Spa treatments as a potential tool in the rehabilitation of people with alcohol and drug problems: a personal perspective

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Abstract
There is a lack of non-pharmacological options for the treatment of people with substance misuse problems. However, service users often mention their use of steam rooms and home baths to help aid their problem of detoxification and aid relaxation of muscle cramps. These anecdotes prompted this current review, to establish whether spa bathing is used for this purpose and whether there is any evidence of its effectiveness. The review was carried out in 2003 and includes a literature review together with written and oral responses from individuals and organizations. The review provided an overview of the extent of uses of spa bathing and describes a variety of examples.

Keywords: Substance misuse, spa treatment, water therapy.

Introduction
This review starts by my own personal reflections and to make transparent any personal bias I may have when writing this review. The method of obtaining the data is discussed, followed by a focus on anecdotal evidence provided by authors, centres, and current experts and practitioners within the field of spa treatments. The review concludes with a list of main themes, followed by a conclusion outlining possible areas that might warrant further investigation.

The role of the literature review was to identify ‘spa treatments,’ which have been used for the rehabilitation of substance misuse. Positive results of this form of treatment could warrant further investigation.

The principal research question for this review was, “Have ‘spa treatments’ been considered in the rehabilitation of people with alcohol or drug problems?” For the purpose of this investigation the term, ‘spa treatment,’ included the use of water or mineralized water as the basis of the treatment for detoxification.
The primary outcomes aimed to identify the use of spa treatments in the rehabilitation of substance misusers. Further outcomes might include such effects as, pleasurable experiences, which have contributed to relapse prevention and an awareness of and improvement in the person’s sense of self.

**Personal reflections: in and out of hot waters**

As a child my parents would take me to the, ‘King’s Bath’ (which now lies as a central tourist attraction in Bath, North Somerset). The baths at that time were open to the public for bathing. Bath possesses the only hot springs in Britain, but it is by no means the only spa town. As part of my research I was to visit the Bath Spa Library, where my grandfather Mr Reginald W. M. Wright, was Director until his retirement in 1954.

I decided to see if he had conducted any research into the history of the Bath Spas. I found his unpublished book entitled, *In and Out of Hot Water*. He had, indeed, researched extensively much of the history, myths, and legends associated with the Bath Waters.

Coincidentally the timing of this research has corresponded with the new, ‘Thermae Bath Spa Project,’ being built with the aim of reconnecting the City with its naturally occurring thermal springs. In some ways, this review has also helped reconnect me with some of my historical roots.

**Method**

*Literature search*

The initial search included the use of the Medline Search Engine from 1989 to 2000, Embase from 1977 to 2003, Allied and Complementary Medicine Database from 1985 to 2003, and Cinhal databases 2001 to February 2003 all languages were included. Search words were combined in various combinations. Experienced literature searchers completed further searches together with a hand search of books and journals at the Bath Library and Mineral Hospital Library, mainly showed the historical use of Spas from the early 1800s to 1900s.

The many searches did not prove useful in producing the literature required, and mainly provided the context and history within which thermal waters had been used. Some of the literature was rejected as not totally relevant because it focused on, for example, immersion treatment for people with chronic liver disease, drinking cures by sulphurous water, rather than focusing on bathing or steam inhalation for the process of detoxification. Other articles proved too difficult to have translated into English and, therefore, remained inaccessible. It was decided to start contacting experts within the field of spa medicine, substance misuse, and complementary research.

Additional methods used were searching for worldwide organizations that may have funded spa research into substance misuse, writing to Spas that advertised helping people with substance misuse problems, advertising in SPA and associated journals for any unpublished research or anecdotal evidence, contacting UK rehabilitation centres to see if any used Spas as part of their treatment process.

*Identifying experts*

Contacting people who were knowledgeable and prominent in the field of spa medicine and/or substance misuse had a two-fold purpose. Initially to make people aware that a
literature review was taking place in the hope they may know experts who could help in this area, and to make contact with unpublished research within the field. In total, 18 experts were contacted and two authors of specific books on ‘Water Treatment.’

Fifteen of the people contacted replied to this request. Some responses provided anecdotal evidence of patients using this spa treatment for substance misuse, but only two were able to offer a specific reference to written evidence they are namely White (1998) and Altman (2000). It was considered that the anecdotal evidence was relevant and is addressed this later in the article.

