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Detecting and Managing Neuropsychiatric Symptoms in Dementia: What Psychiatrists Need to Know and Why

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This issue of the *Canadian Journal of Psychiatry* contains two review articles on the issue of neuropsychiatric symptoms of dementia. We welcome attention to this topic for two reasons. First, it is a reflection of the growing importance of seniors' mental health and geriatric psychiatry as our population ages. Second, it provides general psychiatrists with concise and helpful information about recent developments and controversies in recognizing and treating neuropsychiatric symptoms in dementia.

The disciplines of geriatric psychiatry and dementia care have been advancing quickly in the past five years. Subspecialty training in geriatric psychiatry was recognized in Canada in 2012, and since that time, 11 universities have opened formal geriatric psychiatry training programs in Canada. More than 180 psychiatrists—many of whom have been in practice for decades—have qualified with the new geriatric psychiatry subspecialty designation. Even so, we are currently at less than half of the benchmarks set by the guidelines for comprehensive services for elderly persons in Canada.[1] In most of the country, geriatric psychiatrists remain a scarce resource. Therefore, there is still tremendous need for general psychiatrists across the country to provide expert assessment and management of patients with dementia, particularly as the population ages and the prevalence of dementia climbs.

The first article in this issue reflects on the early presence of neuropsychiatric symptoms prior to the diagnosis of dementia and provides suggestions for using the symptoms as an opportunity for early diagnosis and intervention.[2] The second article focuses on the problem of widespread antipsychotic use in patients with dementia, a topic of significant interest to any psychiatrist working with older people.[3] Both of these topics are of importance to all psychiatrists.

Gallagher, Fischer, and Iaboni[2] argue that neuropsychiatric or behavioural symptoms, even in individuals with no or little change in cognitive functioning, can herald a neurocognitive disorder. This "precognitive" stage, with mood and sleep changes, anxiety, agitation, and apathy symptoms, is understood to have biological as well as psychological underpinnings. Pathological changes in the brain precede the onset of clinical dementia by decade or two.[4] Neurodegenerative or vascular damage disrupts frontal-subcortical circuits in the brain, affecting drive, affect regulation, salience, perception, and impulse control. The regulation of emotion and behaviour is thus subtly altered as cognitive performance begins to slip.

There is clearly value in considering whether late-onset psychiatric symptoms indicate the presence of a neurocognitive disorder. The prevalence of mild cognitive impairment (MCI) is about 18% to 35% in those older than 65 years.[5] While the overall rate of conversion of MCI to dementia is around 5% per year, in those who are exhibiting neuropsychiatric symptoms, 25% will convert to dementia per year.[6] Almost a third of people with dementia come to psychiatric attention prior to receiving a dementia diagnosis.[7]

However, vigilance for dementia must be balanced by the risk of mislabeling a primary psychiatric disorder as dementia, leading to the serious consequences of a neurodegenerative diagnosis when none exists in reality. For example, while individuals with late-life depression are at several-fold increased risk of dementia, most do not develop dementia.[8] Likewise, as many as one-quarter of people with MCI will convert to "cognitively normal" within 1 year.[9] As such, more study of the use of the new term *mild behavioural impairment* and its ramifications is warranted.[10] In the

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interim, the objective should be to treat the psychiatric disorder with longitudinal monitoring of cognition and function, keeping in mind that late-life psychiatric disorders are amenable to treatment even in the presence of cognitive impairment.[11]

Some may ask, what is the point of trying to achieve an early diagnosis? Fear, stigma, and therapeutic nihilism associated with a dementia diagnosis are widespread among health care practitioners.[7] But those of us who work routinely with older adults with dementia would argue that such pessimism is misplaced. Early diagnosis of a neurocognitive disorder provides an opportunity for intervention to slow progression and support function. It opens avenues of treatment and helps to direct psychosocial interventions to improve adaptation and quality of life for patients and caregivers. Hopefully, stigma will lessen over time as the population ages and that rate of early diagnosis increases.

