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Review

DELIRIUM IN THE ELDERLY

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SUMMARY

Delirium is a common and serious neuropsychiatric syndrome in older adults, characterized by acute and fluctuating disturbances in attention, awareness, and cognition. It is associated with multiple adverse outcomes, including increased mortality, functional decline, long-term cognitive impairment, and institutionalization. This review synthesizes current knowledge on the pathophysiology, risk factors, clinical presentation, diagnosis, prevention, treatment, and prognosis of delirium in elderly patients. Delirium arises from complex interactions between predisposing vulnerabilities (such as dementia, frailty, and sensory deficits) and acute precipitants (including infections, medications, surgery, and environmental stressors), resulting in a transient but often severe breakdown of cerebral function. Diagnostic tools such as the Confusion Assessment Method (CAM) and 4AT improve detection, though challenges remain in hypoactive presentations and in patients with underlying dementia. Multicomponent non-pharmacological interventions - focused on orientation, sleep hygiene, mobilization, hydration, medication review, and sensory support - are the most effective preventive and therapeutic strategies. Pharmacological treatment, primarily with antipsychotics, is reserved for severe behavioral disturbances and does not alter the course of the syndrome. Delirium is a clinical red flag indicating systemic decompensation and should prompt both acute management and structured follow-up to mitigate long-term consequences. Greater integration of delirium screening and prevention into hospital protocols is essential to improve care outcomes in this vulnerable population.

Key words: *delirium – elderly - cognitive impairment – frailty – hospitalization – prevention - Confusion Assessment Method – antipsychotics - functional decline - dementia*

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INTRODUCTION

Delirium is an acute neuropsychiatric syndrome characterized by a sudden onset of altered consciousness, inattention, and cognitive impairment that tends to fluctuate over time. It is typically distinguishable from dementia by its acute and reversible nature – delirium has an abrupt onset and fluctuating course, whereas dementia is chronic and progressive. Delirium is especially common among older adults and often serves as the only outward sign of a serious underlying medical condition in this population. Clinically, delirium is a potentially life-threatening condition that frequently initiates a cascade of adverse events in the elderly, including loss of independence, increased risk of complications, prolonged hospitalization, and higher healthcare costs (Inouye 2006). Given the aging global population, delirium in older patients has gained increasing attention as a major public health issue, necessitating a thorough understanding of its epidemiology, pathophysiology, risk factors, diagnosis, management, and outcomes.

EPIDEMIOLOGY

Delirium is common in older people across almost all healthcare settings (Bellelli et al. 2021). Its prevalence and incidence vary widely depending on the patient population and care environment. In general medical inpatients over age 65, the point prevalence of delirium is approximately 23% (Gibb et al. 2020). Hospitalized older patients often develop delirium during their stay; a recent meta-analysis of medically ill elders found a pooled incidence of ~13.5% for new-onset delirium during hospitalization. The rates are even higher in certain high-risk groups. For example, among older adults undergoing surgery, delirium occurs in roughly 15–25% of major elective surgeries and up to 50% of high-risk procedures such as hip fracture repairs or cardiac surgery. In the intensive care unit (ICU), where illness severity is highest, an estimated 31% of patients develop delirium; in those requiring mechanical ventilation, delirium prevalence can reach 60–80%. Delirium also frequently complicates post-acute and long-term care in the elderly. Prevalence in post-acute rehabilitation facilities is around 14–18%. In nursing homes, reported delirium rates range widely (1–70%) depending on case-mix and detection methods; a point-prevalence study in European nursing homes found delirium present in about 37% of residents on a given day. In community-dwelling older adults, delirium is relatively rare (around 1–3% prevalence in the general senior population) but increases with advanced age (up to ~14% in those >85). Importantly, delirium often precipitates hospitalization: studies of emergency departments show delirium is present in 8–17% of acutely ill seniors on presentation, and in up to 40% of older patients arriving from nursing homes (Inouye, 2006; Marcantonio, 2017; Siddiqi et al. 2006; Wu et al. 2025). These epidemiologic patterns underscore that delirium predominantly afflicts vulnerable older patients and is especially prevalent in the context of acute

