

Balneology in the next decade

Pedro Cantista, MD PhD

Abstract

While it is not possible to accurately guess what the future of health will be in the coming decades, it is however possible to consider some of the problems that humanity will face in this field and to anticipate some measures that may prove to be appropriate and effective to the various challenges facing modern societies will come across.

It is possible to project demographic changes, namely the ageing of the population, scientific and technological developments, with emphasis on the definitive digital transition, climate change and the central relevance of water in this field, ecology, economic globalization, massive migrations of populations, new war, social and economic conflicts.

Present in the activities of human societies in all civilizations, the therapeutic use of mineral waters should prevail. How this happens will depend on the correct strategies of decision-makers, which must be based on rigorous scientific criteria. Based on what has been scientific research in the field of Hydrology and Thermal Medicine and taking into perspective the aforementioned vision that we have outlined of the evolution of health in the coming decades, we present a set of reflections on the paths that thermalism and thermal resorts must navigate in order to adapt to new times and better serve their users.

Opportunities and platforms for balneological training in Nasarawa State University, Keffi, Nigeria

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Abstract

Balneology is an emerging field in Africa with numerous prospects for growth. In Nigeria we have the first trained balneologist from Nasarawa State University, Keffi who has initiated the Jose Centeno Medical Geology Center (first in the World). Additional manpower is expected from the proposed signing of an MoU with the Polish Balneology and Physical Medicine Association in October 2023. Aside this, there are several natural balneological resources in Nigeria such as thermo mineral springs, medicinal clays, muds, and peloids with huge prospects of setting up a Balneological Center where students of medical geology and the College of Health Sciences can be trained on the science of balneogeology, balneoeconomics, balneology, and balneotherapy (art and science of treating diseases such as diabetes, cancers, dermatological, cardiovascular and gynecological diseases as well as other post-traumatic ailments using balneological resources). The objective of this paper is to discuss existing opportunities for the growth of balneology in terms of training of students and its practical application in Nasarawa State University.

Keywords: Nasarawa State University, Training, Balneology, Medical Geology, Diseases

Right Strategy for Promoting Hydrotherapy and Climatotherapy in China

Catherine Lan, Chief Representative of Femtec Representative Office in China

Abstract

China has a long history of hot springs. Around 500-600 AD, people knew the function and effect of hot springs for health protection and treatment. There are more than 4400 hot spring enterprises in China by

the end of 2022 with the revenue of around RMB105.95 billion (USD14.5 billion), which is only 43% of the total revenue in 2018.

It was a rapid period for hot springs development in China from 1998 to 2012. The 65th Annual Congress of the World Federation of Hydrotherapy and Climatotherapy (FEMTEC) was held in both Nanjing and Chongqing, China in 2012. Femtec introduced the concept of hot springs wellness and medical hot springs to China. 2012 was named starting year of wellness era for hot springs industry in China. Femtec Representative Office was the positive result of cooperation between China and Femtec. It was officially registered in October, 2018. The main functions for Femtec Representative Office: to assist promoting hydrotherapy and Climatotherapy; to assist promoting international cooperation between Femtec and China, etc.. Femtec Representative got very good performance since its establishment.

Investors and operators in China realized that unleashing the healthy value of hot springs is the way for the industry's future survival and development. On one hand, consumers are increasingly favoring hot spring destinations with health and wellness attributes, on the other hand, investors and operators are paying more attention on developing health and wellness themed projects and products. It results the popularity of the wellness theme hot springs.

The place of botulinum therapy in the rehabilitation of children with neurological diseases

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Abstract

The relevance of the topic is caused by the increase in children with neurological diseases that lead to disability.

The main goal of rehabilitation of children with this pathology is to restore or improve functioning.

A multidisciplinary team is important. During rehabilitation, it is necessary to include three aspects: medical, social and pedagogical modules. Among innovative technologies, botulinum therapy occupies a special place in the rehabilitation of children with spasticity.

We started using this technique in 1999. A method of use was developed, methodological recommendations were issued, dissertations were defended, and articles were published in various journals. In 2017, they published an article in the Lancet journal.

The results of rehabilitation using botulinum therapy are high. In children, muscle tone decreased and motor activity improved. Over 12 years of rehabilitation of children at the Center, 55.7% were socialized.

