandering in institutionalized dementia patients, but it is estimated that 11% to 24% wander.<sup>4</sup>

### **Causes of Wandering and Elopement**

Risk factors for wandering and elopement include memory and recall deficits, poor visuo-spatial ability, disorientation, and expressive language deficits.<sup>4</sup> Those who suffer from dementia experience the severe anxiety associated with not knowing where they are, what they are supposed to be doing, who the people are around them and perhaps not even their own name. Many who experience this disorientation and memory loss spend their time wandering in search of answers. Their fear is often compounded by the frustrating inability to express their feelings and needs, which provides further impetus to leave (elope) in search of a more secure and meaningful place.

Changes in the visual cortex, which occurs in one-third to one-half of all people with AD contributes to the risk of becoming lost. This impairment leads to difficulty interpreting the three-dimensional structure of the environment, resulting in the inability to create a mental map. Thus the ability to keep track of where they have been is missing so they cannot retrace their steps back and become lost.

In addition, wandering is associated with a premorbid personality that is outgoing, altruistic, and sociable. There is evidence that premorbid lifestyle is likely to influence the predilection to wander. An active interest in music, physically and mentally, and a lifestyle that included social and leisure activities are factors that increase the likeli-

hood of wandering. In comparison to other residents, those who wander were found to have fewer physical diagnoses and were more likely to have experienced life-threatening situations or stressful events in the past.

The physical environment contributes to the incidence of wandering. Pacing and wandering tends to occur when there is adequate lighting, low noise levels, and sufficient space to ambulate, suggesting that this type of movement provides a positive outlet for the person. The use of neuroleptic medication can cause akathisia, which is a compulsion to be in motion, manifested by restlessness, pacing and occasionally wandering.

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An emotional state that is frustrated, anxious, bored or depressed increases the predisposition to wandering. Sedating medication also increases the risk of wandering resulting from increased confusion. Finally, wandering may signal an unmet need, such as hunger, thirst, constipation, inactivity, need to use the toilet, fatigue, pain and environmental discomfort, such as uncomfortable seating, mattresses, and lighting. When a person who does not have a history of cognitive loss begins to wander, this behavior may be a symptom of an undetected medical problem, such as an infection, circulatory problem, or metabolic condition whose only symptom is acute confusion.

### **Effects of Wandering Effects Upon the Person**

For some persons wandering is a positive behavior, fulfilling a need for exercise, sensory stimulation, or purposeful behavior. In fact, findings suggest that residents who wander or pace in a safe environment experience better physical health and function. Furthermore, most residents tend to wander under optimal environmental and emotional conditions, unlike many other behaviors described as agitated which tend to occur when the person is experiencing discomfort. This use of wandering appears to be a positive adaptation suggesting continuation of a lifelong pattern of exercise.

Conversely, wandering can pose significant problems for the person who wanders as well as for their family, direct caregivers, and care providers. There is a correlation between falls and wandering, related to fatigue, anxiety, and associated gait and balance instability. There are also safety challenges including the risk of:

- Entering an area that contains hazards including chemicals, fire hazards, tools and equipment.
- Entering an area that is physically unsafe, especially stairwells, poorly lit areas, construction areas, etc.
- Entering an area where there is a person who poses a threat to the resident's safety, including another resident, or a person who may exploit or harm the person who wanders.
- Getting lost and not being able to find the way back, and suffering from heat or cold exposure, drowning, or being struck by a car. The person may also incur dehydration and other medical complications resulting from not having needs met.

The above situations are associated with injury and at times, fatal results. It is estimated that dozens of cognitively impaired elderly

people die annually as a result of wandering.

### **Effects Upon the Person's Family**

When the family elects to place a loved one in AL, they usually assume that their family member is now "safe". This assumption is not often correct and needs to be addressed with clear information regarding the current risks as well as the plan to modify the risks.

### **Effects Upon the Facility**

The person who wanders requires much supervision, environmental modification, an individualized plan for communication approaches, exercise, and activities. Staff requires specialized training to meet the needs of persons with cognitive loss. In addition, attention must be given to the other residents who may be disturbed or frightened by a person who enters their room and unknowingly invades their privacy. Accidents involving residents negatively impact upon the facility's ability to recruit prospective residents as well as staff. The threat of liability looms large for the AL provider as hazardous wandering and elopements are among the most costly risk exposures.