illness, hospitalization, or institutional care. Certain demographic patterns have been observed. The risk of delirium rises with age – the oldest-old (e.g. over 85 years) are at highest risk. There is also some evidence that men may have slightly higher delirium incidence than women in hospital cohorts, though findings are mixed. Overall, delirium in the elderly represents a common clinical syndrome, particularly in hospital and long-term care settings, with significant implications for healthcare utilization.

PATHOPHYSIOLOGY

The pathophysiology of delirium in the elderly is multifactorial and remains only partially elucidated. Traditional hypotheses centered on neurotransmitter imbalances - primarily acetylcholine deficiency and dopaminergic excess - remain relevant, yet insufficient to explain the full clinical picture (Inouye & Ferrucci 2006). More recent models incorporate neuroinflammation, oxidative stress, neuroendocrine dysregulation, and circadian disruption as converging contributors to neuronal network failure.

Systemic insults such as infections, trauma, or surgery may provoke an inflammatory cascade, with cytokine release (IL-1, IL-6, TNF) impairing blood–brain barrier integrity and activating glial cells. In the aging brain, this response is amplified by immunosenescence and chronic low-grade inflammation (Wang et al. 2020). In parallel, metabolic dysregulation - particularly impaired cerebral glucose utilization and mitochondrial ATP production - leads to energy failure, as supported by imaging studies demonstrating hypometabolism during delirium episodes (Nitchingham et al. 2023).

Disruptions in sleep-wake cycles, often mediated by altered melatonin signaling, further destabilize neuronal functioning (Trzepacz 1996). Structural vulnerabilities, including hippocampal or thalamic atrophy and white matter damage, reduce cognitive reserve and are associated with increased delirium risk and duration. The "network disconnectivity" hypothesis posits that when fronto-subcortical and thalamic circuits fail to maintain integration under stress, delirium ensues (van Montfort et al. 2018).

PREDISPOSING AND PRECIPITATING FACTORS

Among the major predisposing factors, advanced age is the most significant, due to cumulative brain atrophy, reduced cognitive reserve, and increased susceptibility to systemic stress. Cognitive impairment or dementia substantially increases risk, often complicating diagnosis when delirium is superimposed. Frailty, functional dependency, and sensory deficits (notably visual and auditory impairments) further reduce resilience. Comorbidities such as heart failure or renal dysfunction contribute to systemic fragility, while psychiatric conditions and prior neurologic insults (e.g. stroke, Parkinson's disease) diminish neural compensatory capacity.

Precipitating factors are acute and often modifiable. Common triggers include infections, dehydration, metabolic derangements, and major surgery - especially orthopedic and cardiac procedures under anesthesia. Iatrogenic factors are central: medications with anticholinergic or sedative effects, polypharmacy, and abrupt withdrawal of central nervous system depressants are frequently implicated. Environmental disturbances, including sensory overload or deprivation, sleep disruption, and relocation to unfamiliar settings, can precipitate delirium, particularly in hospitalized or institutionalized elders. Additional triggers include physical restraints, postoperative complications, and acute organ failures such as myocardial infarction or stroke, which may present atypically in the elderly (Table 1) (Inouye 1999; Ormseth et al. 2023).

