

The Impact on Long-term-care Homes

The Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia (CCCDTD3) resulted in a set of wide-ranging recommendations applicable to care and clinical research involving persons with Alzheimer's disease and other dementias.¹ All CCCDTD3 recommendations were systematically developed and rated.¹ A full set of recommendations can be found in the articles published in the October 2007 issue of *Alzheimer's and Dementia*.

Given the prevalence and acuity of dementia disorders among residents of long-term-care (LTC) homes, this paper focuses on the application of the CCCDTD3 recommendations specific to severe dementia. Our purpose is to explore the unique relevance of these recommendations in the LTC health-service environment.

By Maggie Gibson, PhD, CPsych; Dorothy Forbes, RN, PhD; and David Conn, MB, BCh, BAO, FRCPC

Long-term-care Homes

For the purpose of this paper, the term long-term-care (LTC) homes is used generically to refer to any

Maggie Gibson, PhD, CPsych
Psychologist, Veterans Care
Program, Parkwood Hospital,
St. Joseph's Health Care London,
London, Ontario

Dorothy Forbes, RN, PhD
CIHR New Investigator, Associate
Professor, School of Nursing,
Faculty of Health Sciences,
University of Western Ontario,
London, Ontario

David Conn, MB, BCh, BAO,
FRCPC, Vice-President, Medical
Services and Psychiatrist-in-Chief,
Baycrest Geriatric Health Care
System, Associate Professor,
Department of Psychiatry,
University of Toronto

congregate living residence created for older adults and others with chronic illnesses, disabilities, and/or deficits in activities of daily living (ADL) or instrumental activities of daily living (IADL) that necessitate skilled nursing care on a daily basis.^{2,3} This reference group may include facilities known as nursing homes, complex-care facilities, and/or assisted-living facilities. There is considerable demographic diversity as well as functional variability among individuals who reside in LTC homes.

There is wide variability in how LTC homes are defined, funded and structured in different Canadian provinces and territories. There are no national standards for the optimal mix of

expertise and scopes of practice, and clinical resources may differ between facilities. Resources may include a variety of disciplines, however nursing and personal-care services predominate. Typically, LTC residents have an assigned family physician who works with the facility-based care providers to address identified health needs.

Statistics Canada recently published *A Portrait of Seniors in Canada*.⁴ This extensive report characterizes the current generation of seniors. Currently, only 7% of seniors live in collective dwellings (primarily nursing homes and hospitals), however, the likelihood of institutional residency increases with age, from 2% among seniors aged 65 to 74 years to 32% among those aged

85 or older. Mortality rates are declining for all but the oldest age group (90 years and older). Women continue to live longer than men, although the gap is narrowing.

The Canadian Study of Health and Aging revealed that 50% of individuals diagnosed with Alzheimer's disease (AD) were in the moderate to severe stages of the illness, and 90% of residents in LTC facilities were in moderate to severe stages.⁵ In addition to memory disturbance, many LTC residents demonstrate behavioral and psychological symptoms of dementia (BPSD) which often become increasingly prevalent and disturbing as the dementia progresses.^{6,7} Frequently occurring BPSD include agitation, aggression, wandering, repetitive or bizarre behaviors, shouting, disinhibited behaviors and sexually inappropriate behaviors.

Severe Dementia

Recommendations for the diagnosis and treatment of mild to moderate dementia⁸ are applicable to residents of LTC homes as well as to those who reside in community settings. However, there are two compelling reasons for the present focus on severe dementia. First, LTC homes are the likely residence of persons with severe dementia and, second, LTC homes are unique in that they represent the only communal setting in which many individuals with severe dementia are likely to be

domiciled together. The CCCDTD3 obtained consensus on 17 recommendations for the management of severe dementia.⁵ These are presented in Table 1. The levels of evidence for these recommendations vary, and are available in the consensus document.⁵

Recommendations in Table 1 that address assessment (recommendations 1-3), medical management (recommendations 4, 5, 17) and

appropriate medication use (recommendations 6, 7, 11-16) are applicable regardless of where the individual with dementia resides. This is implied in all cases, and explicitly stated in recommendation 7:

- Treatment with ChEIs and /or memantine should persist until clinical benefit can no longer be demonstrated.
- Treatment should not be discontinued simply because of institutionalization.