### **Standard Approaches for Wandering**

Goals for residents who wander include promoting function and dignity and preventing injury. Assessment, identification of risk, individualized care planning, adequate staffing and environmental practices to promote safety, and immediate, emergency responses to resident elopement are the standard approaches to address these goals.<sup>5</sup> These approaches are derived from evidence-based research and practice guidelines, and apply to all settings serving the older adult.

### **Assessment**

The first critical step in developing effective, individualized interventions is assessment, including an

evaluation to determine the risk of elopement, and an assessment of the person's wandering behavior.

### **Evaluating for Elopement Risk**

Because most elopements occur shortly after admission,<sup>6</sup> potential residents should be screened prior to admission to determine their risk for wandering and elopement. A history of wandering/elopement as well as alterations in mental status are red flags that indicate high risk. The person should be screened for cognitive impairments, which include memory loss, decreased awareness, and disturbances in judgment, reasoning, and perception. Persons with cogni-

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tive impairments require further evaluation including a physical exam that identifies the type, degree and impact of the impairment.<sup>7</sup> The provider should also assess pre-morbid lifestyle to identify those likely to wander<sup>8</sup> and should acquire information on the history of wandering and elopement as perceived by the caregiver. The history should also include an evaluation of the degree of change in activity and routine associated with the wandering. The strategies, including environmental, that have been used to date to deal with the wandering, (eg, latches and alarms on doors, visual cues), as well as their effectiveness should be assessed.<sup>9</sup>

Assessment also needs to rule out causes for restlessness, including the effects of medication as well as medical problems, including diabetes, infection, and congestive heart failure which can aggravate cognitive impairments. Clinicians should also assess for depression, which can mimic symptoms associated with dementia. Finally, a functional assessment of communication ability, (receptive as well as expressive), hearing, gait, continence and nutritional status will identify factors that impact upon cognition as well as the effect of impairment upon function.

### **Assessment of Wandering Behavior**

The next key to promoting function and safety is to conduct a thorough assessment of wandering behaviors to determine the risk for injury and to develop an effective care plan. The term wandering needs clarification to determine if the person demonstrates: searching behavior, intrusion into other people's rooms, pacing, attempts to exit the building, or straying into unsafe areas. Associated behaviors including expressions of anxiety, loss, hunger, pain, incontinence, need for purposeful activity, and looking for someone or something, can all provide clues as to an unmet need. Assessment of the typical time of day, path taken, and duration of the wandering should be noted to determine if there is a pattern.

### **Identification of Those at Risk**

All residents with any history of wandering or confusion, especially those with elopement, should be identified so that staff can be alert to their needs. Some facilities have residents who wander wear a colored bracelet or easily identifiable piece of clothing or jewelry. Another approach is to provide the staff, such as receptionists and security guards, with the names and photos of those who wander, as well as information on who to contact for assistance and how to redirect the

person to a safe area. Staff in dietary, housekeeping, and maintenance should also be able to recognize residents who are at risk for unsafe wandering. Residents who are at risk for elopement should carry identification that includes their name, the name/address of the facility, and notes that they are memory-challenged.

### **The Care Plan**

When a resident has been identified to be at risk for elopement or unsafe wandering, it is essential that the facility develop a plan of care. In the past, a common practice was to use physical and/or chemical restraints to prevent or curtail wandering. However, research demonstrates that restraints do not prevent injury, and both physical and chemical restraints often in fact, increase the risk of injury, physical decline, and depression, and can even cause death. Efforts to maintain function, promote safety, and compassionately assist residents to deal with the anxiety that manifests as “behavior problems” are the humane alternatives to restraints. Provision of an individualized care plan that addresses the person’s physical and psychosocial needs is the more humane and effective approach to wandering.

The University of Iowa Gerontological Nursing Interventions Research Center (GNIRC) has developed an evidence-based protocol to provide care plan guidelines for wandering, and these practices are grouped into the following main areas: environmental modifications, technology and safety, physical interventions, psychosocial interventions, and caregiving education.<sup>9</sup>

### **Environmental Modifications**

A multi-faceted approach to environmental modification is necessary to prevent injury and create a sense of well-being. Instead of preventing movement, the environment should facilitate safe movement. The resident who wanders

requires safe walking areas and lounge areas that provide an opportunity to stop and rest, to prevent falls/injuries from fatigue. The walking paths should be uncluttered, well lit, and lead to a fenced area or lounge. Using tape to create a grid-like pattern on the floor in front of exits or restricted areas decreases the risk of elopement. Because it gives an unstable appearance the grid lines act as a deterrent for exit-seeking behavior.