La Balneoterapia y el Bienestar. Una alianza estratégica para la salud, condiciones socio - económicas, ambientales y la sostenibilidad.

Prof. Florana Menéndez Camporredondo

Abstract

La pandemia marcó un momento decisivo en la historia, un cambio de época extraordinario. Hemos sido llamados a reajustar todos los niveles de la sociedad, nuevas posibilidades económicas, culturales, ambientales, superar los desafíos que pueden conducir a un mundo más saludable, equitativo y sostenible.

Las tendencias que están surgiendo en el mundo de la salud y el bienestar, es una indispensable oportunidad para que las personas mejoren la calidad de vida, la de las comunidades y para que los gobiernos reduzcan los costos de salud e inviertan en la creciente demanda de salud con infraestructuras que permitan el desarrollo sostenible

Nuevos conceptos de medicina integral, transformación de los diversos mercados, de las vastas industrias, de estilos de vida, alimentación, viajes, hospitalidad, así como, en nuestros hogares, lugares de trabajo, entorno social y ambiental.

Diversidad, equidad, inclusión, acogida, respeto, deben guiar las decisiones de las personas y de las empresas.

Todo ello supondrá un cambio y nuevas oportunidades para el Turismo de Salud y Bienestar, que deberá apostar por la formación, la digitalización, investigación, inversiones, actualizar propuestas de prevención y ofrecer experiencias innovadoras en salud y sostenibilidad.

Reflexionar sobre cómo resolver los desafíos que se avecinan en nuestro sector es una prioridad.

Balneotherapy and Wellness. A strategic alliance for health, socio-economic, environmental conditions and sustainability

Florana Menendez Camporredondo

Abstract

The pandemic marked a decisive moment in history, an extraordinary change of era. We have been called to readjust all levels of society, new economic, cultural, environmental possibilities, overcome challenges that can lead to a healthier, more equitable and sustainable world.

The trends that are emerging in the world of health and well-being are an essential opportunity for people to improve the quality of life, that of communities, and for governments to reduce health costs and invest in the growing demand for health with infrastructure that allows sustainable development.

New concepts of comprehensive medicine, transformation of the various markets, of the vast industries, of lifestyles, food, travel, hospitality, as well as in our homes, workplaces, social and environmental environment.

Diversity, equality, inclusion, welcome, and respect must guide the decisions of people and companies.

All of this will mean a change and new opportunities for Health and Wellness Tourism, which must focus on training, digitalization, research, investments, updating prevention proposals and offering innovative experiences in health and sustainability.

Reflecting on how to solve the challenges that lie ahead in our sector is a priority.

Balneology in Third Millenium. Romanian Vision for the future

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Abstract

Romania is one of the richest European countries in natural therapeutic resources and effectively used in medicine, ever since ancient times. Science and innovation continuously have been added to balneal tradition. The Romanian balneal medicine can be characterized by continuity and scientific concept of practical applications. conclusions. balneo-climatology activity in an unified, holistic and integrative manner, and in conjunction with PRM represents an appropriate/beneficial Romanian initiative that we are honored to share with you.

Oxidant/antioxidant status variation in patients undergoing peloidotherapy in Techirghiol Balneal and Rehabilitation Sanatorium

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Authors TV Surdu, V Marin, M Surdu, O Surdu, S Mujdaba, RE Tucmeanu, LE Stanciu, IA Tucmeanu, D Profir;

Abstract

Evaluation of oxidative stress markers confirmed the anti-inflammatory potential of Techirghiol sapropelic mud in the study patients.

The increase in the level of SOD in the case of sludge treatment suggests a positive response of the body considering the positive role of the enzyme in neutralizing ROS and inactivating NO.

The level of glutathione reductase, uric acid or blood glucose, protective factors in the oxidative stress balance, were not influenced by the sludge treatment.

This conclusion emphasizes the protective nature of mud therapy on oxidative stress, the enzymes with a positive role in this metabolism increasing, such as SOD, or maintaining GR and TAS within normal limits.