Contacting spas

The aim of contacting Spas was to see if people were using them for the purpose of help with substance misuse. The website, http://www.thespasdirectory.com, allowed for searching under specific conditions. Twelve Spas were identified whilst searching under, ‘smoking, alcohol/drug abuse,’ criteria. All Spas identified were contacted; however, only three responded. None offered specific treatment, but said they had people who attended with substance misuse problems, although they had no specific expertise in this area with which to advise or treat the individual.

Contacting drug rehabilitation centres

It was decided to make contact with 21 substance misuse residential rehabilitation centres in the UK. These were picked at random from the first part of the directory (SCODA, 1997) between A and R alphabetically. Each centre was asked if they either used spa treatment as part of their regime or had heard of its use. None of the centres contacted used this form of treatment however, but they were interested in the research outcomes and future possibilities.

Results

Findings from interested parties

From the anecdotal evidence there was little to highlight any robust research into the area of spa treatment with substance misuse. Both White (1998) and Altman (2000) provided well-researched books.

White uses the sub heading, ‘Water and Inebriety,’ to discuss the various water cures used in American history. He mentions the flourishing temperance movement and how they had groups who were part of the, ‘cold water army.’ These men were said to be taking the ‘water cure.’

‘Water cure,’ in German is Wasserkur and it means a hydropathic institution.

The treatment involved drinking mineral water instead of alcohol. There were also Hydrotherapy Institutions, White (1998) says ‘Water cure institutions caught the attention of many alcoholics during the mid-19th century.’ He goes on to say the institutions served as a place where alcoholics could attend, but mask their true condition behind “... such vague labels as ‘neuralgia’ or ‘nervous exhaustion,’” because water cure institutes required attendees to abstain from popular stimulants like alcohol, tobacco, and tea. The facilities were often used as a place for detoxification.

White states, ‘The use of hydrotherapy in the treatment of alcoholism can be traced from the mid 19th century water cure establishments to the inebriate asylums, then onto the
early 20th century private sanitariums and insane asylums.' These treatments included the use of ‘steam baths, hot, cold and neutral baths, needle spray showers; hot and cold water sponging; douches; towel rubs; wet packs and frequent water drinking.’

**Detoxification**

Altman (2000) explores the use of both bathing and drinking thermal and mineral waters as a way of helping one’s body to detoxify. He believes this process helps the ‘body’s natural detoxification by stimulating the liver, the circulatory system and the digestive system, which helps remove toxins from the body.’ He cites research evaluated at the National Centre of Physical Therapy and Rehabilitation in Bulgaria.¹ Within this research he says ‘…hypotonic² waters and waters rich in calcium can help neutralizing the ill effects of certain types of drugs.’

Epstein (1978) carried out extensive studies on the profound effects of immersion on the human body. Later experiments were set up at the Bristol Royal Infirmary to test the hypothesis that, during immersion, there is an increase in urinary lead excretion. Although lead poisoning is very rare these days, the work indicated that immersion therapy in spas could be used as a detoxification process.

**Flotation**

The flotation tank is usually an enclosed chamber filled with 10 inches of warm saturated solution of Epsom salts; this sodium solution is so dense that when a person lies in it they float near the surface of the water. Hutchison (1984) describes how the experience of floating can be used to aid withdrawal symptoms. He argues that floating reduces the levels of ‘Such anxiety-related bio chemicals as norepinephrine³, which are released in great quantities during withdrawal.’ The author has gathered anecdotal evidence from tank centres in Princeton, New Jersey, and Philadelphia stating that float tanks are used by many alcoholics and drug addicts to ‘relieve the anxiety and tremors of withdrawal.’

Hutchinson states that floating can be used during the post-withdrawal state to help addicts avoid returning to their habit. He suggests that during post-withdrawal, addicts are unable to secrete the endorphins needed to experience pleasure and ‘by increasing endorphins, floating enables them to experience pleasure.’ Is the feeling of being suspended in a warm salt bath like a replication of early experiences of being cocooned inside the mother’s womb feeling safe and secure. Anecdotal evidence suggests that opiate users describe the physical sensation of taking heroin in similar terms.

The use of exogenous opiates (i.e. heroin, methadone, codeine) displaces the brains natural endorphins and blocks their production. The theory is that the recovery of natural brain chemistry may take far longer than stopping the drug use; consequently, anything that promotes the production of natural endorphins have value in the treatment of opiate dependence. This is presumably only after detox, as whilst the individual is still using drugs, the exogenous opiate will displace the natural one.