The second article addresses the use of antipsychotic drugs in people with dementia, an important issue when thinking about safety and quality of life. The Canadian Choosing Wisely Campaign recently released recommendations that antipsychotics be avoided as first-line agents in the treatment of behavioural and psychological symptoms in dementia.[12] They recommend that nonpharmacological approaches should be tried firs, and that antipsychotics should be reserved for situations in which "the symptoms either cause significant suffering, distress, and/or pose an imminent threat to the patient or others." This perspective relates to regulatory warnings following evidence of increased risk of cerebrovascular events and mortality associated with antipsychotics in dementia, although these warnings have had limited impact on antipsychotic prescribing in this population.[13,14]

Kirkham, Sherman, Velkers, and Seitz[3] provide a meta-analysis of the prevalence of antipsychotic prescriptions in dementia and conclude that the pooled prevalence is 28.4% (95% confidence interval, 26.1% to 30.7%), with a prevalence of 35.9% among those living in long-term care settings. The use of antipsychotics is quite variable between institutions and between different prescribers, but certainly much higher in long-term care than in the community. They discuss the concept of an "inappropriate use" indicator used by the Canadian Institute of Health Information (CIHI), which includes the assumption that unless one has schizophrenia, Huntington disease, delusions, hallucinations, or is "at the end of life," antipsychotic use is potentially inappropriate. Using that assumption from CIHI, Kirkham et al. report that the rate of potentially inappropriate use is 27.5% in long-term care, which is disturbingly close to the overall prescription rate found in their meta-analysis. If that estimate is correct, the troubling implication one might draw is that almost all antipsychotic use in dementia is inappropriate! However, as the authors suggest, there are challenges in accurately measuring antipsychotic use and in interpreting the "appropriate" rate. Kirkham et al. discuss regulatory, educational, and clinical approaches to reducing antipsychotic use, as well as the potential impact of public reporting of antipsychotic use. All of these approaches show promise, but the results have been mixed.

Treatment of behaviours by addressing biological, environmental, and psychosocial triggers and perpetuators is a worthy approach, but nonpharmacological management poses significant challenges with respect to feasibility,[15] at least given the constraints of our current health care and long-term care systems. From a psychological approach, consistency of behavioural approaches is crucial to avoiding inadvertent reinforcement of undesirable behaviour. Hence, discontinuities in care and other challenges in long-term care settings are barriers to implementation. Other pharmacological options such as benzodiazepines and anticonvulsants are not usually helpful and have significant risks.[16] Some studies have shown an increase in benzodiazepine and trazodone use after regulatory warnings about antipsychotics, which raises cause for concern.[17,18] Antidepressants do show some evidence of benefit for behavioural symptoms,[19] although recent syntheses have questioned their value for the treatment of depression in dementia.[20]

Thus, antipsychotics remain one of the only evidence-based treatments available for the treatment of significant behavioural symptoms in dementia that are not responsive to nonpharmacological approaches. It is crucial that informed consent be obtained, that these risks are carefully monitored, and that efforts are made to discontinue the medication over time. The very real risks of not treating aggression and agitation in dementia include the risk of injury and death to the patients and others, eviction from homes and nursing homes, and lengthy stays in emergency rooms and hospitals that are less well equipped to help patients with dementia—this poses a substantial threat to dignity.

In summary, the skill to assess, diagnose, and treat neurocognitive disorders in older adults is increasingly valuable and necessary in Canada. The articles in this issue highlight the need for vigilance about whether new-onset psychiatric symptoms in later life are a harbinger of dementia and for vigilance about limiting the use of antipsychotics in dementia. Clinical practice guidelines from the Canadian Consensus Conference for the Diagnosis and Treatment of Dementia[21] and the Canadian Coalition of Seniors Mental Health[22] can be a user-friendly way for psychiatrists to harness the evidence base for psychiatric management in dementia while we wait for more definitive diagnostic and treatment strategies.

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