Table 1. Predisposing and precipitating factors of delirium in the elderly

Predisposing factors	Precipitating factors
Advanced age (reduced brain reserve, neurodegeneration)	Acute infections (systemic inflammation and cytokine release)
Cognitive impairment or dementia (low cognitive reserve, increased vulnerability)	Metabolic/electrolyte disturbances (neuronal dysfunction from metabolic imbalance)
Frailty and functional impairment (reduced physiological resilience)	Surgery and postoperative course (neurochemical stress, hypoxia, hypotension)
Sensory deficits (vision, hearing) (impaired sensory integration, misperceptions)	Psychoactive/anticholinergic medications (altered neurotransmission, CNS effects)
Multiple comorbidities (chronic inflammation, systemic stress)	Environmental and physical factors (immobilization, disorientation, sensory overload)
History of neurological damage (structural and functional brain compromise)	Sleep deprivation and circadian disruption (sleep-wake cycle instability)
Psychiatric illness (neurochemical imbalance, vulnerability to pharmacological effects)	Substance intoxication or withdrawal (neuroadaptation and rebound excitability)
Polypharmacy (increased risk of adverse CNS effects)	Acute organ failure (disrupted cerebral perfusion and neuroinflammation)

Table 2. Clinical features and diagnostic elements of delirium in the elderly

Feature	Description
Core symptoms	Inattention, disturbed awareness, global cognitive dysfunction (memory, orientation, language)
Course	Acute onset (hours to days), typically fluctuating throughout the day
Cognitive changes	Disorganized thinking, incoherent speech, disorientation
Perceptual disturbances	Hallucinations (especially visual), delusions
Sleep–wake alterations	Daytime drowsiness, nighttime agitation
Emotional/behavioral signs	Anxiety, irritability, apathy; inappropriate actions (e.g. pulling IV lines)
Psychomotor subtypes	Hyperactive (agitated), Hypoactive (withdrawn), Mixed, Motor-neutral
DSM-5 criteria	Attention disturbance, acute and fluctuating course, cognitive impairment, identifiable cause
ICD-10 criteria	Clouding of consciousness, rapid onset, reversible with treatment of cause
Diagnosis in dementia	Based on acute change, altered consciousness, new psychotic signs, collateral history
Delirium superimposed on dementia	Requires high suspicion; associated with poor outcomes and diagnostic challenges

CLINICAL PRESENTATION

Delirium in older adults is an acute neurocognitive syndrome characterized by a sudden disturbance in attention, awareness, and global cognition, with a fluctuating course over hours to days. Core features include inattention, altered consciousness, and impaired cognitive domains such as memory, orientation, language, and perception. Clinically, affected individuals may display distractibility, disorganized thinking, incoherent speech, or perceptual disturbances including hallucinations - often visual or paranoid - and delusions. Sleep–wake cycle inversion is frequent, with daytime somnolence and nocturnal agitation. Emotional dysregulation (anxiety, irritability, apathy) and behavioral abnormalities (e.g. pulling lines, climbing out of bed) are also common (Zou et al. 1998).

Delirium is further classified into psychomotor subtypes. Hyperactive delirium presents with agitation, restlessness, and hallucinations, and is more likely to be promptly identified. Hypoactive delirium, by contrast, manifests as lethargy, drowsiness, and psychomotor slowing, and is often mistaken for depression or fatigue - particularly in frail elderly individuals. This subtype is associated with under-recognition and worse outcomes. Mixed delirium features both hyperactive and hypoactive states in fluctuation, whereas some researchers describe a motor-neutral subtype, although its diagnostic validity remains uncertain. Diagnostic frameworks such as the DSM-5 and ICD-10 provide standardized criteria. According to DSM-5, the diagnosis of delirium requires (a) an attention and awareness disturbance, (b) an acute and fluctuating course, (c) an additional cognitive disturbance, (d) exclusion of other neurocognitive disorders as a primary cause, and (e) identification of a direct physiological etiology (e.g. medical illness, substance, or toxin). ICD-10 emphasizes similar domains, particularly clouded consciousness, rapid onset, reversibility, and a medical underpinning. In clinical practice, diagnosis relies on bedside assessment, collateral history from caregivers, and recognition of an acute cognitive change. Delirium must be distinguished from dementia, especially in cases of delirium superimposed on dementia (DSD). Because patients with dementia already have chronic cognitive deficits, new onset of altered arousal, fluctuating attention, or perceptual disturbances often signals superimposed delirium (Table 2) (Casarett et al. 2001; Fong et al. 2009; Maldonado 2008).

