World balneotherapy research update 2019

James Clark-Kennedy
PhD Candidate
School of Health & Biomedical Sciences
RMIT University
Melbourne, Australia
Global hot springs industry trends

Trends were reported to the Global Wellness Initiative from:

- Australia
- Austria
- China
- Czech Republic
- Hungary
- Japan
- New Zealand
- Romania
- Slovakia
- South Africa
- USA
Nexus of industry trends and academic inquiry

Hot Springs Initiative trends

Health Sciences Research
Nexus of industry trends and academic inquiry
Trend 1: Hot Springs design for all of life enjoyment

Hot springs environments, activities and accessibility for everybody, from infants to seniors

- Retirement villages around hot springs
- Hot springs village development for the elderly market likely to keep growing

- 50 given medication (etodolac)
- 50 given balneotherapy as visiting outpatients
- 50 given balneotherapy as hospital inpatients
Trend 1: Hot Springs design for all of life enjoyment

An older study but very relevant to this trend comes from Japanese researchers:


- 31 community-dwelling seniors
- SPRING, a comprehensive intervention program including exercise classes, nutrition classes and bathing, twice a week for 3 months.
- SPRING may improve physical function among community-dwelling older adults. In addition, SPRING may have long-term beneficial effects for older adults.
Trends 2 & 3: Wellness program integration and packaging of balneotherapy with integrative medicine

- Comprehensive package of health and wellness
- Blending of centuries of tradition with modern medical knowledge
  - Balneotherapy combined with medical treatment

= hot springs visitation paid for by medical insurance
Trends 2 & 3: Wellness program integration and packaging of balneotherapy with integrative medicine

Research of the past 2 years includes packaged interventions

Balneotherapy + diet
+ education
+ exercise

Balneotherapy + exercise together has been shown to be more effective than either activity on its own.
Balneotherapy + mountain hiking!

RESEARCH THIS YEAR FROM AUSTRIA

Balneotherapy + mountain hiking!


Better results for pain, QoL and mental health for the hiking/bathing group than hiking only or control groups
Trend 4: Water properties, educating bathers

A Japanese industry trend is educating onsen bathers in official water analysis to help them understand, select and enjoy onsen properly.

- Water properties are generally well reported in academic studies, health effects of some mineral properties like magnesium, sulphur an radon are well documented.
- This is an opportunity for industry and academia to work together on the creation of
  - an evidence-based explanation of effects and
  - a worldwide standard therapeutic classification of hot springs.

"The role of mineral elements and other chemical compounds used in balneology: data from double-blind randomised clinical trials."
China

Hot springs experiences tending towards a better fit with the Healthy China 2030 Guideline: from treatment-oriented to prevention-oriented

Long term balneotherapy studies are lacking. An important exception is a recent study from China:

- Impressive number of participants (362)
- 5 MONTHS bathing program
- Strong results in favour of long term bathing included sleep and mental stress results

Similar longer term studies could demonstrate outcomes of preventative bathing programs, with healthy participants, reflecting the Chinese trend and providing more data to support it.

Trend 6: Connectivity with nature

**South Africa**
“Luxury hot springs experience creation in a wild environment, such as a wildlife reserve/spa offering in one.”

**USA**
“There exists a deep sense of the sacred within and among these global Hot Springs sites and sources.”

**China**
FEMTEC formal establishment of the Asia-Pacific Institute for Hydrotherapy and Climatotherapy Tourism, “climate wellness” at hot springs in China.
Trend 6: Connectivity with nature

The importance of hot springs ambience, landscape and connectivity with surrounds – therefore perhaps the expectation effect of the bathing experience – is not well reported.

A review of 52 studies in Japan found the physiological effects of nature therapy will play an increasingly important role in preventive medicine.


Such studies into nature therapy/forest therapy and ‘climate wellness’ could be replicated to better understand hot springs-specific nature connectivity.
Trend 7: The one day escape

**AUSTRIA:**
Over the last 3 years, the one day escape has grown.

However, research tends to involve balneotherapy programs 2 to 3 week programs of up to 5 bathing sessions per week, especially in Europe.

An exception is an Austrian study: which found a single session bath had greater relaxation effect than exercise or Progressive Muscle Relaxation.
World balneotherapy research
Perhaps Hungarian scientists have already set the next industry trend?

A fascinating study this year from Hungarian researchers


Perhaps the many hot springs owners here might consider extracting the minerals from your water then providing a special pool of just the organic component for therapeutic bathing?

... a \textbf{BIG} challenge for your marketing departments!
‘A city without a hammam is not a city...’

- Sheherezade, Tales from the Arabian Nights