



HELLENIC
Healing in Greece

Academy of Thermal Medicine

Health Thermal Clusters

The perspectives of mud therapy in Greece

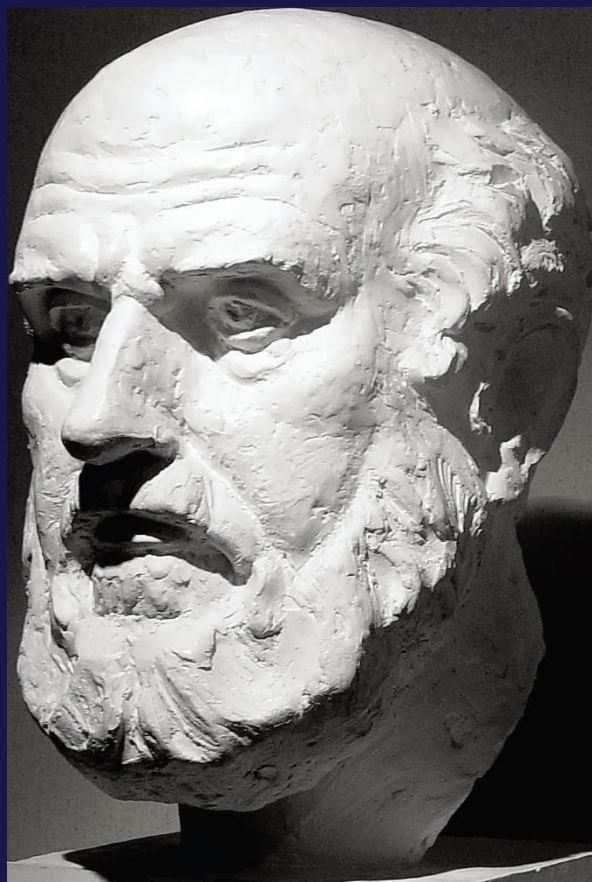
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Professor of Dermatology – Lawyer

President of the Hellenic Academy of Thermal Medicine

f. V. Rector - Gen. Secretary of the Ministry of Education

«Κάλλιον το προλαμβάνειν ή το θεραπεύειν»



'prevention is better than cure'

Health Tourism

Health tourism refers to the prevention, retention, treatment and health recovery with modern medical methods or natural methods combining rest, relaxation and fun

Basic idea is the mental, emotional and spiritual regeneration of the individual in a relaxed environment

Dynamically developing economic sector worldwide

Thermalism in Greece and its prospects

- Thermalism is an unexploited source of tourist income
- The average person does not understand its meaning
- Necessary to clarify the different forms of health tourism and its importance in upgrading the quality of life of the individual

Thermalism

- Wide range of preventive and therapeutic applications using natural resources in areas with particular environmental and cultural characteristics and specialized facilities for physical, mental and spiritual health
- Thermalism does not regard just the elderly (babyboomers), but should be established as a trend and behavior of young people in terms of prevention (new lifestyle)

Thermalism

- Special form of tourism which includes all activities and temporary relations of movement and residence of people who aim to prevent, maintain and restore physical and mental health and wellness, using natural thermal resources
- Includes activities such as spa tourism as well as recreation and rejuvenation that can have non-patients tourists visiting hot springs
- Important role of thermal water in cosmetology and cosmetics, dermatological products and SPA
- Thalassotherapy is done using hot seawater only in specialized centers near by the sea

Basic Forms of Thermalism

- Hydrotherapy
 - External: Balneotherapy
 - Internal: Washes (oral, nasal, gynaecological)
- Drinking therapy
- Inhalation therapy
- Mud therapy
- Thalassotherapy
- Bioclimatotherapy
- Cave-salt therapy