Balneology is in a refreshed opportunity of understanding and practice in the United States

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Abstract

Research has followed the traditional use of North American natural mineral waters by Indigenous cultures, then by early settlers emulating spas of Europe for health practices prescribed by doctors, which went out of vogue as pharmaceuticals replaced the natural medicine of mineral waters and Spas became places for relaxation and recreation in popular culture. Today people are rediscovering their sense of wellbeing at mineral water sites for therapeutic benefits. The Balneology Association of NA emphasizes the integrity of over 250 site-specific sources for scientific and cultural information to increase the use of mineral waters through educational programs and field research to establish Best Practice Standards of Balneology for North American thermal mineral waters. BANA seeks support for research & data collection to progress our initiatives for knowledge & experience in mineral waters.

The Tuscan Thermalism and the Tuscan thermalism study group

Fausto Bonsignori - Pisa University President of Italian Medical Association Thermal-spa Medicine (AMIITTF)

Abstract

Tuscany is a land of thermalism, this not only due to the presence of numerous centers affiliated with the National Health System, but also and above all for its history and for everything that thermalism has represented and represents in society as a cultural, social and economic.

More than 20 affiliated thermal-spa centers are active in the region, some of these are in real spa towns famous throughout the world such as Montecatini and Chianciano. Others are found in small towns with great traditions present throughout the Tuscan territory.

Thanks to the geological conformation, the high number of spa centers corresponds to a notable variety of thermal waters.

From the Etruscans to the Romans, from the Middle Ages to the dawn of medical hydrology in the second half of the nineteenth century up to modern thermal medicine, Tuscan Thermal-spas have welcomed and treated multitudes of people. The presence, even today, of a very high number of patients deserves asystematic studies. For this reason, the group called "Tuscan Thermalism Study Group" was created, formed by the health directors of the Thermal-spa Centers and coordinated by the University of Pisa with the collaboration of the Italian Medical Association of Thermal-spa Medicine (A.M.I.I.T.T.F.).

The Group developed an initial research based on the administration of two questionnaires to patients, one relating to general well-being and one to the specific pathology. The questionnaires recognized by the scientific community must be completed at different times: at the beginning and end of the treatment and after 40 days. The results that will be processed statistically will provide valid indications.

The Role of Integrative Medicine and Health Resort Medicine.

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Abstract

Integrative medicine represents the best of conventional therapy with the judicious application of traditional and empirically proven methods. As the science of Integrative medicine and Health Resort medicine continue to evolve and refine our understanding of the empirical results, it is important to have a consistent and common language and practice basis for our field.

This presentation will review clinically relevant concepts in Integrative and Health Resort Medicine, propose standard evaluation concepts for Health Resort Physicians and researchers to consider, and discuss treatment plan building in light of individualized patient centered care.

Crénothérapie associée au traitement physique dans l'amélioration algo-fonctionnelle des sportifs souffrant de lombalgie chronique commune

Ahmed Belaitar

Abstract

Introduction :

Il s'agit d'une étude pilote destinée à évaluer l'apport de la crénothérapie associée au traitement physique dans l'amélioration algo-fonctionnelle des sportifs souffrant de lombalgie chronique commune.

Méthode :

L'étude porte sur 10 athlètes présentant une lombalgie commune et pris en charge au sein d'un centre thermal dans le sud-est algérien. Ce panel a été réparti en deux groupes : 5 patients dans le groupe intervention (A) bénéficiant d'un traitement physique combiné aux soins thermaux et 5 patients dans le groupe de contrôle (B) recevant un traitement physique seul. La réponse était évaluée en utilisant une échelle algo-fonctionnelle : Oswestry Disability Index (ODI) dans sa version arabe. Le questionnaire était donné en début (M1) et en fin de traitement (M2). Une amélioration dans le score d'ODI est considérée comme cliniquement pertinente si elle est supérieure à 30 %. La sensibilité aux changements est estimée par la réponse moyenne standardisée et la taille de l'effet.

Résultats :

Nous avons observé que 3 sur 5 patients (60 %) avaient une amélioration cliniquement pertinente de l'Oswestry dans le groupe (A) versus 1/5 patients (20 %) dans le groupe (B). La taille de l'effet dans les deux groupes (A) et (B) est de 1.20 et 0.71 respectivement. La réponse moyenne standardisée est de 1,13 pour le groupe (A) versus 1,01 pour le groupe (B). La différence entre les deux groupes n'était pas statistiquement significative (p-value à 0,500) compte tenu de la petite taille de notre échantillon.

Conclusion :

Combinée à la rééducation conventionnelle, la crénothérapie semble avoir un effet synergique dans le traitement des sportifs souffrant de lombalgie chronique commune.

