Service innovations in the spa health tourism
Selected examples

Andrzej Hadzik¹, Andrzej Tucki²

¹ The Department of Tourism and Pro-health Physical Activity, The Jerzy Kukuczka Academy of Physical Education in Katowice, Poland
² The Department of Earth Sciences and Spatial Planning, University of Maria Curie-Sklodowska University in Lublin, Poland

Summary

Introduction. The areas of innovation in health tourism now include four groups, namely innovation: product and process [as examples of technical innovation (technological)] as well as organizational and marketing [as examples of non-technical innovation (non-technical)].

Aim of the study. The aim of the work was the analysis of selected innovation in the health spa tourism, in particular in its product offer (health-related services).

Conclusions. Innovation in health tourism, spa relate primarily offer related to pro-health services. Creating innovation in health tourism spas should primarily focus on the most important trend, which is now the phenomenon of wellness in the tourist’s.

Key words: spa health tourism, innovation and service, wellness
Introduction

Health tourism is one of the most important types of travelling, which is affected by many conditions [1]. Some of them are new products and technologies in the modern apprenticeship treatment, rehabilitation and prevention, which can be implemented during the health tourist destination [2]. These forms of health tourism can be seen especially in spas, which in addition to medical treatment, are often at the same time as tourist destinations.

Every year, health tourism is becoming more and more involved in the tourism industry world. “Contribution” forms of health tourism, or tourism, health and medical (therapeutic) within the global tourism industry was in 2014 approximately 440, and $60 billion. This means that the total health tourism industry of around 0.5 trillion comprised more than 15.6% of the global tourism industry of the world.

Spa tourism is one of the most important national tourist brand products and it is also well-known both on the Polish and foreign markets [3]. Health tourism of spas can be defined as a conscious and voluntary trip for at least a day and no more than one year with an overnight to spa areas with opportunities to create and improve health in their free time. In general, the implementation of the essential objectives of this type of travel is to improve health and to maintain it at an appropriate level. This is done by means of prevention (including wellness and spa), rehabilitation or treatment in the spa (balneological), where naturopathy treatments (as examples of health-related services) provided for guests are essential.

The aforementioned concept of the spa health tourism allows us to distinguish the two principal forms, namely:

- medical tourism (healing) based on rehabilitation and balneological treatment in connection with the guests arrivals to improve their health,
- wellness tourism related to preventive arrivals where the aim is mainly to maintain health at the proper level.

The world health tourism, specific growth opportunities has wellness tourism, in the years 2014-2017 it is expected to grow by more than 9%, or to about 680 billion dollars [5]. In Poland only in the 2006-2011 the total value of health tourism market has grown from 2.3 billion to more than 4 billion Polish zlotys.

The largest participation in the share is in wellness tourism, and medical tourism (as examples of innovation) was characterized by the biggest increase in value in recent years (more than 3-fold increase from 306 to 958 million Polish zlotys) [6].

The origin of the term “innovation” is related to the Latin word “innovare” or creating something new. Colloquially, innovation means “new solution of issues”, it is involved in the change of the status quo while having importance for the development of tourism at the same time [7]. Furthermore, it means a change in production methods and products, and it is based on a new or already used knowledge acquired to date [8]. Innovation is associated with a process involving all the efforts to create a new product, and then to implement it [9]. According to the OECD innovation is any change (containing a novelty item) in products and processes, which was implemented in the enterprise [10].

Taking the areas of innovation into account, nowadays, all four innovations can be distinguished in tourism: product and process (as examples of technical innovation (technological)) as well as organizational and marketing (as examples of non-technical innovation (non-technical)). [11, 12]. Today, implementation of innovation in tourism is associated with the development of services (Fig. 1).

In the spa health tourism all innovations in pro-health terms services, or benefits are valuable and useful in terms of socio-economic product mainly non-material and are produced by human labor (eg. doctors, physiotherapists, trainers) are important. An analysis of domestic and foreign literature shows a wide range of services in the healthspas, many of whom have an innovative character (Tab. 1).
Table 1.
Concepts of health-related services within the spa health tourism

<table>
<thead>
<tr>
<th>Concept</th>
<th>Services offers (procedures) health</th>
</tr>
</thead>
<tbody>
<tr>
<td>[16]</td>
<td>Health services are based on:</td>
</tr>
<tr>
<td></td>
<td>• natural (typically spa areas) methods of treatment (balneotherapy, peloidoterapia, climate therapy, phytotherapy)</td>
</tr>
<tr>
<td></td>
<td>• so called other methods of treatment (hydrotherapy, thermotherapy, physiotherapy, diet, field therapy, health education, psychotherapy, drug therapy, cryotherapy, therapeutic massage).</td>
</tr>
<tr>
<td>[18]</td>
<td>Thermotherapy, hydrotherapy, balneotherapy, massage, electrotherapy, laser therapy, light therapy, color therapy, ultrasound, aromatherapy, music therapy, subterranotherapy, fitness, beauty treatments.</td>
</tr>
</tbody>
</table>

Source: an own study based on literature
These concepts show that innovation in pro-health services (“health services”) refer not only to the ones offered by businesses typically benefit health, including medical (therapeutic). In addition to these health services it should be noted that recreation and sports services are included in the wellness services.

