GEOMEDICAL TOURISM – OUTDOOR HEALTH CARE FACILITIES ANTI-GEOPATHIC STRESS TREATMENT

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Abstract: Geopathic stress and electrosmog affect on the human health in different ways. The list of symptoms is varied and very impressive, but the real problems posed for the study require a specialized approach to diagnosing the main causes of its occurrence and determines the presence of a new type of disease which described by the WHO in 2002 as "Electromagnetic Hypersensitivity Syndrome - EHS". Our attention as researchers focuses on the capabilities of geopathology (geobiology) to identify the causes of geopathic stress and to describe solutions for its neutralization. The aim of presented study was to create specialized tourism destination in pure nature for wellbeing and prevention of geopathic stress and electrosmog impact. The goal is to test the geomedical tourism as a special approach and problem solving. Objects of research: 16 famous Wellness and SPA destinations from 4 countries: Bansko, Sunny Beach, Pomorie (Bulgaria), Sulzberg- Bregen (Austria), Ochrid (N Macedonia), Bad Griesbach (Germany) which were examined in 2010-2017. Methods: Test of differentiated self-assessment of the functional state (SAN), Applied Kinesiology Test, Geopathic stress Sequences (GSAS) and geomedical assessment of environment. Results: the core of Geomedical tourism destination management is a geomedical environment assessment of Climate recreation potential, Forest recreation potential- herbs, woods, lichens, Landscape recreation assessment, Environment assessment, Geopathic stress evaluation, Geological places assessment, Biomedical assessment of natural resources and Wellbeing effect. Some outlined benefits of outdoor recreation including post treatment geopathic stress analysis and Applied Kinesiology test-AK. Their positive results we can apply as an additional key for Geomedical tourism destination’s modelling. Our results from SAN test before and after treatment are very motivated to go over it. Conclusion, Geomedical tourism as a live style coaching including outdoor physical exercises, anti-stress massages, special nutrition menu, breathing treatment, forest meditation and geotherapy. Obviously, all forms of proactive and reactive healthcare including geomedical practices are part of health prevention tourism. Outcomes of Geomedical tourism: Creation and promotion of Individual Well Fare Guidelines for sustainability ecological and social life. Keywords: geomedical tourism, geopathic stress, public health prevention

INTRODUCTION
Geopathic zones are connecting to the planetary energy grids and different geological reasons (1). Geopathic stress affects on human health in different ways. The list of symptoms is varied and very impressive, but the real problems posed for the study requires a specialized approach to diagnosing the main causes of its occurrence and determines the presence of a new type of disease which described by the WHO in 2002 as "Electromagnetic Hypersensitivity Syndrome - EHS". The attention of researchers focuses on the capabilities of geopathology (geobiology) to identify the causes of geopathic stress and to describe solutions for its neutralization. Our experience based on series of detecting of geopathic stress zones and electromagnetic pollution measurements since 2006 in Bulgaria, Germany, Austria and N Macedonia. The influence of geopathology factors on human health can associate with three general levels: cellular, physiological and treatment/recreation process. All of them are related to environment characteristics (indoor and outdoor) and applied geobiological shield. We focused on the treatment level and relax, using Wellness practices. According to some authors, the geopathic stress can trigger behavioral problems in children, hyperactivity and attention deficit (2, 3, 4). Some researchers reported about connection between nights sleepless, anxiety, fatigue, learning disabilities, general anxiety, symptoms of cold extremities, headache, aversion to team work / play (5, 6). Our experience in the Wellness tourism area including Geotherapy, Forest recreation trials and Geomedical tourism destinations, gives us possibility to test very new healing/recreation or public health prevention methods with wellbeing effect for people.

DESIGN OF INVESTIGATION
The aim of presented study was to create specialized tourism destination in pure nature for wellbeing and prevention of geopathic stress and electrosmog impact. The goal is to test the geomedical tourism as a special approach and problem solving. Objects of research: 16 famous Wellness and SPA destinations from 4 countries: Bansko, Sunny Beach, Pomorie (Bulgaria), Sulzberg- Bregen (Austria), Ochrid (N Macedonia), Bad Griesbach (Germany) which were examined in 2010-2017. All of them can describe as well known SPA and medical SPA.
destinations with a good developed tourism infrastructure. The beautiful environment conditions, landscape views and natural lakes are additional benefits for tourists with different health problems. The examined resorts are suitable for tourists’ target groups with various health and age’s profile: from 4 to 70+years old. Research group-86 tourists, divided in 3 groups, according to their age.

METHODS OF INVESTIGATION
Test of differentiated self-assessment of the functional state- SAN test (7), Applied Kinesiology Test, Geopathic stress Sequences (GSAS) and geomedical assessment of ecological environment and tourist infrastructure.
Modeling area was Central North Bulgaria, Stara planina Mountain, Trojan region (8).

All assessments were done using Bulgarian Association of Geomedicine and Geotherapy (BAGG) methodology named “Geopathic Stress Analysis Sequences GSAS”.

Limits of investigations: All experts’ and prediction assessments are based solely on the chemical analyses submitted during the investigation work. The available archive materials are used to evaluate the sustainability of the hydro-chemical characteristics of mineral waters, using for treatment.