Recent clinical practice guidelines focusing on the assessment and treatment of mental health issues in LTC homes were developed by the Canadian Coalition for Seniors' Mental Health (CCSMH).^{2,3} There are some differences between the CCCDTD3 and CCSMH pharma-

cologic recommendations. The CCCDTD3 recommends risperidone and olanzapine for severe agitation, aggression and psychosis. The CCSMH recommendations also include quetiapine. For severe behavioral symptoms without psychosis the CCSMH recommendations include atypical antipsychotics, trazodone and selective serotonin reuptake inhibitors (SSRIs) such as citalopram. The CCCDTD3 states that there is insuf-

The Canadian Study of Health and Aging revealed that 50% of individuals diagnosed with Alzheimer's disease (AD) were in the moderate to severe stages of the illness, and 90% of residents in LTC facilities were in moderate to severe stages.⁵

ficient evidence to recommend for or against the use of trazodone for nonpsychotic agitation and only recommends SSRIs for the treatment of depression.

However, the issue that looms largest for all of these recommendations is resource allocation. Systemic changes are needed to ensure that all LTC residents have equitable access to available medications and the professional expertise necessary to prescribe their appropriate use. For example, as a minimum, LTC homes should have an assessment protocol and policy that mandates regular reassessment and the resources to consult external experts when needed. It is important to note that, in most Canadian provinces, the government will not

Table 1

Recommendations for the Management of Severe AD⁵

1. Severe AD can be defined as the stage in which the patient becomes totally dependent on a caregiver for survival. This will typically correspond to a score of < 10 on the MMSE and a score of 6 to 7 on the GDS.
2. Patients with severe AD should be assessed at least every four months or if treated with pharmacotherapy at least every three months.
3. Assessment should include cognition (e.g., MMSE), function, behavior, medical status, nutrition, safety and caregiver health.
4. The goals for management are to improve the quality of life for patients and caregivers, maintain optimal function and provide maximum comfort.
5. Medical management includes treatment of intercurrent medical conditions (e.g., infections, parkinsonian symptoms, seizures, pressure ulcers), ameliorating pain, improving nutritional status and optimizing sensory function.
6. Patients with severe AD can be treated with ChEIs, memantine or the combination. Expected benefits would include modest improvements or slower decline in cognition, function and behavior.
7. Treatment with ChEIs and/or memantine should persist until clinical benefit can no longer be demonstrated. Treatment should not be discontinued simply because of institutionalization.
8. The management of patients with BPSD should begin with appropriate assessments, diagnosis and identification of target symptoms and consideration of the safety of the patient, their caregiver and others in their environment.
9. Nonpharmacologic treatments should be initiated first. Approaches that might be useful for severe AD include behavioral management for depression and caregivers/staff education programs for a variety of behaviors. Music and multi-sensory interventions are useful during treatment sessions but longer-term benefits have not been demonstrated.
10. Pharmacologic interventions should be initiated concurrently with nonpharmacologic approaches in the presence of severe depression, psychosis or aggression that puts the patient or others at risk of harm.
11. Pharmacologic interventions for BPSD should be initiated at the lowest doses, titrated slowly and monitored for effectiveness and safety.
12. Attempts to taper and withdraw medications for BPSD after a period of three months of behavioral stability should occur in a standardized fashion.
13. Risperidone and olanzapine can be used for severe agitation, aggression and psychosis. The potential benefit of all antipsychotics must be weighed against the potential risks such as cerebrovascular adverse events and mortality.
14. There is insufficient evidence to recommend for or against the use of trazodone in the management of nonpsychotic agitated patients.
15. Benzodiazepines should be used only for short periods as prn agents.
16. Selective serotonin reuptake inhibitors can be used for the treatment of severe depression.
17. If BPSD fails to improve after appropriate nonpharmacologic and pharmacologic interventions, refer to a specialty service.

AD: Alzheimer's disease; GDS: Global Deterioration Scale; MMSE: Mini-Mental State Examination; ChEIs: Cholinesterase inhibitors; BPSD: Behavioral and Psychological Symptoms of Dementia.

cover the cost of cholinesterase inhibitors (ChEIs) once the Mini-Mental State Exam (MMSE) score drops below 10 points. Also, the cost of memantine is not covered in most provinces.

