This article outlines the value of documenting anecdotal (non-experimental) results obtained in aquatic practices such as those offered in alternative health and spa settings. It argues for the validity of such practices as therapeutic modalities, though they may not fit current scientific-medical models. Aspects of alternative practices that warrant further study are noted, with a view to developing an appropriate framework for documentation and research.

We live in a culture that increasingly demands codes of practice and licensing requirements intended ideally to safeguard clients who are seeking help with health problems. Scientific evidence is generally required to support any officially sanctioned therapeutic interventions.

Consequently, practitioners with clinical training are awarded greater credibility than those who do not have this background. A clinician is assumed to be able to: correctly assess and diagnose a client's health issue; determine a treatment plan following strict guidelines; provide supporting research evidence.

While, non-clinical practices might not adopt these strictly prescribed protocols, most do have their own established ethos. Could exclusion or adaptation of alternative aquatics practices that do not fit the conventional scientific model be limiting our ability to serve people in need, as well as discouraging or even preventing valuable novel investigations?
In addition to clinical applications, aquatic movement and bodywork practices are now an innovative part of spa-leisure and alternative health services. Can we learn from the experience of aquatics practitioners in these different settings? Will we accept that aquatic physical therapists and aquatic bodyworkers have a shared goal of more effective treatment and greater health benefit to their clients?

What is aquatic therapy?

A recurring discussion in aquatics circles is that of when practitioners who offer exercise or bodywork in water can use the word *therapy*, as in *aquatic therapy*, and when they should not. How we answer this will influence our attitude towards alternative aquatic practices, their therapeutic models, and their beneficial effects.

We can argue over semantics or we can recognize the value of exploring, with open minds and hearts, the differences and similarities between all aquatic practices, while bearing in mind shared goals. This article sets out to encourage those in clinical aquatics to appreciate the therapeutic work, and alternative models for healing, of their non-clinical colleagues.

In a clear, non-exclusionary discussion of the terms *aquatic therapy*/*therapist*, Andrea Salzman (Aquatic Resources Network) concluded that: ‘Different therapeutic disciplines and wellness/fitness instructors have unique (and sometimes mutually exclusive) things to offer the public’ (1.). However, they all have in common therapeutic intent.

Understanding the experiences and actions of *healthy* people may well provide the
solutions to problems faced by those who are unable or unwell. The natural affinity people have for water play, from fitness to pleasure is relevant to any study of water's therapeutic value. Preventing ill-health and maintaining good health are valid and valuable pursuits.

I have found it useful to make a differentiation between aquatic healing (non-medical) and aquatic therapy (medical), where healing refers to the restoration of health or overall well-being, which may or may not make use of medical modalities. Aquatic healing might then go beyond the physical (concerning itself with emotional and spiritual dimensions too) while clinical aquatic therapy usually does not.

Still, whatever we call what we do, therapy or healing (or even leisure), the impulse behind it is both to bring relief to those who are suffering and to enhance our mutual enjoyment of life. In the end, it is not possible nor universally effective to reduce our sense of what it is to be fully human - in sickness or in health - to any kind of model.

**How do we determine therapeutic value?**

When aquatic clinical therapists insist upon evaluation by evidence-based research only, they miss the unique inherent value of non-clinical approaches; and will ultimately be less effective in their therapeutic work.

I endorse the importance of assessment, documentation, and evaluation in the care and treatment of someone with a troubling health issue that they are seeking to alleviate and resolve; and I also suggest that the form this takes needs to be suited to the ethos of non-clinical practices whenever they are applied.
The desire to assess and evaluate the effectiveness of treatment is important for both clinical therapists and other aquatics practitioners. The latter group may, however, need encouragement in keeping ongoing and long-term records of their work, and this will be helped by acknowledgement of their different health models.

In an article on 'Evidence-based aquatic therapy', Janet Gangaway (2.) noted that:

'Anecdotally we can say "water helps everyone" - it's much harder to prove.' She advised searching the scientific literature (e.g. www.pubmed.com) for research evidence before doing anything with anyone in the water:

'Every professional that is providing an intervention (treatment, exercise session) in the hopes of making a positive change in their health status needs to be able to look critically at the published literature available so they have the answer to the question when asked....'

She added: 'If you find there aren't any answers, perhaps it needs investigating....' We can assume that the investigation she is referring to would be expected to fit the scientific model. However, standard clinical research stipulations have limitations, especially when it comes to certain alternative aquatic practices.

The areas of therapeutic value in aquatic bodywork that interest me, are not easily amenable to conventional scientific study. These include: the energetic qualities of water itself, the consciousness of both the practitioner and client, the subtle energy fields of practitioner and client and their interaction during a session, and psychosomatic reactions that sometimes occur during aquatic bodywork (3.).
Alternative practitioners tend to favor intuitive over cognitive approaches. To dismiss the therapeutic dimensions in which they work because they do not fit an evidence-based model of therapy, however, is to insist that practitioners potentially ignore their own impact within the therapeutic session, as well as many experiences that occur within it as a matter of course.