While the final diagnosis is always clinical, structured tools help identify core features and reduce under-recognition. Among these, the Confusion Assessment Method (CAM) is the most widely validated and commonly used. It evaluates four key criteria: (1) acute onset with fluctuating course, (2) inattention, (3) disorganized thinking, and (4) altered level of consciousness. For a diagnosis using CAM, the first two features must be present along with either the third or fourth. CAM has demonstrated excellent sensitivity (94–100%) and specificity (90–95%) in research settings when applied by trained professionals. However, it requires proper training to maintain reliability in routine clinical practice, as untrained use may miss cases, particularly in hypoactive or sensory-impaired patients (Keenan & Jain 2022).

A modified version, the CAM-ICU, enables assessment in non-verbal or mechanically ventilated patients by using nonverbal cues and simplified tasks. This adaptation has facilitated delirium recognition in intensive care settings (Chen et al. 2021).

An alternative tool, the 4AT, was developed for rapid use (<2 minutes) and does not require special training. It assesses four domains: alertness, orientation via the Abbreviated Mental Test-4, attention (typically assessed through recitation of months backward), and evidence of acute change or fluctuating course. A score of 4 or higher indicates probable delirium. In multicenter studies, the 4AT showed higher sensitivity than CAM (~76% vs 40%) but slightly lower specificity. The 4AT's simplicity makes it useful for widespread screening, particularly when administered by nursing staff, with CAM used secondarily for confirmation by physicians (Tieges et al. 2021).

Other tools include the Delirium Rating Scale–R98 (DRS-R98), which consists of 16 clinician-rated items assessing symptom severity and is mainly used in research (Almuhairi et al. 2024); the Memorial Delirium Assessment Scale (MDAS), a 10-item tool suited for palliative care settings to quantify severity (Breitbart et al. 1997); and the NEECHAM Confusion Scale, a nursing-administered tool integrating cognitive testing and behavioral observation (Gemert Van & Schuurmans 2007).

Simple bedside tests, such as the months backward or days-of-week backward recitation tasks, can provide quick assessments of attention. In dementia populations, the days-of-week version may offer better specificity (Table 3) (O'Regan et al. 2014).

PREVENTION

The core principles of delirium prevention target the patient's environment, mobility, cognition, hydration, and medication safety (Fong et al. 2009; Fong & Inouye 2022; Mart et al. 2021). Orientation and cognitive stimulation help maintain mental clarity, especially in unfamiliar hospital settings. Tools like calendars, clocks, and visible personal items are essential anchors. Sleep hygiene is critical: clustering nursing care, reducing nighttime noise and light, and avoiding sedatives encourage restorative sleep.

Early mobilization combats immobility-associated delirium, with protocols encouraging patients to sit, stand, or walk several times daily. Hydration and nutritional support prevent common physiological triggers like electrolyte imbalance or hypoglycemia. Correcting sensory deficits - through provision of hearing aids or glasses - helps preserve environmental comprehension, reducing the risk of misinterpretations or hallucinations.

Medication review is a cornerstone of prevention. High-risk drugs (benzodiazepines, anticholinergics, opioids) should be minimized, and necessary medications should be prescribed at the lowest effective doses. Similarly, restraints and tethers (e.g. urinary catheters, IV lines) should be avoided unless absolutely necessary, as their use correlates with delirium onset. Alternatives such as supervision by a family member or sitter are preferred.

Adequate pain control must be balanced to avoid both under- and over-treatment. Multimodal analgesia using non-opioid methods (acetaminophen, physical comfort measures) reduces the need for high-dose opioids while addressing discomfort that might otherwise lead to delirium.

Environmental structuring - establishing a day-night rhythm, promoting family involvement, and providing therapeutic engagement - helps maintain orientation and emotional stability. Programs like the Hospital Elder Life Program (HELP) have successfully implemented such measures using volunteers and standardized protocols (Hshieh et al. 2018).