Mots clefs : *Lombalgie chronique commune, Oswestry Disability Index, Athlète, Réadaptation, Thermalisme*

Mineral Waters of Uzbekistan:retrospective study.

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Abstract

Relevance. Well known, that mineral waters have differences in temperature, chemical and gas composition, radioactivity, etc. Hydrogen sulfide waters differ by smell, sometimes at a considerable distance from the place of their exit; by taste - salt water and brines, carbon dioxide water; by the rapid release of bubbles of freely released (spontaneous) gas in the head of the source - carbon dioxide water; according to the color and composition of the sediments of the source: red-brown ochre - ferruginous waters, white calcareous deposits (travertines, calcareous tuffs) - calcium carbonate waters, fluorine-bearing geysers - fluoride hydrotherms, siliceous tuffs, geysers - siliceous thermae. Hot water can be detected by feeling and measuring temperature. It is important that hot water flows out from the depth, and not heated by the sun on the surface. On a quiet frosty day, the hot Belokurikhinsky spring in Altai is visible from afar by an ascending column of white steam. According to the composition of water and dissolved gases, soda, sulfate, chloride, iodide, bromide, hydrogen sulfide, carbon dioxide, etc. are isolated. Ferruginous (Fe) mineral waters must contain at least 20 mg/l of iron, arsenic (As) – at least 0.7 mg/l of arsenic, siliceous (Si) – at least 50 mg/l of siliceous acid, bromide (Br) – at least 25 mg/l of bromine, iodide (I) – at least 5 mg/l of iodine (often iodine-bromide). When determining radon from 5 ncurie/l or more, waters are classified as mineral radon.

Research materials and methods. We conducted a retrospective study of the data of the Scientific Research Institute of Balneology and Physiotherapy named after Semashko "Medicinal mineral waters of the Uzbek USSR (using and promising, as of 1987)".

Results. In 1987, 186 boreholes with mineral waters were discovered in the former Uzbek SSR. Mineral waters of group A: without specific components and properties. A total of 94 boreholes. Mineral waters of group B: sulfide mineral waters. A total of 13 boreholes were found. Mineral waters of group G: ferrous, arsenic and with a high content of metals. 6 boreholes were found. Mineral waters of group D: bromine, iodine with a high content of organic substances. The therapeutic value is determined by the presence of

bromine at least 25 mg/l, iodine 10 mg/l, organic matter. Analogs of Lugela Georgia, Truskovets, Naftusi Ukraine, Bramsheed source MOOR-Salz (Austria). Advantages – thermality, different mineralization, large reserves. Indications – diseases of the cardiovascular, nervous, endocrine systems, musculoskeletal system and gynecological. In total, 25 boreholes were found. Group E radon waters: mineral waters containing radon have been used for medicinal purposes since ancient times, when they were not even suspected of their radioactivity. After the discovery of the phenomenon of radioactivity, a new scientific idea was formulated about the nature of the therapeutic effect of these waters. The use of radon waters was considered as a universal remedy for many diseases. There are more than 300 resort areas with radon waters. A large number of scientific facts have been accumulated about the high efficiency and safety of the use of radon therapy in various pathological conditions. In total, 9 boreholes were found. Siliceous, thermal mineral waters: the therapeutic value is determined by the content of silicic acid of at least 50 mg/l and high temperature. In total, 2 boreholes were found.

Conclusions. Thus, in order to further study the effective use of mineral waters of the Republic of Uzbekistan, it is necessary to conduct an inventory, determine their reserves and the qualitative composition of mineralization.

Centuries of Jinling Spirit Embodied in Enchanting Tangshan

Qi Lin - Secretary of the Party Work Committee & Director of Nanjing Tangshan Hot Spring Tourist Resort Administration Office

Distinguished guests, ladies, and gentlemen,

Good morning to you all! In the harvest season of autumn and the golden month of October, it is my great honor to attend the 74th General Assembly and International Scientific Congress of the World Federation of Hydrotherapy and Climatotherapy in the beautiful city of Galicia. I would like to thank the organizing committee for having me here to introduce the Tangshan Hot Spring Town of Nanjing, China and promote Tangshan's hot spring tourism.