RESULTS
The environmental data about quality of soils and underground water was obtained. There is not contamination with heavy metals and BTEX in modeling region. The results from the monitoring of mineral waters showed stable chemical composition without pollution. There is not research evidence for electromagnetic pollution. An overview of obtained results is shown in table 1.

| Obtained results                                      | Evaluation                                      |
|-------------------------------------------------------|-------------------------------------------------|
| Hydrogeological data and estimate of springs potential (free flow rate) | positive                                         |
| Estimate of hydrotechnical conditions of wells         | positive                                         |
| Hygienic conditions of wells                          | positive                                         |
| Chemical composition of mineral water                  | Stable without contents of BTEX, heavy metals, SO4, NO3 |
| Medico-biological assessment of mineral waters         | Healing water in use for treatment and drinking  |
| Medico-social assessment of tourism development in the region | Traditional cultural-heritage and religious destination for Bulgaria, Wellment destination in Austria, SPA destination for Germany |
| Touristic infrastructure audit                        | Suitable for medical SPA and Wellness : 4 and 5 stars hotels |
| Environmental assessment including Geopathic stress an EMP | Geopathic free zones, EMP free hotels , some of them after remediation |
| Landscape recreation potential assessment               | Suitable for different excercises               |
| Bioclimate recreation potential assessment              | Healing climate yearly                          |
| Assessment of SPA centres                              | Normal conditions for relax                      |
| Assessment of Certification status of SPA centres      | QMS and HSE – not available in Bulgaria          |
| Model for geomedical tourism destination               | Approbated 7 destinations in 2007 year            |

MEDICO-BIOLOGICAL AND GEOMEDICAL ASSESSMENT OF TOURISM RESOURCES
To estimate the medico-biological importance of nature is necessary to apply system approach for evaluation. The conditions for creation of Geomedical tourism are directly related to the pure quality of air, mineral water, water and soils. We need sanitary-hygiene and environmental standards for all components of environment. In fact, all forms of proactive and reactive healthcare including geomedical practices are part of health prevention tourism.
Another important objective of geomedical tourism is that tourists not only pass through a given place and then just forget it, but that they are given some valuable and useful information about the local history, culture, traditions, nature, etc. This creates a strong emotional connection, as the tourist is not just another side observer, but instead a participant who is supposed to take his behavior to another much higher level, to be careful not to harm local interests, not to pollute nature, not to damage the monuments of our cultural and historical heritage, but to give his contribution for the improvement of the social status of the local population.

GEOMEDICAL TOURISM AND PREVENTION OR REDUCTION OF EMF EXPOSURE
Live style coaching or health prevention?
The core of Geomedical tourism destination is a geomedical environment assessment (table 1 and fig.1). Resumed our experience (2007-2016), (9,10,11,12,13), we choose the following elements for the evaluation process: • Climate recreation potential; • Landscape recreation assessment; • Environment assessment; • Geopathic stress evaluation; • Biological resources- herbs, woods, lichens; • Geological places assessment; • Biomedical assessment of natural resources; • Psycho emotional assessment of mountain environment; • Wellbeing effect.

Geomedical tourism perceives and adds to the principles of sustainable development, as it is based and focused on the geographical location, good ecological preconditions and possibilities for the joining of the clients to a healthy way of living, including a healthy nutrition. The main accents of the principles of geomedical tourism are the active participation of the client in the general health process, as the local population has a special role in this process (14,15,16,17). For it the achievement of a positive economic effect and the improvement of the quality of its life are the result of the participation in the tourist service. Furthermore, another achieved result is the protection and preservation of both the natural and cultural heritage, and the intergenerational succession, which have a commitment towards the maintenance of the specialized type of tourism (in the cases of family business), precise planning of all activities, development of the available characteristic potential, achievement of an unforgettable experience for all tourists. Obviously, “Since sufficient EMF reduction is not possible in all cases, other measures can and must be considered. These include not only keeping additional exposure to a minimum, but also enhancing and increasing resistance to EMF. In some cases, positive effects of holistic medicine treatments have been reported” (18). In our point of view, we need new “live style coaching” including physical exercises, anti-stress massages, special nutrition menu, breathing treatment, meditation, etc. All of them we tried to combine in new tourism product which is in line with special needs of EHS person (fig. 4). Every tourist destination needs nature view or geo special place, presence of suitable moderate landscape for different levels of physical loads and treatment, botanical view, well developed infrastructure, suitable necessary equipment (hotel section, ethno- and eco houses with possibilities for SPA practices), Bio/ Eco foods and high qualified personnel with medical education background (19, 20,21). Some outlined benefits of outdoor recreation including geopathic stress analysis and Applied Kinesiology test-AK (8-10). Their positive results we can apply as an additional key for Geomedical tourism destination’s creation. Our results from SAN test before and after treatment are very motivated to go over it.

Fig.1 Prerequisites for development of geomedical tourism destination
CONCLUSION
Resuming our experience and client’s feedback we can conclude that Geomedical product is a highly efficient “anti-stress” product and effective for different target groups. It is a successful element of Wellbeing tourism with special focus on natural recreation of clients’ health condition and improving of their quality of life (22). The holistic approach of Geomedical tourism based on synergy of different areas of knowledge (23, 24, 25, 26). Geomedical recreation consists various specific techniques and thematic focuses for recreation practice as well as interdisciplinary methods. Applying the “holistic model of health (from "patient" to "partner") as well as greater emphasis on quality of life as the unifying focus for all health and human services professionals”.

Geomedical tourism is a new approach in the area of public health prevention and we can apply it as an approach for solving the geopathic stress impact also.

Our idea that geomedical tourism can help to some clients for reducing of EMP impact on their health is obviously workable indirectly on next levels: improving of quality of life in general, good sleep, improved immune system, stabilized the cardiovascular system and achievement of psycho-emotional comfort.

**Benefits and close effects:** Creation a very new clients philosophy about healthy connection with the Nature and develop an adequate wellbeing culture for the life standards and quality of life.

**Outcomes of Geomedical tourism:** Creation and promotion of Individual Well Fare Guidelines for sustainability ecological and social life. Public Health prevention with special social responsibility.

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