Innovation services within the health spa tourism are determined by three levels:

- kind of the pro-health services; it may include a change of form of service, customer benefits, or changes in quality;
- market expansion; innovation in pro-health benefits can be made in the new space (geographical expansion), a new class of spa guests or expanding markets;
- the process of providing pro-health services; it involves the way of sales, organization of sales and service in health-resorts. In this type of spatial innovation the potential for innovation based on new technical communication solutions, and mainly on the potential of personnel providing health-related services analyzed is important [19].

Innovation in offering service in health spa tourism – selected results

According to GUS in 158 spa sanatoriums\(^1\) (92.4% sanatorium facilities in the country) are made of different kinds of treatments, including in the framework of preventive measures (health tourism). A total of 19,932.9 thousand services of this type of health services were realized. Naturopathy treatments\(^2\) accounted for 20.0% (3983.6 thousand) of the total number of the analyzed medical benefits of health services in spas\(^3\).

The most popular types of health services in the resorts are shown in the table 2.

Among other visible in the table of health services, physiotherapy is the second most popular in national resorts, which are in the GUS studies accounted for 19.6% of realized health services [20]. It should be noted that the so-called kinetic therapy, treatment of movement in connection with its specific nature is directly related to physical culture in the context of health care values, which exercise gives. The next most popular health services according to the Central Statistical Office are: hydrotherapy treatments (15.3% of total health services), electrotherapy treatments (13.5%), massage (9.7%), the so-called other health services (9.3%), phototherapy treatments (7.2%), cryotherapy (“cold treatment”) (4.6%).

Method and material

The aim of this work was the analysis of selected innovations in the health spa tourism, in particular in its product offer (pro-health services).

The basic methods of research were: analysis of literature and websites of various spa organizations, including the European Association of Spas (ESPA). In addition, an analysis of the provision of health-promoting has been conducted in the 45 statutory health resorts in Poland (158 spa sanatoriums). The above analysis was made possible also thanks to the use of data from the Central Statistical Office (GUS). In addition, the observational method was used and it was possible through research trips to domestic and foreign spas by the authors.

---

\(^1\) Sanatoriums spa were selected in the work to the analysis because these are basic objects in Poland, where, in addition to treatment and rehabilitation, prevention is realized also in the form of health tourism. The tasks of the sanatorium spa should in particular ensure that the patient, who was sent to stay at a spa receives 24 hour healthcare services in stationary conditions, medical care and full time nursing care, realization of the planned program of treatment procedures of natural medicine using natural raw materials and spa treatment facilities, preventive services and health education [16].

\(^2\) Natural medicine treatments include: mud treatments, which account for 33.6% of the total number of natural medicine treatments, mineral baths (32.8%), inhaling (inhalation) – 21.3%, and CO2 baths (12.3%) according to the Central Statistical Office. With natural medicine treatments in 2010, a total of 387.1 thousand patients benefited, which gave the average score of the number of patients to the number of treatments 1/10 [20].

\(^3\) Spa is an area in where a health resort which was given the status of the spa is run, dedicated to the use and protection of natural medicinal raw materials located in its area of. [20].
Innovations in these health-spa services can be seen in the following dimensions:

- functional (as one action to another),
- useful (as a carrier – the utility for the patient, spa patient),
- technical (as the procedure in the process of diagnosis and therapy),
- relational (as a kind of dialogue – the meeting of the recipient with the service provider) [21].

Innovation in relational and functional dimension is associated with pro-health services as benefits, where the most important role is played by a man – a direct service provider. Others – a new behavior of a doctor, physiotherapist, nutritionist or physical recreation instructor can take the form of innovative activities leading to the improvement of competitiveness in spa offer. An example of innovation in the functional dimension may be a new type of massage for example Chinese massage which is offered to the present customers. In turn, the innovation in the relational dimension is primarily a change in the approach to the patient, eg. for more empathetic with more listening to the needs of the individual.

