

and individuals who want to work hard and expect a challenge coming to our pool. I have also noticed that long-time aqua fitness attendees are working harder than ever before and finally started seeing some longawaited results.

If you want to attract a different clientele to your aquatic programs, it may be time to expand your training formats to include high intensity, athletic workouts.

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Leaving Dementia Behind

By Teresa Sawyer & Stacy Lynch, PTA

I heard him before I ever met him. In the memory care unit where I work, I walked around the corner to see what was going on and there he was, sitting in a wheel chair with his long, muscular limbs flailing, eyes flashing with anger. The caregivers, standing a safe distance away, were consulting with each other about how to redirect him. His arms and legs were swinging and his body writhing. A tall,

muscled man was having a tantrum. A supervisor was called for a PRN; something had to be done. Other residents were becoming upset and agitated at the commotion.

This was Mike, our 67-year-old Memory Care resident with dementia. He had moved in over the weekend. I later learned that Mike had been a linebacker for a professional football team. His sheer size and speed had stopped many elite athletes in his day. Having a top line athlete in our community was unique; from time to time,

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he would have well-known former teammates come to visit. Mike also had a loving and devoted family. Their frequent visits always brought smiles to Mike's face. When he saw his family, Mike's eyes softened and his body relaxed. His tone of

voice turned tender and, though his words were jumbled, his family could infer his overall intent.

One of the goals within our Memory Care community is to get to know what the residents loved to do before their diagnosis of dementia, which allows us to provide meaningful activities. We discovered that Mike and his family loved to swim and had spent countless vacations near the water. It was then that we decided to introduce Mike to our aquatic program for those with dementia.

A challenge of long-term care is keeping patients physically active. Lack of exercise causes physical, cognitive and functional decline. Fall risks and fractures increase due to reduced muscle endurance and strength. Recently, Boston University's renowned Framingham Heart Study concluded that a lowered cardiac output increases the speed that a brain ages. A study published in the International Journal of Aquatic Research and Education in 2009 highlighted the many benefits of immersion. The beauty of aquatic exercise is that when one is immersed in chest depth water, cardiac output increases up to 35%. The hydrostatic pressure of the water improves circulation and increases peripheral blood Deeper respiration and stronger contraction of the intercostals and diaphragm occur in immersion. Further, the blood can absorb more oxygen and there is an effective cleansing of waste in muscle and tissues through the gentle massage of the water.

Another challenge in the aging brain is changes in behavior and mood. In fact, at least 90% of people with a form of dementia will develop behavioral and psychological symptoms. Immersion facilitates relaxation and calms the autonomic nervous system. There is an increased sensory input from being in a warm water environment that stills and quiets mood.

For these reasons and more, we decided to put Mike into our warm water pool to see if we could improve his quality of life. We did so with the guidance of Stacy Lynch, the primary therapist involved in the first published case review on aquatic therapy and Alzheimer's disease. Stacy, in the process of publishing a second case review, has been a strong advocate for aquatic programming for long-term care residents, primarily those who are in moderate to late stage dementia. Stacy states, "I always find it odd that aquatic therapists recognize that aquatic work benefits the minimally responsive pediatric patient with behavioral challenges. Why isn't this therapy being readily offered to the long-term care population with similar struggles?"

There were significant barriers to getting Mike into the pool. But when we got him from his wheelchair into the pool, Mike's demeanor changed quickly and remarkably every time. He smiled and began to show us that he liked being in the pool. He stood independently and later learned to ambulate in the pool without assistance. He treaded water, laughed, and began cracking jokes. Once, when his wife came to join us in the pool, Mike began to flirt with her and he became very playful. This change in his demeanor and activity level lasted about two hours after exiting the pool.

After one memorable pool session, he changed out of his suit into dry clothes, asked for his comb, stood independently out of his wheelchair, groomed and admired himself, and asked for his cologne. Although he reverted to his agitated behavior later in the day, his wife and our team marveled that for a few hours Mike was behaving like any "normal" man would without dementia.

I am sad to say that Mike eventually had to move out of our community. I look back with fondness at the fun and joy that our team and his family had with Mike in the pool. We felt privileged to have seen a glimpse of the old Mike – the real Mike. We met the flirtatious, fun loving, athletic Mike who enjoyed being with people, especially his wife. The aquatic environment enabled Mike to move without fear, to laugh, and to experience being free. In the water, Mike left dementia behind.



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Stacy Lynch, PTA, CPT, is the organizing chair for the International Conference for Evidence Based Aquatic Therapy: Wading Deeper Into Research and Implementation, being held April 14-16, 2018 in Las Vegas. See www.ICEBAT.US for more information.