Located at the eastern suburbs of Nanjing, Tangshan is 20 kilometers away from the main city. It is a 40-minute drive from Nanjing Lukou International Airport and a 30-minute drive from Nanjing South Railway Station, hence an important gateway connecting Nanjing with the core cities of the Yangtze River Delta. As early as the Liang dynasty of the Northern and Southern dynasties period, Tangshan's hot springs were honored as "Holy Springs." Throughout the ages, Chinese literati and scholars have visited Tangshan, hailing its hot springs as "Holy Springs of a Millennium" and a "Paradise for Health Preservation." With an established reputation for the "Imperial Hot Springs," "Prehistoric Caves," and "Peerless Monument Material," coupled with the strategic construction of the Yangtze River Economic Belt, the integration of the Yangtze River Delta, and the integration of Nanjing, Zhenjiang, and Yangzhou, Tangshan is in a good position to embrace the best development opportunities ever. Tangshan is linked to a convenient transportation network, featuring the Ning-Jurong Intercity Rail Transit, Shanghai-Nanjing Expressway, Nanjing-Hangzhou Expressway, Urban Third Ring Road, among many other high-grade highways and railways passing through the region. With Tangshan in the center, the one-hour driving radius reaches a population of 22 million, and the two-hour high-speed rail radius, a population of 100 million in the core cities of the Yangtze River Delta. Tangshan is home to rich historical and cultural heritage. The discovery of the skull of Homo erectus in a prehistoric cave at Tangshan extended the history of human activities south of the Yangtze River by approximately 500,000 years. The magnificent Yangshan Monument Material has been recognized by Guinness World Records. The traces of historical periods, from the prehistoric age to the Ming dynasty and then to the Republican era, can all be found in Tangshan. Tangshan also boasts abundant ecological resources, with 150,000 acres of mountains and forests covering an area of 171 square

kilometers, the water reservoir capacity reaching 20 million cubic meters, the forest coverage rate standing at 58.5%, and the two scenic lakes, namely Tangquan Lake and Anji Lake, delighting the soul. Rich in various minerals and trace elements with high therapeutic value, Tangshan Hot Springs is one of the four major healing-oriented hot springs in China. Tangshan witnessed the emergence of distinctive industrial clusters. Established as one of the first national-level tourist resorts in October 2015, Tangshan has become the most attractive culture- and health-oriented tourist spot in Nanjing. Major leisure and tourism projects, such as the World-level Mountain Garden-Garden Expo Park, the National 4A Tourist Attraction Ziqing Lake, the National Geopark Museum, and the Amusement Park of Nanjing Happy Water World, have been completed and put into operation. Health and wellness development projects such as Jinmao Health Town, Hantian Yiyang, and Qianhai Hospital are under accelerated construction. High-quality hot spring hotels have gathered here too, including Kayumanis Nanjing Private Villa & Spa, Banyan Tree Nanjing Garden Expo, Autograph Collection, Radisson Collection Resort, Nanjing, Westin Nanjing Resort & Spa, and Hotel Indigo Nanjing Garden Expo.

Dear guests and friends, Tangshan basks in the glow of ancient culture and breath-taking scenery and promises bright prospects with immense business opportunities. Our promotional slogan is "Rediscover Tangshan; our splendid future springs from here." We sincerely hope that you can visit Tangshan to enjoy its charming landscapes and experience its vibrant community. I wish everyone success and all the best. Thank you!

Innovation in Hot Spring Tourism Industry of China

Huang Zhimin , President of China Hot Spring Tourism Association

Distinguished guests, ladies and gentlemen,

It's a great honor for me to be here and share some of my thoughts on the topic of innovation in hot spring tourism industry. I have been in this business for 20 years. Right now, changes of the world, of our times and of history are unfolding in ways like never before. Only by innovation can we consistently create value and competitive advantages which is one of a kind.

Why we need innovation? Innovation is a key to value creation. We are committed to providing customers with an excellent experience, not only the hot spring, but also a pleasant, diverse leisure lifestyle. Innovation is our mission, and a commitment to society and customers. Customers will benefit in a innovation boom society, they will enjoy more and more unforgettable experiences. This is one of the reasons why we strive to innovate.

Embrace changes, take on new challenges, and adapt to changing circumstances. If we don't upgrade ourselves, it's no doubt that we can't winning the future. Innovation is our moat, it includes unique hot spring resources, exclusive customer experiences, and evolving business model. In the face of the fierce market competition, whether your company in an invincible position or not, is directly depends on its innovation capability.