The remaining three recommendations (recommendations 8 to 10) have a unique interpretation in the LTC context, as they speak specifically to issues of safety and education. Safety and education are relevant to all environments in which individuals with dementia reside, but will be operationalized differently in each context. In the LTC environment, the uniqueness arises largely from the communal nature of the setting, with large numbers of dementia sufferers spending the majority of their time in close proximity to each other. We consider the implications of recommendations 8 to 10 for LTC homes specifically. To facilitate the following discussion, consider Mrs. Smith, a typical LTC resident.

Case Presentation

Mrs. Smith is an 85-year-old woman who suffers from several chronic conditions, including a musculoskeletal disease that impacts her mobility and sensory impairments (hearing and vision). She is incontinent, under weight, and has moderate-to-severe dementia. She is disoriented to person, place and time and occasionally agitated as evidenced by calling out and pacing (unsteadily). She requires complete assistance with ADLs, and

participates in programs and activities only with significant levels of support and only on “good” days. She is a widow, but has family members who make brief visits, usually on weekends. She seldom recognizes them. She spends the majority of her time in the presence of other residents and staff, with an absence of meaningful social interaction or engagement.

Mrs. Smith is well-known to the treatment team, including the facility-based staff and her consulting physician. She has been a resident for 18 months. Her physi-

cian sees her for routine checkups, and nursing rounds result in few revisions to her care plan. Occasionally, family members and facility care providers disagree on some aspects of care provisions, but relationships are generally congenial. Only the required minimum of end-of-life care planning has occurred (she has a “do not resuscitate” order), but care providers and family expect that she will eventually pass on in the care of the facility.

In the average 24-hour period, facility-based healthcare providers may choose to ignore, deflect and/or

redirect a variety of Mrs. Smith’s dementia-related behaviors (e.g., pacing, calling out), depending on contextual factors such as whether the behaviors are noticed, perceived risk, available resources and deviance from the norm. Behaviors that are more unusual, more risky or have significant consequences are more likely to result in communication with the consulting physician or a family member. For example, if she falls or interferes substantially with another resident, incident-reporting procedures and responses are likely to follow. Persistent increases in agi-

Systemic changes are needed to ensure that all LTC residents have equitable access to available medications and the professional expertise necessary to prescribe their appropriate use.

tation and/or aggression are viewed as a source of significant concern and there is pressure to “do something,” at least until the behavior subsides or is eclipsed by a more salient event—such as the notable actions of another resident. Withdrawal, avoidance and increased periods of passivity are less likely to evoke a response in the short term. If these changes in Mrs. Smith’s appearance and/or behavior are sufficiently dramatic and continuing, they result in assessment for an underlying cause such as a urinary tract infection. If no treatable condition is

identified, normative expectations for her behavior shift to accommodate these changes.

Application of Recommendations (Table 1):

Recommendation 8 mandates two sets of actions. The first is the appropriate assessment, diagnosis and identification of target symptoms. There are well-established behavior-assessment methods that are ideally suited to generate the

communicated to other residents who also become agitated. Her care providers themselves can become frustrated, particularly when her agitation occurs at times when resources are stretched, such as shift change or when other residents are similarly displaying behaviors of concern. Unchecked, her agitation can escalate into aggression towards others, despite her general frailty. If Mrs. Smith becomes agitated when family members

community as well as the impact on the individual must be taken into consideration when developing a care plan to respond to BPSD.

In Mrs. Smith's case, it is evident that behavioral contagion is likely and inhabitants of the environment are emotionally and physically vulnerable. Thus, it is critical that care providers have the skills for effective crisis intervention and the expectation that crisis escalation is preventable with early intervention. Moreover, the organizational culture must support a quality-improvement philosophy that enables staff to share expertise, learn from experience and assist each other as needed to maintain a therapeutic rather than punitive milieu. There needs to be explicit discussion of the antecedents and consequences of Mrs. Smith's behaviors and a shared plan of action for prevention and de-escalation.