Regular monitoring of high-risk patients using tools like 4AT or CAM facilitates early detection of incipient delirium, allowing for prompt intervention. Despite the interest in pharmacological prophylaxis (e.g. haloperidol, melatonin, dexmedetomidine), no drug has demonstrated sufficient efficacy, and guidelines do not recommend routine pharmacologic prevention (Table 4).

Table 3. Diagnostic tools for delirium

Tool	Target population	Features assessed	Advantages	Limitations
Confusion Assessment Method (CAM)	General hospitalized patients	Acute onset, inattention, disorganized thinking, altered consciousness	High sensitivity/specificity; well-validated	Requires training; less effective in untrained hands
CAM-ICU	ICU patients (nonverbal, intubated)	Modified CAM using nonverbal assessments	Enables ICU screening; widely adopted	Still needs observer familiarity; false negatives in subtle cases
4AT	Emergency, wards, general hospital use	Alertness, orientation (AMT-4), attention, acute change/fluctuation	Rapid (<2 min), no training needed, good sensitivity	Slightly lower specificity; some false positives possible
Delirium Rating Scale–R98	Research and specialized clinical use	16 symptom domains (e.g. perception, psychomotor, cognition)	Quantifies severity; structured assessment	Time-consuming; needs trained clinician
Memorial Delirium Assessment Scale (MDAS)	Palliative care, general wards	10 items assessing severity (e.g. consciousness, attention, behavior)	Used for monitoring delirium over time	Limited use outside palliative settings
NEECHAM Confusion Scale	Nursing use in general wards	Combines cognitive testing with behavior and physiology	Allows regular nursing screening	Less precise than CAM/4AT
Simple attention tests	All settings, including dementia patients	Months backward, days-of-week backward	Very fast, no training needed	Not diagnostic on their own; reduced specificity

Table 4. Prevention strategies for delirium

Intervention domain	Key strategies	Mechanism of action
Orientation & cognitive stimulation	Daily orientation, clocks/calendars, familiar objects, conversation, puzzles	Maintains attention, reduces confusion and perceptual errors
Sleep hygiene	Noise/light reduction, care clustering, earplugs, warm drinks, avoid sedatives	Preserves circadian rhythm and cognitive function
Early mobilization	Sit/stand/walk multiple times/day, physical therapy, ROM exercises	Enhances sensorium, reduces immobility-related risk
Hydration & nutrition	Oral fluids, feeding support, IV fluids if needed	Prevents dehydration and electrolyte disturbances
Vision & hearing optimization	Glasses, hearing aids, magnifiers, audiological support	Reduces sensory deprivation and misinterpretation
Medication review	Avoid benzodiazepines, anticholinergics, unnecessary opioids; titrate dosing	Reduces drug-induced cognitive impairment
Minimizing restraints & tethers	Limit catheters, IV lines; use sitters/family presence	Decreases agitation, promotes comfort
Pain management	Regular assessment, non-opioid analgesia, comfort measures	Prevents pain-triggered delirium while avoiding sedative burden
Environmental structuring	Day/night cues, access to cognitive aids, conversation, family visits	Supports orientation and reduces anxiety
Monitoring & surveillance	Routine CAM/4AT checks, especially in high-risk wards (e.g. ortho, ICU)	Enables early detection and escalation of preventive measures
Institutional support	Geriatric units, staff training, delirium education programs	Facilitates systemic implementation of best practices

MANAGEMENT

Supportive care and non-pharmacological interventions are the mainstay of delirium treatment and mirror preventive strategies, but with increased intensity and vigilance. Creating a calm, structured environment that facilitates orientation - adequate lighting during the day, reduced noise at night, visible clocks and calendars, and familiar items - is essential. Use of glasses and hearing aids must be ensured. Staff or family members should provide frequent reorientation and reassurance. Physical restraints are avoided, as they often aggravate agitation. Instead, supervision by a trained sitter or a familiar caregiver is preferred. Engaging the patient in conversation or simple activities may aid attention and reduce disorganized behavior (Hshieh et al. 2018).