Then, it lead us to the next question: How we innovate?

Firstly, cost efficiency. Reduce costs by improving efficiency, enabling us to provide more competitive products in the market.

Secondly, service innovation. Think what the customer think, and keep close track of customer insights. Whether you have regular or not, even fans, is up to your service.

Thirdly, product innovation. We persist in delivering attractive niche products to increase customer base. Last but not least, model innovation. We focus on optimizing business models in order to better adapt to the dynamic market.

I want to share with you the innovation progress of Tianmu Hot spring, our journey can be divided into 3 eras:

In the 1.0 era, from 2002~2008, we were in the early stages. During this period, our focus is on innovative hot spring products and services. Lushan Tianmu Hot Spring, is the most representative project of this period. It is the first large-scale scenic garden style hot spring in China, which is 21 years ago. In that year, we begin to combine modern physical therapy and healthcare resources to make a workers' sanatorium upgrade into a whole new product by redesign and redevelop. It truly open a new era of hot spring industry in China.

In the 2.0 era from 2009~2017, we started to arrange integrating cultural and tourism development. Our goal is to create original leisure resort industry cluster area.

Mingyueshan Tianmu Hot spring hotel is our typical project. It contains resort hotels, various hot spring areas, large water parks, and health care complex. Since its opening, it has received over 10 million tourists in total. At the same time, we actively participate in the infrastructure construction of this town, so that can promote local economic development, it has changed from a rural town to a world-renowned hot spring destination.

At the moment, we are in the 3.0 era, from 2018 till now, we are strive to explore the evolution of cultural tourism ecology. This is a time that needs forward-looking power.

We have elevated innovation to a higher level, adopting O+EPC model (Operation+ Engineering Procurement Construction) and committing to operation-oriented, project life-cycle development. Emphasize the foresight of operations, be oriented towards business results, focus on the entire process management of operations, and refine it to every module. The innovation in this period was more forward-looking, it increased the supply of high-quality cultural tourism products, created a supply matrix of products and services, and focused on building a hot spring resort complex to meet the dynamic demand of the market.

As an ancient Chinese adage advises, "If one can make things better for one day, he should make them better every day." Looking ahead, innovation must be upheld as it is not just a means to an end, but a tenet in its own right, which will be more firmly embraced through tests and trials. A formidable mission is a magnificent and glorious mission. Together, let us usher in an even brighter future!

Thank you all for listening.

Development trend of hot spring tourism in China after the COVID-19

Zhang Yue, Executive Vice President of China Hot Spring Tourism Association

Abstract

In 2020, the COVID-19 triggered a global economic crisis around the world. The tourism economy based on long-distance travel, social interaction and experience of living in different places is particularly sensitive to the epidemic, and its impact and challenges are unprecedented. At the end of 2022, China orderly relaxed epidemic control, and hot spring tourism showed good resilience in recovery.

Firstly, in the first half of 2023, the number of people receiving hot spring tourism in China has basically returned to the level before the epidemic. Although the overall level of recovery nationwide is relatively fast, there are still significant regional differences in the recovery situation among provinces. Jiangsu,

Guangdong, Shaanxi, Guangxi, Sichuan, Anhui and other provinces have experienced rapid recovery, while Inner Mongolia, Ningxia, Hainan, Tibet and other provinces have experienced relatively slow recovery rates.

Secondly, the per capita consumption level of hot springs has decreased compared to before the epidemic, and some hot spring enterprises have recovered or even exceeded the same period before the epidemic. However, the sales prices of hot spring enterprises' rooms, scenic spots, and other products have decreased, and per capita consumption has also decreased.

Thirdly, hot spring parent-child vacation products are widely popular. Compared with other hot spring formats, hot spring hotels and vacation products suitable for family outings are clearly sought after by the market, and there is a hot market situation during summer and golden weeks.

Fourthly, China actively promotes the formulation and implementation of standards and norms related to hot spring tourism. In order to improve the comprehensive supporting service functions of domestic hot spring tourism enterprises, improve the reception service quality and comprehensive management level of hot spring tourism destinations, the National Tourism Administration has issued two industry standards: "Star Classification and Evaluation of Hot Spring Tourism Enterprises" (LB/T016-2017) and "Hot Spring Tourism Spring Quality Classification" (LB/T 070-2017). In 2023, the establishment of national standards for hot spring tourism will be further promoted.