Innovation service in a useful dimension may involve the introduction of additional benefits to spa offer – thereby increasing the value and usability of the considered product, eg. an additional spa service. Technical or technological dimension of innovation in services in the health spas refers mainly to new or modified methods of diagnosis and therapeutic procedures, eg. new apparatus for the diagnosis or treatment of a disease in a town spa, eg. the cardiovascular system.

Analyzing the importance of innovation in pro-health tourist services it should be emphasized that some of the innovative products in this market are

Table 2. Major health services in spas (according to GUS)

<table>
<thead>
<tr>
<th>Type of treatment</th>
<th>Specific aspects of</th>
<th>Source: an own study based on [20]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massages</td>
<td>One of the most common procedures performed in spas and wellness. These therapies are one of the oldest therapeutic treatments. Currently, you can distinguish many various kinds of a massage (classic, specialist, sports, cosmetic and care).</td>
<td></td>
</tr>
<tr>
<td>Mineral baths</td>
<td>Various types of brine are mainly used for their preparation. These are baths in tubs or pools filled with medicinal water with simultaneous exercise.</td>
<td></td>
</tr>
<tr>
<td>CO₂ baths</td>
<td>There are bath tubs (carbon dioxide is dissolved in water) or dry solution baths (carbon dioxide is used in gaseous form).</td>
<td></td>
</tr>
<tr>
<td>Baths and mud treatments</td>
<td>Baths of this type involve the use of shredded peat and peat peloids which are natural mineral substances.</td>
<td></td>
</tr>
<tr>
<td>Inhalations, inhaling</td>
<td>The introduction of drugs or natural substances to the respiratory tract (upper respiratory tract and bronchi), by using devices for producing aerosols of different degrees of dispersion. Inhaling can be individual or collective.</td>
<td></td>
</tr>
<tr>
<td>Cryotherapy</td>
<td>The treatment is about subjecting the whole body for a short time to very low temperatures.</td>
<td></td>
</tr>
<tr>
<td>Electrotherapy</td>
<td>The therapy involves the use of various kinds of electric current treatments. This includes, among others, treatments such as electroplating, iontophoresis, interference electric diadynamic currents,</td>
<td></td>
</tr>
<tr>
<td>Phototherapy</td>
<td>The method of light therapy, eg. Lamps emit mainly infrared (sollux), ultraviolet (quartz lamp) light or a combination of both types of radiation.</td>
<td></td>
</tr>
<tr>
<td>Water therapy, hydrotherapy</td>
<td>Methods of treatment of the stimulus by the outer application of cold water, cool or warm (therapeutic baths, half-baths, showers, water jets, water wrapping).</td>
<td></td>
</tr>
<tr>
<td>Kinesiotherapy</td>
<td>The method for movement treatment; therapeutic exercises are divided into local and general. Local exercises concern directly the affected organ, and the general is refers to exercises of parts of the body which are not ill.</td>
<td></td>
</tr>
<tr>
<td>Parafin treatments</td>
<td>Paraffin wrapping, brushing, wraps or direct limbs baths (so-called “glove” or “sock”), and masks.</td>
<td></td>
</tr>
</tbody>
</table>
on the list of “National Smart Specialisation” (KIS), which is a specialization recognized as giving a competitive advantage for Poland [22]. From the point of innovation in the health spa tourism, three specializations in the field of “healthy society” are particularly important:

- KIS 1. Medical engineering technologies, including medical biotechnologies;
- KIS 2. Diagnosis and therapy of civilization diseases and personalized medicine, including: IV. Coordinated health care and promotion; prevention and VII. coordinated rehabilitation, and especially;
- KIS 3. Preparation of medicinal products [23].

The aforementioned and so-called smart specializations refer to a large extent, to product innovations, which generally constitute the largest group of innovative solutions [24]. Product innovations in pro-health spas offer include:

1. material goods, which are:
   - tourist and recreational or therapeutic equipment allowing new recreational activities or new methods of treatment or rehabilitation;
   - innovative technical and electronic equipment, eg. for active health tourism (eg. Specialized heart rate monitors);
   - technical ecological solutions eg in hotels. Eco – or Bio – hotel where owners and managers care at the same time about the comfort of the health tourists and their close contact with nature.

2. services, which are:
   - new services eg. the organization of events for people with disabilities in the resorts,
   - innovative services in the field of wellness tourism, for example the „Nordic wellbeing” or „Blue Lagoon” in Iceland; Innovation often results from another, a new usage of natural materials, eg. thermal waters;
   - innovation services eg. healthy gastronomy.

An innovative, widely understood product of health spa tourism, seen as a bid submitted with a number of services and non-material elements, is often based on various types of apparatus and equipment (tab. 3).