The CCSMH guideline^{2,3} similarly endorses the principle of first-line treatment by nonpharmacologic methods in general, as articulated in CCCDTD3 recommendation 9, as well as the caveat that concurrent implementation of pharmacologic and nonpharmacologic interventions may be necessary in situations where symptoms are particularly severe, as articulated in CCCDTD3 recommendation 10. Considerations of safety and risk management for the entire LTC community are

As Canadian demographics continue to shift, there will be increasing demand for the development of effective strategies for the management of severe dementia in LTC homes.

required information within the LTC setting.^{9,10} In Mrs. Smith's case, behavior assessment identifies agitation as the behavior of a particular concern, because it creates a risk to herself (she paces rapidly when agitated, despite her frailty and risk for falling) and others (she is at risk for bumping into and tripping over others). Behavioral analysis reveals frustration is a frequent precursor to her agitation and pacing, but the need or desire fueling her frustration is not always apparent and/or not always achievable, for example, when what she wants is something currently in the possession of another resident. Her apparent emotional distress is readily com-

are present, they blame themselves, feel helpless and experience reluctance to maintain their regular visiting schedule.

The second action mandated by recommendation 8 is the consideration of safety. Behaviors such as agitation, aggression, delusions and sexual inappropriateness create safety concerns. There is a risk of physical and/or mental harm to the individual presenting the behaviors, the target(s), and even bystanders. Harm may or may not be the object of the actor, but regardless, LTC facilities have a duty to minimize risk and ensure the safety of residents, visitors and care providers. Thus, the impact on the LTC com-

again relevant in determining when circumstances warrant a staged vs. concurrent intervention approach.

With respect to caregiver/staff education programs, it is a reality that LTC homes differ in their resources for educational programming and residents differ in whether they have family members and friends who are willing and able to participate in educational offerings. That aside, it is clear that lack of knowledge and skills can compromise resident care and safety and there is an urgent need for standards, strategies and further research on how to optimize the effectiveness of

knowledge utilization in the LTC setting. In Mrs. Smith's case, there are involved family members who have demonstrated their commitment to remaining involved with her and their need for education (they are distressed by her agitation). It is important that the LTC home make available to the family the information and training they require to enable and encourage them to stay involved with Mrs. Smith and contribute to her quality of life.

Conclusions

The issues that are unique to the management of severe dementia

in LTC homes are those that hinge on the intersection of population density, disease severity and caregiving resources (including staff ratios, education and norms around family participation in the therapeutic milieu). As Canadian demographics continue to shift, there will be increasing demand for the development of effective strategies for the management of severe dementia in LTC homes. Continued thoughtful analysis and discussion of the issues of safety, risk management and knowledge utilization will be essential to the evolution of care in this environment.

References:

1. Chertkow H. Introduction: The Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2006. *Alzheimers Dement* 2007;3:262-65.
2. Conn D, Gibson MC, Feldman S, et al. National Guidelines for Seniors' Mental Health The Assessment and Treatment of Mental Health Issues in Long Term Care Homes (Focus on Mood and Behavior Symptoms). The Canadian Coalition for Seniors' Mental Health, Toronto, 2006.
3. Conn DK, Gibson MC, Feldman S, et al. National Guidelines for Seniors' Mental Health: The Assessment and Treatment of Mental Health Issues in Long Term Care Homes (Focus on Mood and Behavior Symptoms). *Canadian Journal of Geriatrics* 2006; 9(2):S59-S64.
4. Turcotte M, Schellenberg G. *A Portrait of Seniors in Canada* 2006. Minister of Industry, Ottawa, 2007.
5. Herrmann N, Gauthier S, Lysy PG. Clinical practice guidelines for severe Alzheimer's disease. *Alzheimers Dement* 2007; 3(4):385-97.
6. Boller F, Verny M, Hugonot-Diener L, Saxton J. Clinical features and assessment of severe dementia: a review. *Eur J Neurol* 2002; 9:125-36.
7. Lopez OL, Becker JT, Sweet RA, Klunk W, Kaufer DI, Saxton J, et al. Psychiatric symptoms vary with the severity of dementia in probable Alzheimer's disease. *J Neuropsychiatry Clin Neurosci* 2003; 15:346-353.
8. Hogan DB, Bailey P, Carswell A, Clarke B, Cohen C, Forbes D et al. Management of mild to moderate Alzheimer's disease and dementia. *Alzheimers Dement* 2007; 3(4):355-84.
9. DK Conn, N Herrmann, A Kaye, et al. Mental health issues in long-term care facilities. In: (eds). *Practical Psychiatry in the Long-Term Care Home A Handbook for Staff*. 3rd Edition. Hogrefe and Huber, Cambridge, 2007. pp.1-16.
10. Lundervold DA, Lewin LM. *Behavior analysis and therapy in nursing homes*. Springfield, Illinois: Charles Thomas Publishers, 1992.