**Water, steam and herbs for drug treatment**

Anecdotal evidence came from both Dr Diwakar Sukul, the Director of the Kamkus Clinic in London, and Mike (no surname given) from the East West Detox Project in Berkshire. These are the only two centres in the UK where it was possible to locate the specific use of water treatments for substance use and addiction problems.
The East West Detox is a charitable trust, which was founded and established by professional workers in the drug field, who felt there was a need for a different kind of service provision concerning the detoxification and rehabilitation of problematic substance users. The centre created a new model of treatment that combines both eastern and western philosophies, as well as therapy and medicine. Their holistic programme combines herbal detoxification and rehabilitation. On their website (http://www.east-westdetox.org.uk/about.htm) they say that:

... unique treatment for substance addiction that has been carried out by monks at the Thamkrabok Monastery in Thailand since 1957. The detoxification process, using a combination of over a hundred herbs and plant extracts, takes only 5 days and is administered as a drink daily. This is complemented by other therapies including herbal steam baths, diet and nutrition with counselling and guidance.

Mike, a member of the organization, said he seemed to think that spa treatment in their use of herbal steam treatment was central to their work in Thailand. He was keen for his organization to take part in research, but acknowledged that it is often difficult to find a robust methodology model suitable for locating some of the softer outcomes reported through complementary treatments.

Dr Diwakar Sukul is the founder of the Kamkus Clinic. He has received international recognition for his pioneering work by integrating eastern and western treatment approaches for addictive behaviour problems. The clinic uses a multi-dimensional assessment tool, believing an individual's well-being is dependent upon the various dimensions of their life. The assessment takes into account the physical, mental and environmental health of an individual. People come to the clinic with a range of problems, which may include addiction to substances. The centre can refer someone for hydrotherapy/steam/ozone therapy.

Ozone therapy can be an ozone sauna, which involves sitting and relaxing in a steam cabinet just surrounding your body and limbs, but not your head, while ozone is pumped into the unit so the body is bathed in an ozone-oxygen steam mixture. The steam moistens and warms the skin, opening the pores, allowing the ozone to gently penetrate and oxygenate the tissues.

Both centres mentioned difficulty in fitting research into eastern treatments within a western research paradigm.

Secondary outcomes

‘Taking the Waters,’ is the title of an article by Trevelyan (1990) concerning her visit to the Institute of Rheumatology and Physiotherapy in Budapest. In the article she discusses the use of mud and water treatments to help relax joints and ease pain. She acknowledges that research is hard to come by, but she argues that the ‘... plaques that adorn the walls of the institute bear tribute to the healing powers of the thermal springs from grateful patients.’ This article reflected on the author’s experience of her visit to the institute and was not intended as a piece of robust research.

In and out of hot waters: personal reflection

My grandfather Reginald W. M. Wright seems to have developed a fascination with the link between the ritual and magical properties of the springs. I discovered in the archives of the...
Bath Library a large assortment of his unpublished papers and detailed maps showing where he felt Bath should excavate for further springs. He describes the Bath waters as the ‘Cauldron of Regeneration.’ Wright (1957, p. 35) My grandfather speaks of the various Celtic rituals involving casting of ‘nine sacred hazels,’ into the hot springs to keep them health giving and how its ‘divinatory qualities of the hazel generally associated with finding of water and the divining of certain metals.’

The reason why I am quoting this research in my review is not for just sentimental reasons, but also a sense of noticing how rituals are often associated with substance misuse. I have often heard users comment on the rituals of injecting or rolling a joint to share with friends. Perhaps the activity of the ritual activates as much pleasure as the drug itself induces? Could the magical and ritual properties of the spas healing properties through the ages be partly why they have attracted people wanting help with their addictions?

Contacting spas

Only three replies were received from the 12 spas contacted (each spa was emailed twice). All respondents said that people with drug/alcohol problems may use their facilities, but that this may not be disclosed to them and the addiction could be a secondary reason for their visit. The questions asked evoked responses from centres asking simple questions about the needs of substance misusers and possibility of hepatitis infection control risks. There seemed to be a lack of information for spa/health centres and some misinformation about how to work with this client group, which may explain why patients are not open about their condition. Education around hepatitis and working with people who have substance misuse problems could allow for these facilities to be further utilized.

Discussion

This literature review is unusual in that it has not discovered literature, which provides high quality, randomized clinical trials, clinical cohort studies or case controlled studies with consistent findings. This may initially seem disappointing; however, through the various discussions and communication a wealth of interest and knowledge has been discovered in this field of work.

The main themes and learning that have evolved from this review include the anecdotal evidence of the use of herbal steam and ozone therapy in current treatment of drug/alcohol misuse. This includes the current uses of spas to help relax joints and ease pain, and the use of floatation as a method of helping with withdrawal symptoms.

