Over two thirds of the home health care population consists of adults over the age of 65, approximately 36% have some form of cognitive impairment, including dementia. According to the Institute of Medicine, the number of home health care (HHC) providers qualified to properly care for the older adults, including those with dementia, is inadequate.

Seeing the need to fill the knowledge gap, Abraham Brody, PhD, RN, GNP-BC, an assistant professor at the New York University College of Nursing (NYUCN) and associate director, Hartford Institute for Geriatric Nursing (HIGN), recently developed the Dementia Symptom Management at Home (DSM-H). The intent of the program is to help home healthcare agencies to improve the quality of care they provide to patients living with dementia (PLWD) and reduce caregiver stress and burnout.

The DSM-H is a synergistic combination of elements from several interprofessional training programs utilizing both online education, off-line mentoring, and evidence-based assessment tools and care plans to provide a structured way for HHC agencies to assess and manage pain and behavioral symptoms such as agitation, verbal and physical aggression, delusions, hallucinations, and sleep problems in PLWD and to also decrease their caregivers' stress, burnout, and burden of care.

"The DSM-H program strives to improve the care confidence of HHC clinicians, and in turn, the quality of care delivered to people living with dementia," said Dr. Brody. "We developed the DSM-H primarily for the HHC interprofessional team of RNs, physical therapists, and occupational therapists, as they are the largest provider groups in HHC and provide complimentary but different care to people living with dementia utilizing different bases of knowledge and expertise."

The development and implementation of the DSM-H is detailed in a study published in *Geriatric Nursing*, in which researchers tested the ability of their program to improve the knowledge, confidence, and attitudes of the HHC team members in assessing and managing pain, depression, and other behavioral symptoms in people living with dementia. The study, "Development and testing of the Dementia Symptom Management at Home (DSM-H) Program: An interprofessional home healthcare intervention to improve the quality of life for persons with dementia and their caregivers," also sought to examine if the DSM-H is a feasible resource to be used by interprofessional HHC teams.

The online interactive education modules were broken up into 45-90 minute blocks (total training time 4.5 hours) for ease of learning and to limit interference with work hours, and they were designed with a mixture of imagery and text with narrative voiceover. Content-specific questions that users had to correctly answer in order to proceed were included to reinforce the learning objectives of the modules.

"Education can change practice, but systems supporting the practice change help to embed and sustain that change," comments Tara A. Cortes, PhD, RN, FAAN, clinical professor of nursing, and executive director, HIGN at NYUCN. "To that end, we developed additional components for use in the DSM-H to reinforce the evidence based practices taught in the online training program."

Among these components, a "champions program" was implemented to develop clinical leads and mentors within the agency. Champions were
identified as those with an interest in the clinical care of dementia patients, who were well-respected role models to their peers within their respective fields and organizations, analogous to the Geriatric Resource Nurse Model used by NYU Nursing’s NICHE Program.

Champions received about 15 hours of in-person training provided by two experts in the assessment and management of dementia. All clinicians receiving the online training were notified of the identity and role of the champions within the online training program.

In the study, knowledge, confidence and attitudes regarding the assessment and management of behavioral symptoms in PLWD was measured before and after completion of the online training portion of the DSM-H. The pre-assessment showed clinicians to have limited initial knowledge and confidence toward identifying and managing pain, depression, and behavioral symptoms. The research noted that occupational therapists showed the greatest knowledge, attitudes and confidence prior to implementation, and physical therapists the least.

The researchers noted that an extraordinarily high number of people who were approached were willing to participate in the pilot. Overall, 191 RNs, physical therapists, and occupational therapists saw the DSM-H through to completion, 83 of whom also completed the research survey associated with it. When comparing the before and after, there was significant improvement in pain knowledge (5.9%) and confidence (26.5%), depression knowledge (14.8%) and confidence (36.1%), and neuropsychiatric symptom general knowledge (16.8%), intervention knowledge (20.9%), attitudes (3.4%) and confidence (27.1%).

"We know that when clinicians aren't confident, they revert back to what they normally do, which can inhibit practice change when there isn't confidence behind their knowledge," explains Dr. Brody. "Our study shows this disseminable program proved to be implementable and improve clinician's confidence and knowledge in caring for PLWD."

"We encountered very high levels of enthusiasm,” said Dr. Brody. "There's a significant need and nothing out there for HHCs in geriatrics, let alone dementia. One of the post-test questions was how well was the knowledge was directly applicable to their practice, and 97% said they found applicable and would use in their practice."

The researchers note that there is a significant need within HHC agencies to improve the care provided to PLWD, a fast growing segment of the population with specific care needs. The DSM-H may help HHC agencies to fulfill this need, and therefore requires further study to test its ability to improve patient and caregiver outcomes.

"Sadly, the number of people living with dementia is only expected to rise over the next several decades," says Dr. Brody. "This underscores the need to provide evidence-based, patient and caregiver centered care to this population to prevent institutionalization and hospitalization."


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