Wandering is often precipitated by sensory stimulation that is lacking, overwhelming, or meaningless. Decorating rooms with favorite pictures, art, etc. may provide a sense of comfort and familiarity. The use of tactile wall art (three dimension-

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al), and the presence of interesting artifacts create a positive distraction that may deter wandering. Camouflaging exits and placing residents who wander in rooms located away from exits is another tactic. Large-print signs in combination with portrait-like photographs help the resident who has trouble finding his/her room.<sup>10</sup>

A basic and common safety intervention is the use of safety locks for closets and drawers that contain potentially hazardous materials. Many facilities employ locked or semi-locked doors to prevent the confused person from leaving the unit or facility where they are monitored. Semi-locked doors contain entry mechanisms that require cognitive skills that exceed those of most persons who wander.

### **Technology and Safety**

Electronic tagging is a system used to track residents who wander. The device may be a bracelet or a small lightweight device placed on a buckle, watch, or sewn into a piece of clothing. An alarm may sound when a resident exits a door or enters a certain area. The alarm may sound at the site or a distant site that is monitored. Video camera surveillance is another approach, albeit expensive. Door alarms are the most commonly used physical intervention, but can be unreliable due to staff not responding or turning the alarm off. Monitoring devices can assist the staff, however, they are not fail-proof and should not be used to replace careful supervision by staff.

Bed alarms are frequently used for the resident who leaves the bed at night to wander. The alarm is designed to alert the staff that the resident is out of bed and requires supervision. In order to prevent falls/injuries and unsafe wandering the use of such alarms needs to be supplemented with an individualized plan to prevent nighttime injuries, including attention to comfort, toileting needs, safe bed height, use of night-lights, following the person’s routine, and supervision.<sup>11</sup>

### **Physical and Psychosocial Interventions**

The psychosocial and physical interventions described in the literature are concerned with assessing and treating depression and physical problems, and providing meaningful activity. These approaches need to be clearly defined in the care plan. Sufficient support and supervision from staff is essential to adequately provide these interventions.

Depression can adversely affect cognition and function, yet it is often overlooked. Residents with cognitive loss should be routinely assessed for depression. Wandering can develop more in depressed AD patients, and the care plan needs to

address psychosocial and pharmacologic interventions. The plan also needs to include the management of chronic medical conditions that can alter cognition.

Activities are an essential component of the care plan. The traditional bingo game is not adapted to the needs of the person who has memory loss, anxiety, restlessness, and limited attention span. A structured activity plan provides consistent supervision and allays the anxiety that is associated with memory loss and disorientation by answering the question, "What should I be doing?" The resident who is provided with positive activity does not have to wander to search for meaningful stimuli. Activities should also provide exercise including walking programs. Group activities that relieve tension and provide stimulation and exercise are dancing, cooking, flower arranging, and active games. Activities that increase self-esteem and engage the resident are useful endeavors such as watering plants, folding linen, gardening, and setting tables. The resident who wanders at night can be included in rounds with staff, can fold clothes, or make a snack. Successful activity plans provide a great deal of consistent routine, task segmentation, (wherein tasks are broken down into small steps to be accomplished) and exercise. The result is decreased anxiety, increased function, and fewer predilections to aimlessly wander.

Communication that is adapted to the resident's memory challenges, and demonstrates an understanding of the person's history, preferences, routines, and values, promotes that person's sense of security. The resident who feels understood and has a sense of being in the right place is less likely to wander in search of the place he/she belongs.

Consistent staff schedules are important to provide residents a sense of security and also to provide follow-through of the care plan. The staff member assigned should fre-

quently observe the whereabouts of at-risk persons and when the person attends appointments, such as Physical Therapy, the responsibility for supervision must be formally handed over to another. Adequate supervision of residents at risk for elopement and unsafe wandering is essential, on every shift. The traditional practice of staffing the night shift at the minimum level is a particularly unsafe approach for mobile residents who have cognitive loss.

### Caregiving Education

The specialized needs of patients with cognitive loss require staff and family caregivers cognizant of their

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needs for adapted communication, provision of activities, environmental modification, and safety needs. Staff also requires education and competency evaluations addressing facility policy for assessment, equipment use, and a system for the retrieval of a missing resident. Receptionists and security guards need education on how to redirect residents who are attempting to leave, and the provision of photo identification of at-risk residents supports monitoring their whereabouts.

