**Project Title:** What is the effect of water-based exercise on balance and mobility in older people?: A systematic review of randomised controlled trials.  

**Code:** GEO2

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<th>Host School/ Institute</th>
<th>Address: The George Institute for Global Health, Level 13/ 321 Kent St Sydney NSW 2000</th>
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<td>The George Institute for Global Health</td>
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<th>Project Type:</th>
<th>Literature Review</th>
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**Project Category:** Public Health, Ageing, Rehabilitation

**Project Keywords:**  
1. Ageing  
2. Balance  
3. Mobility  
4. Exercise  
5. Fall prevention

**Project Description:**

**Title:** What is the effect of water-based exercise on balance and mobility in older people?: A systematic review of randomised controlled trials.

**Background:** Maintenance of balance and mobility in older age is essential for maximising independence and preventing falls. There is now extensive evidence about the effect of a wide variety of exercise modalities on balance, mobility and fall prevention in older age. Water based exercise programs are often recommended for older people with musculoskeletal conditions due to arthritis, osteoarthritis and sarcopenia as water provides a supportive environment that is less stressful on joints. However, the overall effect of these water-based programs on balance and mobility is not clear.

**Aim:** To identify the balance and mobility-related effects of water-based exercise for older people.

**Methods:** The review will include randomised controlled trials evaluating water-based exercise interventions, with community-dwellers aged 60+ that include balance or mobility outcomes. Search and meta-analysis methods will be designed with reference to the Cochrane Handbook on Systematic Reviews. Review protocol will be prospectively registered with PROSPERO.

**Significance:** The results will synthesise evidence of the effect of water-based exercise on independence in older age. The results may have implications for the design of exercise-based fall prevention interventions.