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Pilot Project Research Report
Perceived Benefits and Barriers to Aquatics Program Participation

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Summary

This qualitative study examined perceptions of the benefits and barriers to aquatics participation among persons with MS. Study participants were involved in a range of aquatics programs, including MS-specific aquatics classes, deep-water aerobics, general low-impact water aerobics, lap swimming, and U.S. Masters swim programs. The study revealed that MS Society Chapters, friends, and family were important sources of information regarding local aquatic opportunities. Receiving information from the MS Society or from personal acquaintances increased participants' comfort with trying the pool or program. Participants reported multiple physical, social, and psychological benefits to their aquatics programs. The physical benefits included reduced pain and fatigue, weight loss, and increased strength and endurance. Social benefits included a feeling of camaraderie at the pool, social opportunities with classmates, and the ability to engage in more social activities with family members. Psychological benefits ranged from being "up" or recharged after each workout, to a feeling of control or taking charge of one's body or illness, to establishing a distinct identity as a "swimmer."

Participants noted, however, that participating in an aquatics program required overcoming several barriers. For many, the initial barrier was embarrassment about their appearance or physical disability. These participants noted that this embarrassment quickly disappeared when they encountered an accepting atmosphere at the pool facilities and the range of health issues found among others at the pool. An ongoing challenge for many, however, is the physical energy required to navigate from the parking lot to the locker room and then to the pool. At some pool facilities, the distance of handicap-designated parking spaces, the lack of family locker rooms, and the barriers to scooter use within locker rooms added to the exertion required to participate. Participants noted a key to successfully participating then is to prioritize the aquatics program over all other activities, including doctor visits. Participants also scheduled time to rest and avoided other strenuous activities on aquatic days in order to ensure they had the energy to regularly attend their aquatics program.

Scientific Summary of Research Progress

The goal of this qualitative study was to examine aquatics participants' perceptions of the benefits of their pool-based exercise, their motivations for starting and continuing with programs, the barriers to participating, and strategies for overcoming these barriers. This report provides a summary of the as yet unpublished key themes that emerged from participants' responses on these issues. Several publications are being developed that will explore these themes in greater detail.

Methodology

Forty-five persons with MS who had participated in an aquatics exercise program within the previous six months completed the study's telephone interview. The 60-90 minute interviews were recorded and transcribed. Interviews were thematically coded using Atlas.ti, a qualitative data management program.

Demographics

Thirty-five participants (78%) were female. The mean age was 54.9 (SD 9.5). On average, participants had been diagnosed with MS 16.3 years (SD 9.0), with the majority (n=30; 67%) reporting relapsing remitting MS. Participants had been participating in aquatics exercise for a mean of 4.6 years (SD 5.5). Participants reported a range of aquatics programs, including MS specific classes, general aquatics programs (deep and shallow water), lap swimming, and U.S. Masters swim programs, with seven (15.6%) reporting more than one type of aquatics program. Participants' discussions of their motivations, challenges, and strategies were relatively similar, regardless of the type of aquatics program. For purposes of this report, then, the phrase "exercise program" refers to both MS-specific classes and other water-based exercise.

Getting started: personal invitations

The most frequent reason for starting a water-based exercise program was having received a personal invitation to join a program or having received unsolicited information from the local MS chapter regarding programs. Whether invitations were extended by other persons with MS, persons who engaged in water-based exercise for other health conditions, or the local MS Society Chapter, personal referrals led participants to feel more secure in attempting the program.

Program recommendations often came at a time when participants were feeling the need to "do something" or they were finding other exercises were no longer suitable, e.g., one participant reported being unable to keep up with the tight timed circuit training at a local private chain, another participant reported feeling too "tippy" in a yoga class. As one participant explained, "one of my neighbors had gone and told me about it and would talk about how much fun it was. And I thought that this might be something I could do because I knew I needed to be exercising and I wasn't doing any exercise. And so I thought I'd just try it out and after the first month or so, I realized it was helping me and it just felt good to be in the water and to be moving around. Um, so I've been going ever since."

Perceived Benefits

Participants uniformly indicated that the most immediate benefit to pool-based exercise programs is that the programs provide a way to regularly engage in a "safe" physical activity. For many, aquatic exercise is the only way they feel they can exercise without pain, overheating, or fear of falling. As one participant expressed, she can "exercise without feeling bad while doing it." Another reported, "It's just, it feels really good. It is something I can do where I don't wear down because the water temperature is just right." This regular exercise in turn has led to a range of physical, psychological, and social benefits.