The cognitively impaired resident's plan of care needs to include guidelines that initiate reassessment. Behavior logs that monitor the degree and type of behavior need to be utilized to monitor the effectiveness of the care plan. Revising the care plan is a standard process that

ensures that the provider responds effectively to the ever-changing needs of the resident. In addition, those residents not initially identified as an elopement risk may develop cognitive impairments that require interventions to prevent elopement. Thus, providers serving the elderly are expected to be vigilant in their assessment for the mental status changes and attendant behavior changes that are common in the elderly.

### Response to an Elopement

When a resident elopes, time is of the essence as mortality rates and injuries for those who elope rise dramatically after 24 hours. The care provider is expected to notify the local police to facilitate a search and retrieval effort. An organized search by staff should include periodic re-check of the area where the person was last seen. These missing persons are often found within a mile of where they were last seen. Familiar places, including former job sites should be checked. If the person has not been located after two hours, or the person has a life-threatening illness, or if weather conditions are severe the media should be notified.<sup>12</sup> The state regulatory agency should also be notified, and provided a report on the incident as well as the provider's plan to prevent reoccurrence.

### Regulatory Standards

AL facilities must comply with state health regulations and life-safety codes, as well as local fire and safety regulations. The details of AL regulations vary from state to state, and generally are not as specific as the federal regulations for nursing homes. However the staffs that practice in these settings are required to function under the generally accepted standards of care which include providing adequate assessment, supervision and care to those served; educating caregivers as indicated; maintaining a safe en-

vironment; and providing or securing services that meet the residents' needs. Those organizations that market services to the family of the person with dementia are particularly held accountable to the standards that are derived from research, described in professional literature, and recommended by recognized expert organizations, including the Alzheimer Disease and Related Disorder Association.

### **Legal Risk Management Strategies**

Care providers minimize the risk of injury due to wandering and elopement through a combination of the following management tools: policy and procedure, staff training, and quality assurance/improvement activity.

### **Policy and Procedure**

The Admission policy needs to describe the criteria for admission/discharge, and include the process by which a person whose needs cannot be met would be discharged. Marketing material should be consistent with the provider's policy and ability to keep the promises described in the promotional material. For example, a pledge that the person will "age in place" in an AL facility that can not safety meet the person's needs may be a promise that can not be fulfilled. The facility should describe its commitment to promoting the safety of those served, consistent with quality standards, and define how this is accomplished, as opposed to describing a commitment to providing "absolute safety", a goal that may be unreasonable.

The person with dementia is particularly vulnerable to abuse and neglect. Policy and procedure needs to clearly identify examples of mistreatment, prevention approaches, method of investigation, treatment of those potentially abused, and reporting mechanisms. All accidents, including those related to elopement should be evaluated for potential failure to prevent abuse/neglect. Other

rights, including the right to be free from unnecessary restraint should be also be addressed in facility policy.

A policy and procedure addressing assessment and care planning is necessary to support the safety of residents who wander including guidelines for assessing risk, assessing resident need associated with behaviors, developing an individualized plan, reassessing and evaluating the care plan's effectiveness, and revising the plan as needed. Because cognitively challenged residents are usually unable to remember and/or articulate their needs, a method for communicating the care plan, including anticipating needs, to all

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staff on every shift is crucial.

Safety policies should clearly define the safeguards that the facility employs to prevent accidents and elopements. A process of reviewing incidents such as falls, accidents, altercations, and elopements is a standard policy that provides the administration and staff an opportunity to determine the outcome of an incident, the cause or factors related to the incident, and develop a plan to prevent reoccurrence. Finally, the facility needs a plan to locate a missing resident.

Clinical policies should reflect clinical practice guidelines, including the use of alternatives to chemical and physical restraints. Environmental policies/procedures need to address equipment management in-

cluding the safety checks and maintenance of alarms, and other resident equipment.

### **Staff Training**

The care of older adults with cognitive loss requires staff that is knowledgeable and skilled in the specialized assessment, psychosocial interventions, communication approaches and activity needs of those served. When staff is unable to demonstrate the ability to competently respond to the needs of persons with dementia, the results can be catastrophic, including increased anxiety, elopement, accidents, and injury. Staff education, then, should focus on enabling staff to understand the effects of cognitive loss upon the person's emotional state, function, and physical health. If this understanding is acquired, then staff will appropriately perceive wandering as a coping mechanism that requires safe expression rather than a negative behavior that requires restraint. Professional staffs need to be educated to the clinical presentation of dementia, and the physical and psychiatric problems that can both mimic and co-exist with its presentation. Care interventions including communication techniques, meaningful activities, incontinence management, nutritional support, modification of the environment, promotion of exercise, and management of acute and chronic health problems are standard topics found in a training program for staff caring for persons with dementia.