Basic therapeutic elements

- **Inorganic elements and nonmetals:** Cl^- , SO_4^{2-} , HCO_3^- , S, Br, I, F, NH_3 , NO_3^- , NO_2^- , PO_4^{3-} , H_2PO_4^- , HPO_4^{2-} , CO_2 , O_2 , N_2 , H_2 , Se
- **Microminerals:** Na^+ , K^+ , Ca^{2+} , Mg^{2+} , Fe^{2+} , Fe^{3+} , Cu, Co, Zn, Ni, Mn, Li^+ , Al, Ba, Sr^{2+} , Pb, As, B
- **Noble gases:** Rn, He, Ne, Ar, Kr

Thermalism and affected Diseases

1. Myoskeletal system
2. Respiratory system
3. Cardiovascular system
4. Nervous system
5. Endocrine system
6. Gastrointestinal system
7. Urinary system
8. Dermatological Diseases
9. Gynaecological Diseases
10. Allergic Diseases
11. ENT Diseases
12. Periodontal Diseases

Current Trends Globally

- It is directed not only to patients but also to their caregivers as well as to healthy people
- Combining holidays and services for prevention, maintenance or improvement of their health through comprehensive programs of rejuvenation and relaxation

Key Lifestyle Trends

- More time available for tourism and travel
- However, people do not feel wealthier. This sense of financial constraint will sustain an increased interest in budget travel
- Increased sense of time pressure and increased focus on the value for time offered by travel and tourism
- Concern about environmental and sustainability in future, as today younger consumers who are concerned about these issues, form a bigger proportion of the tourist market
- In emerging, as well as developed markets, access to information technology is now a key driver of awareness of other countries and their tourism offers

Life expectancy

- Worldwide, life expectancy is increasing
- Gap between male and female life expectancy is narrowing
- The period of healthy life expectancy is also increasing
- Larger number of older tourists from existing markets in developed countries
- Older tourists will have a younger outlook than previous generations

European MediSpas with strong medical background

In most European countries Medispas and spa facilities:

- Are part of the national healthcare system and require to ensure good health services for the population
- Spa treatment/healthcare is paid by social/health insurance
- Depend on local natural healing sources
- Are characterized by high quality environment
- Are based on medical background for rehabilitation, therapy and prevention
- Cross-border healthcare for traditional spa treatments is good known for many years , mainly by self paid patients/clients

Services of Thermalism

- Spa rehabilitation is proposed after high-tech operations and acute stages of illness by specialized centers
- Services for primary prevention with education in healthy lifestyle-young people
- Services for secondary prevention for risk groups of population with specific program
- Services for prevention for chronically ill patients to promote independent life

Advantages of Thermalism

- Form of tourism throughout the year
- Medispa and Wellness spa services can help increase revenue of hotel units
- All treatments of Thermalism require 21 applications per semester and the duration of each is 20 minutes
- Job vacancies for specialized medical and hotel staff

Factors favoring the development of health tourism in Greece

- Specialized medical and nursing staff
- Doctors mobility
- Quality and low cost of medical services
- Development of international certification
- Growth of private healthcare providers
- Absence of legal impediments restricting medical procedures (in vitro fertilization in Catholic countries)

Development Potential in Greece

- English-speaking scientific and administrative staff
- Good quality of food and beverages
- Greece is not a mass summer holiday destination
- Need for investments to attract senior citizens
- EU supports programs for financing investment initiatives

Greece's advantages to develop alternative tourism forms

- Excellent and unique bioclimate for spa and thalassotherapy services (4 seasons destination)
- Rich cultural and historical heritage
- Beautiful natural environment
- Famous Mediterranean diet

Establishing Thermalism as a growing economic activity

- Movement of elderly for more thermalism services
- Development of social tourism
- Modern life stress
- Trend for healthier and alternative ways of living
- At least 10% of Europeans are looking beyond national borders for thermalism services

From
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Director
Management of Noncommunicable
Diseases, Disability, Violence and
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To
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New WHO report:
**100 million people
affected by
psoriasis, action
needed to provide
care,
overcome
discrimination**



New WHO report: 100 million people affected by psoriasis, action needed to provide care, overcome discrimination

A new World Health Organization (WHO) report shows that psoriasis, the painful, disfiguring condition involving skin and nails, affects approximately 100 million people worldwide. There is no known cause or cure for this noncommunicable disease (NCD), which is also associated with discrimination and stigmatization of those affected.