The perceived physical benefits of aquatic exercise included both the reduction of MS-related symptoms, including reduced fatigue, spasticity, and pain and traditional exercise-related benefits,

including weight loss, increased strength and endurance, and enhanced sleep. Several participants noted that these physical changes led to substantial quality of life improvements, allowing the participant to engage in more social events that required exertion and to complete chores that contributed to the participant's sense of contributing to the household. Several participants also noted lower reliance on pain relievers and muscle relaxers.

A second consistent benefit that participants reported was the social element of their exercise program. Social activities, e.g., brunches, lunches, or movie outings, were formally and informally organized by class members and instructors. Notably, even those who indicated no such events reported a feeling of camaraderie occurs in the locker room and within the pool. Indeed, both lap swimmers and organized class participants reported that this camaraderie and the feeling they would be missed if they didn't attend in part motivated their continued participation. Participants further revealed that having a consistent, engaged instructor contributed heavily to this feeling; instructor turnover and instructors who appeared uninterested in individual members undermined a feeling of belonging and class community.

The psychological benefits reported by participants ranged from generally feeling "up," "recharged," or "virtuous" to feeling "free," "human," or "normal." For some the feeling of normalcy or being human arose from the ability to engage in a "normal" social activity, while others specifically noted the water's buoyance allowed for a range of movement, including walking, which was not possible on land. In addition, several participants expressed that the most important benefit of their exercise program was that it established an alternative identity to MS, that of a "swimmer," or as someone who takes care of themselves. Participating in the program also provided a focus and feeling of control. Participants often noted that the nature of MS means that they cannot know whether their exercise has or will influence the progression of their illness, but the exercise nonetheless provides an important sense of taking action in the face of the unpredictable.

Barriers to Participation

Study participants revealed a range of barriers to participation that had to be overcome in order to engage in aquatics exercise. Many noted initial embarrassment about wearing a bathing suit or using a public locker room, but the accepting atmosphere of the pool facility and the realization that others in the class, whether it was an MS class or general aquatics class, had similar health issues minimized participants' embarrassment.

Despite many facilities' attempts at physical accessibility, several participants indicated that physical barriers were an ongoing struggle. Common physical barriers included the total distance from handicap parking spots to the pool (which was particularly problematic for those who had classes on university campuses), the inability to use a scooter when moving from the locker room to the pool, and the absence of family bathrooms in which a spouse could assist with dressing. Each of these barriers increases the physical workload required to participate in the aquatics program. Participants described having to anticipate the effort required to get to and from the class and into a bathing suit, along with the exertion of the program itself.

Strategies

A central theme among participants' discussions of their strategies to ensure their ability to attend an exercise session is that the aquatics program is the focus of their week. All other activities, including doctor appointments and social events, are scheduled around the exercise program. Many participants also avoid planning strenuous activities for the day of their exercise program in order to ensure that they will have the energy to go to the pool. Participants noted that family support of the aquatics program is crucial as spouses and children also have to adjust their schedules. Flexible work schedules were critical

for those still formally employed. This flexibility included being able to leave early or to not return to work if a class was particularly fatiguing.

Because getting to and from class, along with participating in the class often required much physical effort, a second important strategy was allowing time to rest after the class. Interestingly, many participants noted feeling that fatigue after class was a “good tired” that they contrasted with the fatigue they attributed to their MS. Many felt recharged despite the need for a short rest after class.

Conclusion

Participants’ responses indicate that MS Society chapters, friends, and family play an important role in encouraging aquatics exercise participation. Program information from known, trusted sources informally validates the suitability of programs. The variety of aquatics programs that participants report suggests that the distribution of information about area aquatics opportunities, not just those designed for MS, could encourage broader aquatics participation. For these participants, many types of aquatics program clearly have multiple physical, social, and psychological benefits that have contributed greatly to perceived quality of life. Among the most striking outcomes of participation is the formation of an identity as a “swimmer” or “fit” person; achieving this identity then encourages continued participation. Attention to instructor characteristics (e.g., enthusiasm and interest in individual participants) and helping participants through physical barriers (e.g., parking distances, scooter navigation, family bathrooms) of “accessible” facilities can further facilitate successful program participation.