The table shows the market of health spa tourism as having more and more innovative technology in the field of equipment and devices for the development of wellness tourism, which is one of the modern trends. This is connected with the changes broadly defined as „health” motivation for trips to spas, where the next targets are typically therapeutic (treatment of diseases, plastic surgery), there are objectives related to wellness, relaxation and being „forever young”.

**Discussion**

The main reason for the need to create innovation is the variability in the time of motivation of people coming to the spas. These motives to make a trip to the spa affect the manners and forms of leisure activities, while being inspired to create a new concept of health tourism products, meeting the needs of patients and tourists better [25]. On the other hand, continually increasing competition, changing markets and technologies force companies and health resorts to implement innovations, especially product innovations.

A new approach to life, including health, based on the paradigm of “wellness” is a visible change having consequences for health tourism in spas now. They focused on “... prolonging life while maintaining the health, physical and mental fitness, youthful appearance, well-being and social activity” [26]. The phenomenon of “wellness” in terms of health is seen in the category of megatrend XXI, and the civilization of knowledge determines the long cycle-creating the next 40-60 years, the lives of many people [27].

Trends in health tourism “reaching” toward wellness “create” consequences for this type of travelling as being generally “allies” of development of the analyzed tourism industry. However, this requires taking appropriate innovative “steps”. One of the examples of such actions are the products of health tourism brand WellVital offered in the Allgäu mountain range in southern Germany. Generally WellVital brand of products is focused on offering the scope to relax the body and mind, as well as fitness classes. The offer is based on the eight-pillar concept of health, or health
### The type of apparatus and equipment

#### Medical Tourism
- Medi devices:
  - medical equipment, aesthetic medicine and physiotherapy,
  - thermotherapy devices (saunas, paraffin, cryotherapy apparatus),
  - hydrotherapy equipment used to baths, showers, pouring, flushing,
  - phototherapy devices using visible light radiation IB., UV,
  - laser device,
  - electrotherapy devices using direct electric current, low and medium frequency,
  - devices using electromagnetic fields and low frequency,
  - ultrasound devices.

#### Medical and Tourism Wellness
- Cosmetic devices:
  - devices using lasers (used for; photorejuvenation skin, hair removal, pigmented lesions, vascular, tattoos)
  - equipment using IPL (pulsing light) and ELOS (IPL or laser connection with the flow of high frequency electric current)
  - ultrasound devices (used to inhibit the aging process, release of fat cells, skin nutrition – sonophoresis, peeling, elimination of cellulite and fat)
  - devices using electric currents used for: galvanization, iontophoresis, depilation, darsonvalization
  - devices using an electromagnetic field used for magnetotherapy, diathermy
  - other treatment devices (used for: mesotherapy, dermabrasion, lipolysis,) and multifunction devices

#### Wellness Tourism
- Basic equipment and instruments used in the wellness treatment:
  - hydrotherapy device for bath, showers, Kneipp, drinking cures, graduation towers, swimming pools
  - thermotherapy devices (saunas, Roman bath, Turkish bath, banyas, ice cave)
  - devices using radiation (lamps, IR cabins, solariums)
  - subterraneanotherapy equipment (caves, salt caves)
  - peloidotherapy equipment used for mud packs, peat, fango, clay
  - equipment and appliances for massage (couches, oriental massage devices for example. Ayurveda, shells, stones, stamps)
  - relaxation appliances and equipment (capsule cabins salve in terra, aromatherapy appliances, color therapy)
  - cosmetic equipment and appliances (armchairs and couches and cosmetic podiatry, beauty combines)
  - fitness instruments and utensils:
    - Cardio equipment (treadmills, cross trainers, exercise bikes, steppers, rowers)
    - Power equipment (atlases, benches, poles)
    - Refrigerator (dumbbells, barbells, balls, rubber, furlers)

### Table 3.

Apparatus and equipment in the health spa tourism

<table>
<thead>
<tr>
<th>The type of apparatus and equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical Tourism</strong></td>
</tr>
<tr>
<td>Medi devices:</td>
</tr>
<tr>
<td>- medical equipment, aesthetic medicine and physiotherapy,</td>
</tr>
<tr>
<td>- thermotherapy devices (saunas, paraffin, cryotherapy apparatus),</td>
</tr>
<tr>
<td>- hydrotherapy equipment used to baths, showers, pouring, flushing,</td>
</tr>
<tr>
<td>- phototherapy devices using visible light radiation IB., UV,</td>
</tr>
<tr>
<td>- laser device,</td>
</tr>
<tr>
<td>- electrotherapy devices using direct electric current, low and medium frequency,</td>
</tr>
<tr>
<td>- devices using electromagnetic fields and low frequency,</td>
</tr>
<tr>
<td>- ultrasound devices.</td>
</tr>
</tbody>
</table>