Increased action, led by governments, to ensure appropriate care is provided to people living with the disease, and to prevent them suffering discrimination and stigma, are among key measures recommended by the first WHO *Global report on psoriasis*.

"One way to reduce the burden of psoriasis on people's lives is through early diagnosis and appropriate treatment," says Dr Etienne Krug, Director of WHO's Department for the Management of NCDs, Disability, Violence and Injury Prevention. "Access and affordability of essential medicines are a huge challenge that we see for psoriasis and for NCDs in general."

The cause of psoriasis remains unclear, although there is evidence for genetic predisposition. The immune system's role in psoriasis causation is also a major topic of research. Psoriasis can be provoked by external and internal triggers, including mild trauma, sunburn, infections, systemic drugs and stress.



Global report on **PSORIASIS**



Psoriasis

- Psoriasis is a chronic, scaling inflammatory skin disease that affects approximately 1.5-3% of the population
- It is not contagious or life-threatening, but it can affect the patient's quality of life with negative psychosocial implications. The burden of living with psoriasis is equivalent to or greater than that seen in other long-term conditions, such as cardiac failure and chronic lung disease, but tends to be underestimated
- The patient feels stigmatized, which further intensifies their lack of self-confidence and self-esteem. Feelings of shame and guilt increase the tendency toward suicidal ideation













Mud therapy in Greece



Our Study

Mud therapy, sun exposure and balneotherapy as an effective supplementary combination treatment in psoriasis: a pilot study

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- Due to the latitude of Greece, the natural sun is heavy. Therefore, there is no need for artificial UV phototherapy, which is known for its efficacy in the treatment of psoriasis
- Few trials have been conducted to assess the efficacy of mud treatment and bathing in mineral water combined with natural UV phototherapy
- In this study, we compared the treatment results of psoriatic patients, who underwent simultaneously mud therapy, phototherapy and balneotherapy through an one treatment course and through two treatment courses and we also evaluated potent treatment complications

