The Benefits of Aquatic Therapy to the Ageing Population
• It is also beneficial for medical conditions that affect joint or muscle integrity, such as arthritis, amputation, muscle spasms, chronic pain, post-polio syndrome, pregnancy, and post-mastectomy.
Less Joint Impact

- Exercises done in water are considered a low-impact activity. The water's natural buoyancy removes the stress and pressure off your muscles and joints, states the Mayo Clinic.
• Water provides a gentle way to exercise your joints, states the Arthritis Foundation. Exercises that caused too much joint stress on land can be done in water. Lowering your joint stress level will help lower your pain level. Aqua therapy helps release endorphins, a natural pain killer.
Natural Resistance

• Water's natural buoyancy helps you do resistance exercises. On land, you would do resistance exercises by lifting or pushing weights, according to the National Institutes of Aging. Water provides resistance without the possibility of falling.
• Falling is a concern of many patients when exercising on land, especially if you elderly. Balance becomes a major concern when dealing with an ageing population.
Increase Joint Flexibility

• Aqua therapy in warm water can increase flexibility. On land, your joints may be too stiff and painful to move. Aqua therapy lessens your stiffness, decrease your pain level and make it easier to move your joints and improve your joint flexibility, according to the University of Washington Orthopedics and Sports Medicine. Warm water is used to help patients deal with arthritis.
Warm water therapy (WWT) allows patients to begin therapy as soon as they are immersed in the water, foregoing the need for lengthy "warm-up" sessions. Physical therapy in warm water environments becomes more efficient than physical therapy on land since there is less time spent in just getting comfortable. In warm water therapy, treatment can begin almost immediately.
Aquatic therapy also utilizes hydrostatic pressure to decrease swelling and improve joint position awareness. The hydrostatic pressure produces forces perpendicular to the body’s surface.
• This pressure provides joint positional awareness to the patient. As a result, patient proprioception is improved. This is important for patients who have experienced joint sprains, as when ligaments are torn, our proprioception becomes decreased.
• The hydrostatic pressure also assists in decreasing joint and soft tissue swelling.
• Lastly, the warmth of the water experience during aquatic therapy assists in relaxing muscles and vasodilates vessels, increasing blood flow to injured areas.
Gravity may be the biggest stumbling block to proper, sustained and meaningful exercise regimens for the elderly and the disabled.
• On the other hand, the resistance that gravity provides can also be the most meaningful vehicle for strengthening the fitness of these two patient groups most affected by the limits that gravity places on them due to the decreased weight-bearing load on joints.
• Proper use of aquatic therapy, namely rehabilitation, prevention, health and wellness increases the benefits it has on these two groups.
Benefits of Aquatic Aerobic Exercise

• The term aerobic means in the presence of oxygen and the goal of aerobic exercise is to train your heart and lungs to utilize and deliver oxygen more efficiently. Aerobic exercise is any activity that uses large muscle groups in a continuous, rhythmic fashion for sustained periods of time. A water temperature of 87 degrees is considered ideal.
Water walking with hand webs

Deep Water walking with hand webs

Arm exercise using hand webs
Arm exercise using water weights
Resistance exercise using a kickboard
Leg exercise using a noodle
• The variations of Aquatic therapy is in the thousands, using various types of equipment and exercises that go along with one another makes it useful for every age group and almost any condition needed to be treated.
Aquatic Therapy Techniques

• *Ai Chi*

• Created by Jun Konno of Japan, ai chi is a combination of deep breathing and slow broad movements of the arms, legs, and torso, using concepts of T'ai Chi, Shiatsu, and Qigong. Ai Chi is performed standing in shoulder-depth water with an ideal pool temperature of 88F to 96F.
BackHab

- This is an integrated program that the individual can do on his or her own. It was developed for people with back problems but is now being used by group programs for people with disabilities. Rather than focusing on healing one part of the body, all the body parts coordinate to work on healing and fixing the affected area. BackHab is an aquatic walking program using various strides to accomplish a variety of benefits. It is excellent for gait re-training.
Watsu

- Developed by Harold Dull, watsu (water + shiatsu) is a cradling, one-on-one program that is experienced in a very warm (approx. 94 °F degrees) pool. The client is held in the water by the practitioner and moved using the water to massage the body. Shiatsu (acupressure) points are stimulated along the meridians of the body during the massage. Watsu is used for pain reduction, increased range of motion, increased circulation, psychological problems, relaxation, and reduction of stress. It has been used in rehabilitation programs for people with orthopedic problems or physical disabilities, for pregnant mothers, and the elderly.
Bibliography

• http://www.livestrong.com/article/104715-water-aerobics-exercises-seniors/
• http://www.mayoclinic.com/health/aquatic-exercise/SM00055
• http://physicaltherapy.about.com/od/strengtheningexercises/a/aquatictherapy.htm
• http://voices.yahoo.com/the-benefits-aquatic-therapy-6756242.html