The lack of robust research into the clinical use of spas for the rehabilitation of people with alcohol or drug problems should be acknowledged. There seemed to be the need to establish an evaluation tool, which is sensitive enough to locate some of the softer secondary outcomes that spa treatments can generate.

The process of contacting spa centres uncovered a lack of knowledge on working with people with substance misuse problems, including fears on infection control issues.

Historical evidence was uncovered in America from Spas being used in the treatment of alcoholism, together with historical anecdotal evidence of rituals and magic associated with Bath Spa.

Perhaps the most powerful impact of this research was the personal journey of learning new skills and discovering old historical roots previously unknown to me.
The literature review set out to identify, ‘spa treatments,’ which have been considered for the rehabilitation of people with alcohol or drug problems. The information obtained has shown that Spas do have a historical connection with the treatment of substance misuse. This includes:

- the use of steam;
- drinking mineralized water;
- bathing in hot waters;
- floating in Epsom salts;
- ozone sauna;
- hot, cold, and neutral baths;
- needle spray showers;
- hot and cold water sponging;
- douches;
- towel rubs and wet packs.

It can only be hypothesized as to why the research was unable to locate any clinical research literature relevant to the subject. Instead, it has relied on individual’s personal experiences, historic text, expert testimonies, and transpersonal insights and theories.

**Conclusion**

Spas are used world-wide to help alleviate a range of health problems and ‘taking the waters’ has been valued for centuries here in the UK as part of a cleansing and detoxifying process. Water has been used in two ways internally since the early 19th century in specific relation to substance misuse and, secondly, water remains a component of some external regimes in the 21st century, but the evidence as to the effectiveness of these is for most part anecdotal.

The research suggests it is anecdotal because:

- research paradigms of the west may be incompatible;
- difficulty in securing funding into spa research;
- lack of publication does not equate to lack of evidence.

Despite lack of ‘hard’ evidence, it is apparent from responses to broader areas of search that there is considerable interest in this approach and sufficient anecdotal support to recommend further investigation. Perhaps the answer cannot currently be found because the question proposed in this review has not been asked.

The only conclusion to this review is cited in the anecdotal evidence stating that spas have been used for the treatment of substance misuse. This could be seen in the current work carried out by the use of ozone therapy by the Kamkus Clinic and steam treatments, which are core to the treatment used by the East West Detox Project.

Authors who write on the subject of spas and water treatment mention the properties of using spas to both detox the body, and aid in the process of anxiety and tremors within withdrawal and relapse prevention. The use of floatation was cited as a treatment that provided pleasure by reducing the amounts of noradrenaline present. The process of floating was said to increase endorphins and, therefore, experience the pleasure that previously the drug may have given the user.
It could be acknowledged that lack of knowledge and pre-judgement around the issue of substance misuse and infection control may be preventing the spa health centres taking an interest in working directly with this client group. Further research could be initiated to discover what the specific learning gaps are possibly preventing clients accessing their services.

The historical evidence provided by White (1998) suggests that Spas were a place where people who had addiction problems could detox and rehabilitate, perhaps by using other conditions like neuralgia and nervous exhaustion to disguise their true problem. Whereas Altman (2000) writes about the use of spas to help neutralize the ill effects of certain drugs and stimulate liver detoxification. Perhaps, in the future, a substance user would be able to obtain a specifically chosen combination of salts from the treatment agencies to place in the bath to replicate the processes in spa centres.

The suggestions above lack robust scientific research; however, there was a genuine interest in further research being carried out. This may require a new research paradigm to be developed if eastern treatments are to be researched within a western methodology. It is hoped this review may contribute towards the National Treatment Agency Directives in identifying research gaps and understanding how perhaps a local resource could be further utilized as a treatment option.

In 1976, the Bath council closed the spa treatment centre, which then altered Bath’s role as a spa resort. It is hoped that the new opening of the ‘Thermae Bath Spa Project,’ could regenerate interest in spa treatment and provide a much needed research/treatment facility. Paradoxically, the concept and acceptability of spas being used as detox for beauty is widely accepted; however, to detox for the purpose of substance misuse seems less socially acceptable or fashionable. If effective spa treatment could offer local substance misusers with an opportunity to experience a drug-free treatment that is person centred, non-pharmacological, and adjunct to current treatment options.

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Notes

2. Hypotonic—characterizing water with low osmotic pressure, meaning that it is easily absorbed by the intestine.
References