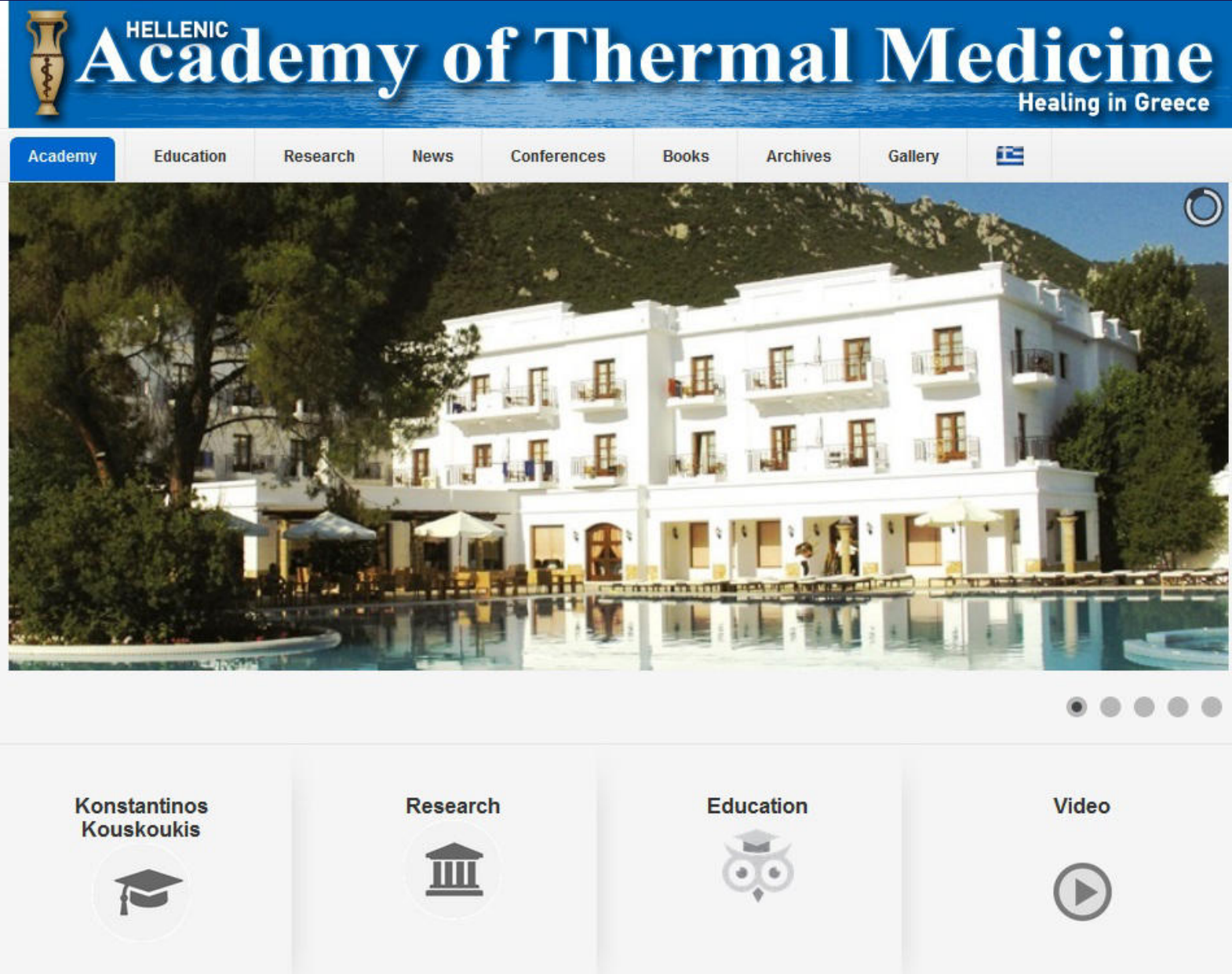
- Our study protocol was approved by the Medical School of Alexandroupolis, Thraki, Greece and adhered to the Declaration of Helsinki. All patients provided informed consent before participating in the study
- We enrolled and analyzed 69 patients, 35 males and 34 females. All patients were examined and diagnosed with psoriasis
- The examination was performed by two independent dermatologists, who did not take part in the data analysis

- Patients underwent simultaneously mud therapy, phototherapy and balneotherapy during an intensive 21-days treatment course at the outpatient treatment facility of Krinides, in Northern Greece
- The treatment protocol included 21 daily treatment sessions
- Initially, patients were covered with mud for 20 minutes, then they were exposed to sun for 15 minutes and finally they performed balneotherapy in the mineral water of Krinides lagoon for 10 minutes

Our conclusions

- Despite the absence of long-term major therapeutic efficacy for psoriasis, UV phototherapy combined with mudtherapy and balneotherapy appears to be an inexpensive and potent beneficial supplementary therapeutic option for psoriatic patients
- Our study proposes a standardized, intensive and cost-effective protocol with encouraging results and absence of side effects. Nevertheless, more trials, randomized, controlled are needed to investigate the simultaneous effect of mud therapy, balneotherapy and sun exposure on patients with psoriasis and its safety profile

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Distinguished Doctors, Ministers and Ambassadors attended the 3rd Thermal Medicine Congress in Greece (October 6-8, 2017)