### **Quality Assurance/Improvement Activity**

Even the small facility needs a process to measure the effectiveness of care provided. Basic quality assurance activity includes:

- Evaluation of each incident report to evaluate the care provided to individuals and make immediate revisions as necessary in the plan. All elopements should be evaluated immediately, and a

*(continued on page 25)*

## Wandering and Elopement

(continued from page 22)

- plan developed to prevent reoccurrence.
- Evaluation of all incident reports, over a certain time period, on a consistent basis, tends to identify areas that need improvement. This analysis also needs to identify practices that engender mistreatment or safety hazards, and development of a plan to prevent or correct deficiencies.
  - Environmental rounds, conducted periodically, to assess and maintain the safety and operability of the physical plant and equipment.
  - Staff training records to evaluate compliance with facility and industry standards.
  - Tracking and analysis of clinical outcomes, such as falls/accidents and restraint use.
  - Comparing actual staffing hours to the prescribed staffing pattern.
  - Observation rounds to evaluate staff performance and follow-through on facility policy and implementation of program plans.
  - Evaluation of the facility's compliance with supporting resident/patient rights, including the right to be free from restraint.

To be successful the provider's approach to quality assurance/improvement needs to be interdisciplinary, measure outcomes (eg, number of accident and elopement), and measure degree of compliance (eg, extent to which risk assessments are completed). Quality improvement employs a problem-solving cycle that analyzes the factors that contribute to areas of noncompliance or weakness, develops an action plan to positively modify these factors, studies the results, and revises the plan as needed. This critical management tool is particularly necessary when dealing with the clinical issues of wandering and elopement, which pose potential threats to the lives of those served.

## Hypothetical Example

BG was a 70-year-old man admitted to the nursing home from home because, according to his daughter, he was newly incontinent, awakened at night, and frequently attempting to leave the house and "go to work." His admitting diagnoses included senile dementia - probable Alzheimer type, and mild hypertension. The admitting nurse identified

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him as being high risk for wandering/elopement. His initial care plan included:

- Supervision checks to be performed every fifteen minutes by his assigned caregiver. (The nursing assistant would walk with him to an activity then "hand over" the responsibility to monitor his whereabouts to the assigned activity staff.)
- A plan for consistent caregivers.
- A screening for depression was conducted and was not remarkable for depression. Also, Benadryl, which was used at home for sleep, was discontinued due to its high side-effect

profile in the elderly, including the side effect of increased confusion. His medical work-up was negative.

- Communication techniques that included physical cueing and validation of emotions. There was also a plan to redirect him away from the semi-locked door by saying, "I was looking for you. We need to go this way." Then he was to be asked to complete one of several projects set up by the activity staff.
- Mapping out a routine that described his normal time for awakening, meals and bedtime, combined with a toileting program and structured activities. His activities included a walking program, in the morning, afternoon, and evening, and yard work, woodworking, music appreciation, and dance class.
- The siderails on his bed were removed to prevent the possibility of falls/injuries at night. A toileting program was also provided at night, at bedtime and at 5AM, his usual times to awaken.
- When staff noted that he attempted to leave with departing staff at change of shift time, (3PM) his walking time was changed.
- The receptionist and security guard were provided with his name, photo, a brief social history, and techniques to redirect him. This information was also shared with the housekeepers, dietary, and maintenance staff on the unit.

## Summary

Injury or death due to unsafe wandering and/or elopement is a tragedy that requires an incisive evaluation to determine the merits as well as potential culpability of the care provider. The expected outcome of care and services is both prevention of harm as well as maximum function and dignity. The standards of care are very clear:

(continued on page 28)

assess risk, identify and respond to risk, assess related needs, provide care to meet needs while promoting health and safety, and evaluate the plan and revise as needed. **ALC**

Programs/SafeReturn.htm

The University of Iowa College of Nursing Gerontological Nursing Interventions Research Center (GNIRC)—Research Translation & Dissemination Core. <http://www.nursing.uiowa.edu/centers/gnirc/protocols.htm>

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