

## Guest Editorial

# A global perspective on aquatic physical therapy

Aquatic physical therapy (APT) is a relatively small part of physiotherapy, however there is an increasing global interest in APT and a growing body of knowledge underpinning APT and Irish physiotherapy researchers are well represented among the published work in this area.<sup>1,2,3,4,5</sup> This guest editorial will highlight some of the global and professional developments that have taken place in APT in recent years.

### AQUATIC PHYSICAL THERAPY INTERNATIONAL – A WCPT NETWORK

In July 2010 the board of the World Congress of Physical Therapy (WCPT) approved a new network for APT—Aquatic Physical Therapy International (APTI). The mission statement of APTI is to promote evidence based APT around the world. While only recently approved, the network started informally at the WCPT conference in Vancouver in 2007, when some attendees, with a particular interest in aquatic therapy, organized the first informal meeting. Irish physiotherapy researchers were among those gathered. This meeting and subsequent discussions resulted in the formation of a core group of aquatic therapy professionals which defined the objectives for APTI, these are to:

1. Promote evidence based practice and clinical reasoning in APT
2. Collect information on best clinical practice, safety and hygiene standards.
3. Provide a forum to discuss clinical practice and management issues in APT
4. Promote collaborative research and facilitate communication on research topics and outcomes.
5. Support the development of aquatic physical therapy in low-resourced countries
6. Promote and support the development of educational materials and professional development in APT
7. Liaise and collaborate with other groups of aquatic therapy professionals.
8. To become a subgroup of WCPT

The WCPT website (<http://www.wcpt.org/apti>) and the related forum offer the opportunity for therapists to discuss topics related to the APTI objectives and provide information about national aquatic physical therapy groups. Educational resources such as aquatic journals (The International Journal of Aquatic Research and Education, The Journal of Aquatic Physical Therapy and Aqualines) are also available from the website.

As there is much variation in how therapy in water performed by physiotherapists is defined around the world one of the initial tasks of APTI was to define terminology. Similarly the group had to be given a name that was globally acceptable. In order to be consistent with the World Confederation of Physical Therapy the name decided upon to describe therapy in water was 'Aquatic Physical Therapy'. This reflected moves by *The Aquatic Therapy Association of Chartered Physiotherapists (ATACP, United Kingdom)* to move from the name 'hydrotherapy' to 'aquatic physiotherapy'. The ATACP stated the rationale for the name change was firstly to be consistent with the international term 'aquatic physical therapy' and secondly to make use of the protected term 'physiotherapy'.

The ATACP defines 'Aquatic Therapy' as: A therapy programme

utilising the properties of water, designed by a suitably qualified physiotherapist specifically for an individual to improve function, carried out by appropriately trained personnel, ideally in a purpose built, and suitably heated hydrotherapy pool.<sup>6</sup> Similar definitions have been used by the South-African Aquatic Physiotherapy Group<sup>7</sup> (2009) and the Dutch Centre of Allied Health Care (NPI).<sup>8</sup> However perhaps the most comprehensive definition of APT is given by Jenny Geytenbeek, author of the *Aquatic Physiotherapy Evidence-Based Practice Guide*,<sup>9</sup> published by the National Aquatic Physiotherapy Group of the Australian Physiotherapy Association, which states;

*'Aquatic Physiotherapy refers to the special practice of physiotherapy, with therapeutic intent toward the rehabilitation or attainment of specific physical and functional goals of individuals using the medium of water. It differs from the more generic term hydrotherapy which connotes any water-based therapy conducted by an array of professional specialties, including immersion in warm water, immersion in mineralized water (balneotherapy and spa therapy), immersion in mechanically turbulent warm water (spa therapy), application of pressurized water to the external body (whirlpool), application of warm water into the colon (colonic irrigation), the application of water of various temperatures and pressures via showers and towels (Kneipp therapy), and movement-based therapy in water (hydrokinesiotherapy). Aquatic therapy similarly refers to water-based activity of therapeutic intent, is common among American literature, and includes the practice of e.g. physical therapists, exercise therapists, nurses and exercise instructors. Aquatic exercise has the intention of fitness training in both healthy and symptomatic individuals, and water exercise is its synonym.'*

The developments at WCPT stem from a European initiative started in 2007 at the Katholieke Universiteit Leuven, Belgium. In 2007 the University launched an Erasmus IP (intensive programme) course with partner universities in various EU countries. The 14 day course 'AquaEvidence: the evidence of aquatic therapy in persons with disabilities' aimed to provide students with a comprehensive understanding of evidence based practice with respect to APT. Work stemming from this course has subsequently been published.<sup>10</sup>

A further course will be running in 2012—'AquaOutcome'. One of the outcomes from this programme will be the identification of a core set of outcome instruments that should be used in aquatic therapy research. Information will be provided at 'AquaEvidence' [www.aquaevidence.eu](http://www.aquaevidence.eu)

Aquatic Physical Therapy is an extremely versatile therapeutic intervention that can be applied at all three dimensions of the International Classification of Functioning, Disability and Health.<sup>11</sup> A fourth dimension that should also be considered is Quality of Life, as improving Quality of Life is an important goal in APT. Beyond the traditional uses, APT might also be appropriate in the treatment of the 'epidemic' of modern life-style conditions as recently highlighted in *Physiotherapy Ireland*.<sup>12</sup> The challenge of 'life-style diseases' and the role of physiotherapy was also highlighted in a special issue of *Physiotherapy Theory and Practice* entitled 'Physiotherapy practice in the 21st century: a new evidence-informed paradigm and implications'. Issues such as nutrition and weight control, sustainability of physical activity and exercise, management of sleep disturbance, and life stress were identified as major challenges that will face—and

are facing—physiotherapy practice in the 21st Century. Evidence is still scarce, but issues such as obesity,<sup>13</sup> exercise adherence,<sup>14</sup> management of sleeping disorders<sup>15</sup> and stress reduction<sup>16</sup> have all been addressed in the aquatic therapy literature. Aquatic Physical Therapy is an area of practice that can be utilized to help address some of these major challenges that face the profession and society at large. With the development of APTI, under the auspices of WCPT, those who work in aquatic therapy are preparing to meet future challenges on a global scale.

A network meeting of APTI has been scheduled for the WCPT conference June 2011 in Amsterdam, Irish physiotherapists are most welcome.

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