

# M.Phil Research Project - Pam Smith

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## **Evidence Based Hydrotherapy - A Community of Practice Approach**

The Haywood Rheumatism Research and Development Foundation generosity has supported me to complete a postgraduate research project with 2 main aims:-

1. Identify and review the best available evidence for hydrotherapy in adults and children with inflammatory arthritis using a Critically Appraised Topic (CAT)
2. Explore how this evidence could be useful in clinical practice and services with a group of experts and managers within the National Health Service using a focus group methodology

Hydrotherapy utilises warm water which allows muscles to relax and the buoyancy of the water helps to support a patient's weight, relieving pain and enabling increased joint range of movement and muscle strengthening exercises to be completed in a safe and clinically supervised environment.

The CAT identified that:

- There is good quality evidence that hydrotherapy improves pain and function for adults with inflammatory arthritis in the short term. However there is a lack of long term data. This is comparable with land based exercises.
- There is some evidence that hydrotherapy and land based exercise has a beneficial effect on quality of life and disease outcome for children with Juvenile Idiopathic Arthritis (JIA) in the short term. There was no available evidence to justify hydrotherapy above land based exercise, or any long term data.

The focus group generated eight key themes which highlighted the limitations associated with the existing evidence, the need for qualitative studies and the importance of understanding barriers and facilitators in providing a complex service such as hydrotherapy in a complex environment such as the National Health Service.

In conclusion hydrotherapy appears to provide an enabling alternative when land based exercises are proving difficult to complete. No adverse effects were reported in the literature, which is important for patient adherence to treatment and self-management. The project identified an evidence to practice gap for hydrotherapy and that the current available evidence/knowledge needs to be mobilised to all stakeholders: patients, clinicians and commissioners, in a language that is understood by all, effectively and in a timely manner. This could then help to support the continued provision of this specialist treatment modality for patients with their ever increasing complex needs, in a culture of financial constraints.

The Critically Appraised Topic has been published on-line and disseminated to clinicians via the Keele University Musculoskeletal Research Facilitation Group. The results of the project have been presented to clinicians at the Best Practice Day at Keele University and will also be presented to the Haywood User Group and local commissioners to help support funding of the hydrotherapy service locally. On a national level, I have been invited to share my findings with the Chartered Society of Physiotherapy Special Interest Group in Aquatic Therapy / Hydrotherapy and would like to present the results at the British Society of Rheumatology Conference.



Seen in photo from left to right: Kay Stevenson (Research Supervisor), **Pam Smith**, Dr Andrew Finney (Research Supervisor) and Professor Krysia Dziezic (Research Supervisor)