An interdisciplinary team should coordinate care to support mobilization, nutritional intake, bowel and bladder function, and to prevent complications such as falls, pressure ulcers, or deconditioning

Pharmacological treatment is reserved for specific cases, particularly when severe agitation or psychosis poses an immediate risk to the patient or others, or when behavioral symptoms interfere with essential care. In such cases, the goal is short-term control using the lowest effective dose for the shortest duration. Antipsychotics are the main pharmacologic agents used. Haloperidol remains widely used due to its rapid onset and availability in oral, IM, or IV formulations. Low doses (e.g., 0.5–1 mg) are generally effective. Atypical antipsychotics such as quetiapine, risperidone, aripiprazole or olanzapine are increasingly preferred, especially in frail patients, due to a lower risk of extrapyramidal side effects. Quetiapine is favored when sedation is also desirable, for example to restore sleep patterns. Regardless of the agent, side effects such as sedation, QT prolongation, and falls must be closely monitored, especially with intravenous haloperidol (Attard et al. 2008; Bostwick & Masterson 1998; Maddalena et al. 2024; Weiss & Scheeringa 2014).

Benzodiazepines are not recommended for standard medical or postoperative delirium due to their potential to worsen symptoms. The exception is delirium due to alcohol or sedative withdrawal, where benzodiazepines (e.g., lorazepam or diazepam) are first-line. In rare cases - such as in patients with Parkinson's disease or Lewy body dementia who cannot tolerate antipsychotics - low-dose benzodiazepines may be used cautiously.

Emerging evidence supports dexmedetomidine in ICU settings for intubated patients, as it may reduce delirium duration compared to benzodiazepines. However, its use remains limited to intensive care environments due to monitoring requirements (Flükiger et al. 2018).

Importantly, no pharmacological treatment has been proven to shorten the duration of delirium. Antipsychotics may manage behavioral disturbances, but the resolution of delirium depends on treating the underlying causes and providing supportive care. Once symptoms improve, medications should be tapered and discontinued to prevent iatrogenic complications.

Table 5. Delirium outcomes

Outcome	Description
Mortality	2× increase in 2-year mortality; in-hospital mortality 22–76%; each day of delirium increases death risk
Functional Decline	Higher risk of discharge to nursing home or rehab; reduced chance of returning to pre-morbid functional level
Cognitive Decline	Accelerates cognitive deterioration; associated with increased risk of long-term dementia
Recurrent Delirium	Past delirium increases vulnerability to future episodes, lowering threshold for new-onset delirium
Institutionalization	More frequent need for long-term care due to loss of independence and physical deconditioning
Hospital Readmissions	Higher risk of early readmission due to unresolved or new medical issues following delirium
Healthcare Costs	Greater resource use: intensive nursing, sitters, extended stays, special equipment
Patient Emotional Distress	Fear, anxiety, trauma from hallucinations or confusion; may persist after recovery
Family and Caregiver Burden	Psychological stress and moral distress, especially when delirium behaviors are disruptive
Staff Burnout	Care of delirious patients linked to increased clinician fatigue and emotional exhaustion

Post-delirium care includes monitoring for residual cognitive impairment, as many patients experience persistent deficits or subsyndromal delirium. Discharge planning should account for rehabilitation needs, with possible referral to home care or transitional care units. Communication with the patient and family is essential - explaining the nature of delirium, expected recovery trajectory, and need for continued support can help reduce anxiety and foster adherence to care recommendations.

OUTCOMES

Delirium in the elderly is a serious medical event, not a transient or benign condition. It significantly increases the risk of mortality, functional and cognitive decline, institutionalization, and healthcare burden. In-hospital mortality can reach up to 76% depending on severity and context, and even brief episodes correlate with worse outcomes. Each additional day of delirium, particularly after surgeries like hip fracture repair, raises the risk of death and poor recovery (Stollings et al. 2021).