Denial of these components, in my experience, is not an effective way to do therapy. There is much that clinical and non-clinical practitioners can share, and the intuitive, energy-based, psychosomatic approach of alternative practitioners, although not generally amenable to evidence-based research, does have therapeutic value.

To share effectively, however, we have to stand on equal ground. Clinicians, in particular, will need to be willing to look beyond their own paradigms, the ways in which they have been trained to work, and the systems that they are required to abide by to keep their jobs or obtain funding. They could benefit from the understanding that not everything that is healing to their clients can be measured scientifically.

The pioneering works of such respected organizations as the Fetzer Institute (with the power of healing prayer) (4.) and HeartMath (with heart-based intelligence) (5.) have shown that it is possible to examine the behavioral, social, psychological and physiological pathways connecting non-traditional methods to health outcomes.

But the methods used by these groups are not strictly what would be called scientific by evidence-based standards, though they have been gaining increasing respect for their effectiveness. In order to consider the information from these groups, clinical therapists must make room for it by moving beyond a strictly evidence-based model of therapy.
The limitations of evidence-based research

The definition of evidence-based therapy given below, acknowledges that evidence-based methods do have limitations when it comes to health and well-being.

**Evidence-based medicine** (EBM) aims to apply evidence gained from the scientific method to certain parts of medical practice. It seeks to assess the quality of evidence relevant to the risks and benefits of treatments (including lack of treatment). According to the Centre for Evidence-Based Medicine, "Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients." EBM recognizes that many aspects of medical care depend on individual factors such as quality and value-of-life judgments, which are only partially subject to scientific methods. EBM, however, seeks to clarify those parts of medical practice that are in principle subject to scientific methods and to apply these methods to ensure the best prediction of outcomes in medical treatment, even as debate about which outcomes are desirable continues. From Wikipedia (6.)

Science depends on quantifiable measurement, yet so much that is important in healing or therapy cannot easily be measured or quantified. Evidence-based therapy is a concession by science to the subjective nature of the therapeutic experience. But it is incomplete without taking into account the subjective context of an individual's own process - which may or may not conform to the scientific norm.

Healing is indeed a highly subjective process and one-size does not fit all. Just because a given technique or procedure works for a majority of clients does not mean it will work in any given individual case. Conversely, what does work in a given individual case will often not be scientifically valid for a majority of clients.
Inclusion of the more individual, anecdotal, and idiosyncratic dimensions of research could well be relevant to more effective therapy. These are often the types of information that alternative practitioners are interested in, and routinely use in their practices, but relatively rarely document or report upon.

These are also often the types of information that clinical practitioners would like to incorporate into their practice, but can’t because of the strictures of an evidence-based approach that prohibits their consideration. Yet it is this type of subjective, anecdotal information that makes the experienced healer (whether clinical or non-clinical) effective, and exceptional, at what he or she does.

Alternative practices provide effective intervention through clarity of intent, close attention to subjective context, increased awareness of the impact of the therapist's mindset on the client, and intuitive flexibility in applying a broad range of skills. None of these fits conventional scientific research models.

In fact, evidence-based therapy is based upon a model that seeks, as much as possible, to negate the effect of the individual practitioner, including his or her capacity for imaginative and intuitive responses to the individual client.

Yet, we all appreciate that the researcher or therapist does influence the outcome of an experiment or session. If the 'experiment' is a therapeutic intervention, this is (or could be) a good thing. Is it useful to insist that good therapy ignore the skill, the experiential knowledge, and the consciousness, of the therapist?

Evidence-based therapy seeks to develop standardized protocols, applicable in situations where a given client fits a given profile. This model attempts to minimize risk to clients and liability for practitioners, but it may also stifle the particular healing capacity and therapeutic creativity of the individual healer-practitioner.
It is arguable that the most effective healer-practitioners are not those who adhere most dogmatically to protocols, but those who are able to bring the entirety of their training, and experience to bear spontaneously and instinctually in the moment, with regard to a unique therapeutic challenge.

A strictly evidence-based approach to the use of water-based therapies may seriously limit the potential therapeutic value of this work. If aquatic physical therapists are going to make a difference in the lives of their clients, they must feel encouraged to bring the whole of their individuality to their interaction with each client.

**Expanding the therapeutic potential of water**

Our studies of water as a therapeutic medium, could encompass not only physical/physiological benefits but also attempt to correlate these with psychological and spiritual aspects. They could also include practices that routinely employ intuition or imagination to elicit responses outside the normal realms of therapeutic benefit.

For many alternative aquatics practitioners, water is not only a bridge between energy and matter, but also between the conscious and unconscious minds, the rational and the emotional, waking state reality and altered states, and the subjective and objective realms.

Science is generally reluctant to cross this bridge, preferring its truth to be objective, conscious, rational and provable. Yet the healing process has a strong unconscious, emotional, irrational, non-material component. Many alternative approaches acknowledge and work with the last aspects intentionally.

Water is a medium through which these dimensions of the healing process can be explored and encompassed, but only if they are not systematically excluded by a strictly
evidence-based model of therapy. Water itself has qualities that are only just beginning to be recognized on the 'fringes' of science.

