

THALASSOTHERAPY, HEALTH BENEFITS OF SEA WATER, CLIMATE AND MARINE ENVIRONMENT: A NARRATIVE REVIEW

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INTRODUCTION

Thalassotherapy is a therapeutic practice that includes baths in sea or sea-like salty water, seaweed baths, controlled sunlight exposure, inhalation of marine aerosol and, in general, any interaction with marine environments and their natural elements for health-promoting purposes.

AIM

To summarize evidence-based clinical uses of thalassotherapy.

METHODS

Scientific database: PubMed. Search date: 15th July 2021.
MeSH term: "thalassotherapy". Inclusion criteria: clinical studies.
Results: 560 articles found, 14 studies included in this work.

RESULTS

Summary of evidence from clinical studies eligible for inclusion.

Condition	Population (n)	Location	Control type	Treatment duration	Outcomes	Reference
Psoriasis	254 adults	Atlantic Ocean (Canary Islands)	/	3 weeks	↓ disease severity	(1)
	85 adults	Dead Sea	/	>5 days	↓ disease severity	(2)
	17 children	Dead Sea	/	2 weeks	↓ disease severity	(3)
	10 adults	Dead Sea	/	4 weeks	↓ parakeratosis + ↓ dermal immune cell infiltration + ↑ enkephalin levels	(4)
	18 adults	Dead Sea	/	4 weeks	↓ disease severity	(5)
	70 adults	Dead Sea	/	>5 days	↓ disease severity	(6)
	64 adults	Dead Sea	/	4 weeks	↓ disease severity	(7)
Atopic dermatitis	30 adults	Pool with Dead Sea salts	Tap water	6 weeks	↓ skin inflammation	(8)
	116 children	Dead Sea	Steroid drugs	4 weeks	↓ disease severity	(9)
Vitiligo	436 adults	Dead Sea	/	Variable	↑ skin pigmentation	(10)
Ankylosing spondylitis	107 adults	Mediterranean Sea (Turkey)	The same program, but in Norway	4 weeks	↑ mobility + ↓ symptoms	(11)
Fibromyalgia	134 adults	Mediterranean Sea (Tunisia)	Usual care	2 and a half weeks	↑ QoL + ↓ pain	(12)
	46 adults	Atlantic Ocean (Brazil)	The same program, but in a pool	12 weeks	↑ QoL + ↓ pain + ↑ mood	(13)
	58 adults	Mediterranean Sea (Tunisia)	Usual care	2 and a half weeks	↑ QoL + ↓ pain + ↑ mood	(14)

CONCLUSIONS

Clinical efficacy of thalassotherapy was mostly tested for skin problems and rheumatic disorders. Disease severity and the patients' quality of life significantly improved after intervention, with the majority of evidence for **psoriasis** and **fibromyalgia**. Further studies on the topic are recommended to better quantify the effect size of intervention, assess long-term benefits, ascertain potential health risks and identify any moderators of the effect or confounding factors.

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NATURAL COMPONENTS OF THALASSOTHERAPY

- Highly mineralized water immersion.
- Marine climatic conditions.
- Controlled sunlight exposure.
 - Interaction with biogenic compounds released in the environment by seaweed, algae and coastal vegetation.
 - Hot sand baths.
- Marine aerosol inhalation.

CONFERENCE INFORMATION

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