Functionally, patients with delirium are less likely to return home and more often require nursing home or rehabilitation placement. Delirium also leads to long-term deconditioning and physical dependence. Cognitively, it is associated with accelerated decline and a higher incidence of dementia. Studies show worse long-term cognitive performance and increased dementia diagnosis in patients with a history of delirium. It may unmask or exacerbate underlying neurodegenerative diseases.

Recurrent delirium is common, as the brain becomes more vulnerable after an initial episode. Delirium also leads to higher readmission rates and resource use. Patients often require more intensive care, and the condition increases both emotional burden for families and psychological stress for healthcare staff. Agitation, hallucinations, and confusion can be traumatic for patients and distressing for caregivers (Table 5) (Robinson et al. 2009; Witlox et al. 2010).

DISCUSSION

This synthesis highlights delirium in older adults as a multifactorial and clinically significant condition with serious prognostic implications. Traditionally underrecognized, especially in its hypoactive form, delirium is now understood as an acute expression of systemic and neural vulnerability that not only signals immediate clinical deterioration but also contributes causally to long-term functional and cognitive decline. The reviewed evidence supports the conceptualization of delirium not merely as a transient syndrome but as a sentinel event with enduring consequences for morbidity, mortality, and quality of life.

The data reinforce the complexity of delirium's pathophysiology, encompassing neuroinflammatory mechanisms, neurotransmitter imbalance, cerebral hypometabolism, and structural brain vulnerability. This multifactorial model explains the heterogeneity in clinical presentation, ranging from overt agitation to subtle withdrawal, and justifies the need for refined diagnostic tools and high clinical vigilance. Despite the availability of structured assessments such as the CAM and 4AT, delirium continues to be underdiagnosed, particularly in patients with pre-existing cognitive impairment or those presenting with hypoactive features. The limitations of current diagnostic instruments in patients with dementia underscore the importance of clinical acumen, collateral history, and longitudinal observation.

Preventive strategies, especially multicomponent non-pharmacological interventions, remain the cornerstone of delirium care. Programs emphasizing orientation, sleep

hygiene, mobilization, sensory support, medication review, and environmental structuring have demonstrated substantial reductions in delirium incidence and duration. Notably, no pharmacological intervention has shown efficacy in preventing or reversing delirium. Antipsychotics, while commonly used for symptom control in cases of severe agitation or psychosis, offer no benefit in terms of delirium resolution and must be prescribed with caution due to potential adverse effects.

The prognosis following an episode of delirium is consistently poor. Delirium independently predicts higher mortality, increased rates of institutionalization, and persistent cognitive deficits. Moreover, it may serve as both a marker and a mediator of neurodegenerative processes. The risk of recurrent episodes and the potential for downward functional and cognitive spirals highlight the need for structured follow-up, including cognitive assessment and rehabilitation planning. Additionally, the psychological burden on patients, caregivers, and clinical staff necessitates comprehensive education and institutional support systems.

This review also calls attention to the health system implications of delirium. The syndrome contributes to prolonged hospital stays, increased readmission rates, and higher care costs. Despite its high prevalence and clinical impact, delirium remains insufficiently integrated into routine hospital practice. Bridging this gap requires institutional commitment to staff training, routine use of validated screening tools, and the implementation of multidisciplinary delirium care pathways.

CONCLUSION

In sum, delirium in older adults should be viewed as a modifiable complication of acute illness and hospitalization, yet one with potentially irreversible consequences. Its prevention, timely recognition, and appropriate management are essential components of geriatric care. Future research should continue to refine diagnostic strategies, evaluate scalable prevention models, and clarify the neurobiological mechanisms linking delirium with cognitive decline, with the ultimate aim of improving outcomes in this vulnerable population.

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