The Chinese hot spring tourism industry has entered a new stage of greater sustainability and market segmentation after the epidemic.

Evolución de la docencia de la Hidrología Médica en España

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Abstract

La docencia reglada de la Hidrología Médica en España se inicia en la Universidad Complutense de Madrid en 1866, como parte de la asignatura de 6º curso de la licenciatura "Ampliación de la Terapéutica y de la Farmacología. Hidrología Médica" y alcanza plena madurez como disciplina del doctorado con la creación de la Cátedra de Hidrología Médica en 1912. Con posterioridad, la Ley de 20 de julio de 1955 sobre «Enseñanza, título y ejercicio de las Especialidades Médicas» la que en su artículo 4º tipifica entre otras especialidades para la práctica profesional, la de "Hidrología".

La Escuela profesional de Hidrología Médica e Hidroterapia inicia su andadura a partir del del curso académico 1978/79. En ella se imparten enseñanzas teórico-prácticas que permite obtener el título de Especialista en Hidrología Médica, en aplicación del Real Decreto 127/1984 de 11 de enero, que regula la formación médica especializada, quedando incluida entre las especialidades que no requieren formación hospitalaria. El plan de estudios oficial, de dos años de duración, se publicó en el Boletín Oficial del Estado el trece de septiembre de 1988 y el reglamento del centro el veinticuatro de abril de 1997. En él se reflejan claramente los fines de esta, es decir: la formación de Médicos Especialistas en Hidrología Médica e Hidroterapia. Atender la formación continuada de los Médicos ya especialistas. Organizar cursos temáticos especializados y establecer y facilitar convenios, relaciones, etc., con departamentos universitarios, instituciones científicas, asociaciones y organismos relacionados con la Hidrología Médica. Así mismo, recoge fines sociales como: colaborar con los centros docentes universitarios en materia docente e investigadora relacionada con la especialidad. Emitir y preparar a requerimiento de organismos oficiales o entidades particulares informes periciales acerca de las aguas minerales, técnicas crenoterápicas, instalaciones balnearias, etc. Prestar colaboración científica a la propiedad balnearia y centros relacionados con las aguas mineromedicinales o minerales naturales, para que puedan alcanzar el máximo rendimiento o bien de interés público, así como, estimular todo tipo de investigación y fomentar el conocimiento de la Hidrología Médica e Hidroterapia, facilitando la elaboración de tesis doctorales, tesinas, trabajos de investigación, etc.

La Cátedra y la Escuela siempre contó entre su Profesorado con Personal Docente e Investigador – Funcionarios de Carrera, entre sus titulares destacan: Hipólito Rodríguez Pinilla (1913-1933), José San Román Rouyer (1955-1961), Manuel Armijo Valenzuela (1963-1994) y Josefina San Martín Bacaicoa (1986-2004).

En relación con la docencia impartida, mientras, en el caso de la Escuela Profesional de Hidrología Médica e Hidroterapia, desde su creación, la docencia consistió en la impartición de los cursos de formación de Médicos Especialistas en Hidrología Médica, con acceso vía MIR; en la Cátedra, durante este período de tiempo, se ha experimentado un notable desarrollo, de manera que lo que inicialmente se circunscribía a disciplinas de postgrado con dos asignaturas de doctorado: “Hidrología Médica” e “Hidroterapia”; pasó a transformarse en programa de doctorado de “Hidrología Médica” de 32 créditos y ya, incorporada como Unidad Docente al Departamento de Radiología, Rehabilitación y Fisioterapia y adaptándose al espacio europeo de educación superior imparte en los Grados de Medicina, Nutrición y Dietética Humana, Terapia Ocupacional y Fisioterapia.

The concept of the therapeutic landscape and its role in the further development of spa cities.

Alina Huseynli

Abstract

This presentation delves into the intricate concept of the spa therapeutic landscape, exploring its contemporary interpretations and its transformative potential for future trajectories in medical wellness tourism. Drawing on a careful analysis of existing literature, our study underscores the healing potency of therapeutic landscapes, postulating their crucial role in amplifying the appeal and therapeutic efficacy of spa destinations. This research not only gathers key findings from a broad range of academic discussions but also outlines the implications of these insights. By promoting a discussion that explores the vast potentials of therapeutic landscapes more closely, we aim to establish a progressive direction for the growing medical wellness tourism industry, advocating for a thriving and sustainable future for global spa cities.