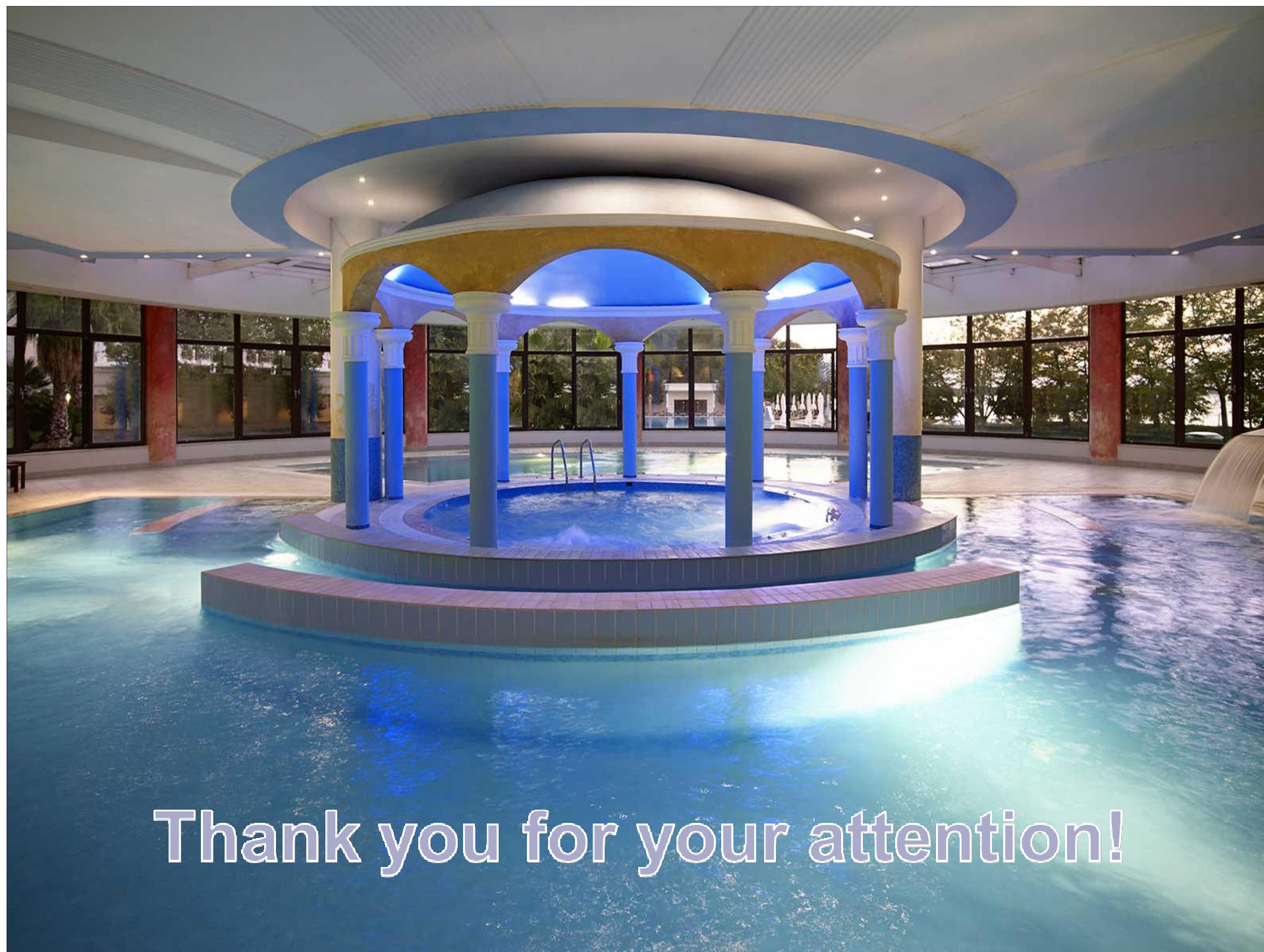


Ιαματική Ιατρική

Η καθιέρωση της Ιαματικής Ιατρικής επιβάλλεται από:

- Την απαίτηση των ασθενών σε διεθνές επίπεδο για εφαρμογή εναλλακτικών και συμπληρωματικών θεραπειών
- Την εφαρμογή των διατάξεων περί διακίνησης ασθενών εντός των χωρών της Ε.Ε.

President of the Hellenic Academy of Thermal Medicine in the Opening Ceremony



Thank you for your attention!