My own non-clinical aquatic bodywork practice is founded in Watsu - water shiatsu. Watsu draws on Zen Shiatsu - a Japanese healing practice that is based on energy meridians in the body. It appears that water enables these energy systems to be more easily sensed and accessed (but by humans not machines).

As I became more and more acquainted with the aquatic setting, I noticed that the human response to qualities inherent in water was just as significant as the techniques being used. This led me to the controversial studies concerning water memory and water's ability to transfer energetic information.

I discovered the work of so-called mystic scientist, Theodor Schwenk (7.), who described water as nature's ultimate sense organ; and the writing of the philosopher, Ivan Illich (8.), who believed that a utilitarian attitude towards water damages human sensitivity as well as the natural environment. These are just two examples of a wealth of information that falls outside conventional realms of investigation.

**Set and setting in subjective studies**

'Set' and 'setting' are established aspects of subjective information in psychotherapy, in particular in studies of altered states of consciousness. Set refers to the expectations, intention, attitude and personality of the client; setting is the physical and social context and the presence and attitudes of the practitioner.
As a practitioner of Watsu-type aquatic bodywork becomes more adept with their techniques and more sensitive in their awareness of the receiver, they not-infrequently witness 'unexplained' effects that arise out of the ways in which touch and movement are translated through the highly sensitive medium that is water.

Those who practice in a more methodical and results-orientated way are unlikely to create a setting that allows for this experience, which can be something akin to an altered state in both parties and is quite difficult to articulate in a rational way.

On the other hand, those who practice with the intent of invoking altered states, therapeutic imagery, or transformative experiences in their clients very often create a setting that enables this kind of work. To those who benefit from this kind of work, the effects are often profound and lasting.

Another parallel for aspects of alternative aquatics can be found in the therapeutic field known as body psychotherapy, in which the intrinsic somatic (embodied) unity (mental, emotional, social and spiritual life) of a person is recognized. This field has been richly informed by many non-clinical as well as clinical methods.

**A framework for documenting alternative aquatics**

If we are going to make room in our therapeutic model for the individual therapist, then we must cultivate a paradigm that is broad and flexible enough to encompass the subjective, the energetic, and the psychosomatic.

Altering a person's state of consciousness positively, restoring to vibrancy the subtle
energy field around the human body, relieving someone of an adverse psychosomatic reaction - all these lack widely accepted conceptual frameworks and study models.

They present problems of definition, measurement, reproducibility, evaluation, and so on. However, there are precedents in the fields of psychosomatics, psychoneuroimmunology and psychotropics, for example. There is certainly value in acknowledging the aspects of practice involved and gathering anecdotal data in the aquatics realm.

For alternative practitioners and their clients these healing experiences or events are real and sought-after outcomes.

Here is a brief outline of what might be important in conducting such studies of alternative aquatics:

- begin by identifying some of the positive to negative effects experienced by receivers and practitioners
- correlate these states with specific sequences of movement, stillness, breathing patterns, etc.

(However, most alternative practitioners might well agree that it would be counter-effective to turn the practice of working with people intuitively in the water into a universal formula.)

- find appropriate measures of these states that can be applied in a water environment
- demonstrate reproducible and lasting effects, defining what is beneficial (also neutral or potentially harmful)

(However, this is highly subjective. You wouldn't say, for example, that all people suffering
from depression could benefit from doing xyz, since depression is only an objective label for a deeply subjective experience.)

- evaluate the significance of the consciousness/other qualities of the receivers and practitioners

(It is not just the consciousness of the investigator that determines outcome, but the conscious AND unconscious exchange between the investigator and the 'subject'.)

- investigate the contribution of the water medium and its variables to the effects observed

Over several years of private aquatic bodywork practice (2000-2007), I developed some basic documentation to reflect my needs as a professional but non-clinical practitioner. This consisted of the items below. I am interested in exploring further the development of more comprehensive forms that alternative aquatics practitioners could use to document their assessments and record treatment plans.

Documentation package for aquatic bodywork practice:

* a variety of FAQs sheets
* a consultation questionnaire
* an evaluation sheet
* a research questionnaire

A fuller discussion of the themes in this article with examples drawn from physical therapy and alternative aquatics practices, presentation of a basic documentation package, and a compilation of 7 years of records based on this will be presented at the Aquatic Therapy

References

1. Salzman, A. 'Qualifications to Practice Aquatic Therapy: What Must I Do to be an Aquatic Therapist?' posted on http://www.aquaticnet.com/Article%20- %20Qualifications%20to%20practice%20aquatic%20therapy.htm


**About Sara Firman**

For the last 20 years I have explored alternative health practices (including a special interest in aquatics). My certificate from WABA after over 800 h of training says 'Watsu Therapist'. I prefer to call myself a facilitator. After learning some essential techniques, what I really know about aquatic bodywork came from 10 years of practice in different settings with different people having different needs.

I also have a degree and masters in Genetics (from Edinburgh and Cambridge Universities), and over 15 years career experience in scientific/medical publishing. This is by way of assuring my readers here that I am aware of the requirements of scientific research, and of the mindset behind that. I walk between worlds. Paper credentials have always mattered to me less than what we learn on the ground, in the water, in life.