Spa treatment and balneological research in the Czech Republic

Patricie Hlouskova

Abstract

The Czech spa industry is part of the European cultural heritage. Thanks to the high quality of natural healing resources, the use of modern treatment methods, unique rehabilitation technologies, and a systemic approach to patients, the Czech Republic is significant in the world of balneology. Balneotherapy is characterized by the so-called complex spa treatment, which includes balneological procedures based on a doctor's prescription. The treatment includes an educational program in nutrition, physical activities, and psychological intervention. The advantage of the Czech spa industry is the care associated with highly qualified medical staff, whose profession is associated with mandatory lifelong education. The Institute of Spa and Balneology is a scientific institution engaged in independent basic and applied research. The structure and organization of the balneology system in the Czech Republic prioritize both scientific research and the provision of treatments.

Hydrothermal Wellness: Defining a New Career Path

Marc Cohen

The Australian thermal bathing and wellness sector is growing rapidly. Bathing capacity in Victoria increased by more than 1.2M from 2019–2022 and many new facilities will open in the coming years. This has led to a workforce shortage and a new Diploma of Hydrothermal Wellness aims to meet the needs of this industry. This Diploma will provide the skills and knowledge for Wellness Hosts to consult with guests, assess their needs, and safely guide them through a range of experiences including bathing rituals, hot and cold immersion, sauna, steam, clay, and forest bathing, along with aquatic exercises, breathwork and relaxation. The Diploma will be Registered through the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS) and forms the basis for degree and post graduate and research programs that further explore therapeutic interventions. This will provide a career path and global industry standard and ensure the health of the bathing industry and future guests.

Termalismo en Marruecos y su impacto socioeconómico en la población local

Mohamed Benmakhlouf - Presidente de la asociación Marroqui del termalismo

El Termalismo ha tenido un gran impacto socioeconómico en Marruecos. Las surgencias termales se conocen desde la época romana y se utilizan como baños de vapor populares e incluso spas, especialmente con fines terapéuticos. La producción en invernadero y la calefacción doméstica, así como las aplicaciones industriales, son otras formas de aguas termales del Mediterráneo occidental.

En los países mediterráneos, tradicionalmente se ha aprovechado la energía térmica de las aguas cálidas, pero no se ha estudiado en detalle la transferencia de esta forma de energía a otras formas de múltiples vocaciones y para diversos usos que pueden contribuir al desarrollo socioeconómico regional. Cabe señalar que la evaluación y mejora del potencial hidrotermal de una zona determinada se basa en dos parámetros fundamentales: la temperatura (energía) y el agua como factor vehicular (reserva de agua). Las aguas termales son una fuente de energía renovable para los países que desean reducir su dependencia de la energía exterior. Además, estos recursos tienen un gran potencial ante la implementación de proyectos y programas de desarrollo de turismo de spa y salud en todo el mundo.

La existencia de anomalías geotérmicas en Marruecos, las numerosas aguas termales y los grandes depósitos de agua caliente revelados por pozos hidrogeológicos y, en algunos lugares, cisternas, son todos signos que sitúan a la región como objetivos prometedores para la energía geotérmica en aguas termales. Estas anomalías, destacadas por datos tectónicos y geofísicos, se encuentran principalmente en el Mediterráneo occidental debido a su actividad tectónica relativamente reciente asociada a la convergencia de las placas euroasiáticas y africana.

Los estudios de Termalismo están destinados principalmente a operadores socioeconómicos, destacando las características de las aguas termales de cada región y los posibles escenarios de su uso (spa, sericultura, piscicultura), lo que conducirá a la creación de usos y protección del medio ambiente. Este estudio tiene como objetivo investigar la integración de los objetivos de desarrollo sostenible por parte de proyectos de spas en Marruecos. Para ello, se realizará una investigación con dos grupos: uno con las poblaciones locales y otro con visitantes-turistas de inversores, con entrevistas semiestructuradas con funcionarios municipales y sociedad civil.

Escuela de Longevidad en un balneario: nuestra experiencia

Miguel Ángel Fernández Torán, MD, PhD

Abstract not available