Balneotherapy medicine: a complex therapeutic intervention, from health care center to health resort

Pedro Cantista
Introduction

- Balneology or Medical Hydrology has been an important modality of Medicine with a wide scope of interventions which include:
  - prevention,
  - treatment and
  - rehabilitation of a large number of health conditions
History

- Since early times mankind used **water, steam or mud** as therapeutic agents, first as a purely empiric exercise but in our times with a remarkable progress on its scientific basis.

- Almost every culture developed these procedures.

- Of course different cultures developed different methods or modalities
Greece

- Mineral water had already a therapeutic statute

- Hippocrates wrote “Corpus Hipocraticum” in which he mentioned the use of water to treat several conditions
Greece

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Comprehensive Therapy

- Mineral Water Treatments
- Exercise
- Massage
- Diet
- Physical and Psychological Relaxation
- Social and Cultural Interaction
**Rome**

- Caracalla central building: 216 x 112m
- Could receive 3000 people simultaneously
- **Roman empire spread thermal practice**
- Hygiene and leisure aspects
Rome

- Caracalla central building: 216 x 112m
- Could receive 5000 people simultaneously
- Roman empire spread thermal practice
- Hygiene and leisure aspects
ALL OVER EUROPE MANY MINERAL SOURCES BECAME “THERMAL CITIES”
During the two last centuries we assisted of a growing interest and knowledge of the properties and therapeutic principles of these agents, including:

- **physical** (hydrostatic, hydrodynamic, thermal), - HYDROTHERAPY
- **chemical** (baths may have a parallelism with iontophoresis),
- **biologic** and
- **psychological factors** in their action mechanisms

- **CRENOTHERAPY OR BALNEOTHERAPY** includes all these principles
XXI Century

• NEW PARADIGMA OF HEALTH

• QUALITY OF LIFE (PAIN AND FUNCTION) INSTEAD OF THE FORMER ONLY GOAL OF SURVIVING

• WHO APPROVAL OF THE ICF
54th WHO ASSEMBLY

- GENEVE, MAY 2001
- FOR THE FIRST TIME WITH THE PRESENCE OF MR. KOFI ANNAN, UN'S SECRETARY-GENERAL
- 191 MEMBER STATES
- Approval of the "INTERNATIONAL CLASSIFICATION OF IMPAIRMENTS, DISABILITY AND HANDICAP" (ICIDH-2), AND HANDICAP" (ICIDH-2), WITH THE NEW DESIGNATION OF “INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH” (ICF).

DR. GRO HARLEM BRUNDTLAND
FDRG
Functioning and Disability Reference Group

Project 1: Principles of use, coding rules and guidelines.
Project 2: ICF update task group
Project 3: ICF implications for ICD
Project 4: Stream of work - Measurement and statistical use of ICF
Project 5: Educational materials
Project 6: Ethical and ICF
Project 7: Environmental factors
Project 8: Terminological task group for ICF (FDRG-TG)
ICF Model - circumstantial factors

- Health condition (disorder or disease)
- Body Functions and Structures
- Activities
- Participation
- Environmental Factors
- Personal Factors
ICF Model - circumstantial factors

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THERAPEUTIC FACTORS

- Physical
- Chemical
- Biologic
- Psychological

PLUS

- CONTEXTUAL  (environmental and personnel)
Therapeutic factors

- Physical
- Chemical
- Biologic
- Psychological

+ Circumstantial (environmental and personnel) factors

= Health Resort Medicine
“A proposal for a worldwide definition of health resort medicine, balneology, medical hydrology and climatology.”

*Int J Biometeorol.* 2010 Jun 9

Gutenbrunner C, Bender T, Cantista P, Karagülle M Z
Medical field and health resort Medicine

Scheme of the structure of the medical field

Gutenbrunner et al, 2010
Thermal Springs

MINERAL WATER IS THE DIFFERENTIATING ELEMENT
DAX, 2005
1st INTERNATIONAL MEETING OF THE THERMALISM INSTITUTE OF DAX

«DOCUMENTATION, TRAINING, SCIENTIFIC RESEARCH: THE POINT OF VIEW OF DIFFERENT EUROPEAN COUNTRIES”
2005, December 2nd and 3rd in Dax

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THE FIRST CONSENSUS CONFERENCE
Szeged, Hungary – 2th April 2005
1772

Con Rôle des remèdes particuliers
et eaux minérales
The consensus continued at the 35th World Congress of the International Society of Medical Hydrology and Climatology held between 7-10 June 2006, in Istanbul, Turkey.
« Le thermalisme en la nouvelle Europe : perspectives de collaboration internationale »

Sociedade Portuguesa de Hidrologia Médica
International Society of Medical Hydrology
Balneology Group of the UEMS (PRM Section)
Comissão Portuguesa da Década do Osso e da Articulação
Sociedade Portuguesa de Medicina Física e de Reabilitação
• PORTUGAL 2008
Opening Ceremony

- CASA DA MÚSICA
Teaching Balneology in Europe

Pedro Cantista
BALNEOLOGY IN EUROPE:  
- RESULTS OF A NEW SURVEY  

Pedro Cantista  
Tamás Bender
LET’S TRUST IN THE FUTURE !
Thank you!