| **Medical and Tourism Wellness**   |
| - Cosmetic devices:               |
| - devices using lasers (used for; photorejuvenation skin, hair removal, pigmented lesions, vascular, tattoos) |
| - equipment using IPL (pulsing light) and ELOS (IPL or laser connection with the flow of high frequency electric current) |
| - ultrasound devices (used to inhibit the aging process, release of fat cells, skin nutrition – sonophoresis, peeling, elimination of cellulite and fat) |
| - devices using electric currents used for: galvanization, iontophoresis, depilation, darsonvalization |
| - devices using an electromagnetic field used for magnetotherapy, diathermy |
| - other treatment devices (used for: mesotherapy, dermabrasion, lipolysis,) and multifunction devices |

| **Wellness Tourism**               |
| - Basic equipment and instruments used in the wellness treatment: |
| - hydrotherapy device for bath, showers, Kneipp, drinking cures, graduation towers, swimming pools |
| - thermotherapy devices (saunas, Roman bath, Turkish bath, banyas, ice cave) |
| - devices using radiation (lamps, IR cabins, solariums) |
| - subterraneanotherapy equipment (caves, salt caves) |
| - peloidotherapy equipment used for mud packs, peat, fango, clay |
| - equipment and appliances for massage (couches, oriental massage devices for example. Ayurveda, shells, stones, stamps) |
| - relaxation appliances and equipment (capsule cabinets salve in terra, aromatherapy appliances, color therapy) |
| - cosmetic equipment and appliances (armchairs and couches and cosmetic podiatry, beauty combines) |
| - fitness instruments and utensils: |
| - Cardio equipment (treadmills, cross trainers, exercise bikes, steppers, rowers) |
| - Power equipment (atlases, benches, poles) |
| - Refrigerator (dumbbells, barbells, balls, rubber, furlers) |

*Continued on the next page*
The so-called other equipment used in wellness:

1. Devices modeled after baths and saunas:
   - Herbal steam bath
   - Stonebath® – Sauna stone
   - Rasul®
   - Brechelbad® – Steam farmers (sauna fir)
   - Kraksenofen® – sauna in the hay
   - Body Conclusio®
   - Brotbad® – Baths in the smell of bread
   - In Salve Terra®
   - A shower under a mill wheel

2. Equipment modeled on graduation tower and light therapy:
   - Salina thorn room – salt graduation towers
   - Sole licht Raum – brine cascade
   - Brine licht room – light and brine therapy
   - Med® Sabbia – Sand & light system
   - InfraPLUS

3. Equipment for body treatments:
   - Soft Pack® system pure
   - Hamam by Haslauer Oriental table – table for oriental treatments
   - Contur® Permanent,
   - Holistic beds for body treatments
   - Couches
   - Specialized couches for Ayurvedic treatments
   - Spa Baths
   - Professional seats designed for medical offices

4. Cosmetic:
   - Raylife multiplatform – the device provides an innovative solution for dermatology, cosmetology and aesthetic medicine
   - Reaction™ technology-based Core™ (channeling Optimised RF Energy) of issuing bipolar energy radio waves of three different frequencies
   - Dx Twin – a device designed to reduce cellulite and fat
   - Cavijet™ Pro – is based on the LICU technology (Low Intensity Cavitation Ultrasound) used for non-invasive elimination of unwanted fat deposits and cellulite
   - Shape Trio is a comprehensive and modern system of effective body sculpting
   - Trio X7 – uses a combination of two technologies: radio waves and low-frequency ultrasound ensuring high efficiency in body shaping and anti-wrinkle action
   - Lumi 8
   - SP Original allows you to perform vacuum massage
   - Lymphobions L300 is a comprehensive method that offers treatments for face, neck and body, combining a detoxification, cavitation peeling, sonophoresis, toning and soft laser
   - Infusion™ – is a modern device for non-invasive deep injection preparations
   - Laser Dermablate effect is developed with the aim of treatment of coagulation, vaporization, ablation or cutting of soft tissue
   - Laser Quadro Star+
   - Doublo is a machine which performs a face lift, Soft Plus is a device for the diagnosis of the skin condition
resorts products: WellVital Relax WellVital Active WellVital Spa WellVital Beauty WellVital Slim WellVital Mental, and the Special WellVital WellVital Prevention [29]. Of course, it should be emphasized that this is only one of many offers of innovative services in the health spa tourism has potential to be used by the national body healing.

In the literature you can indeed see the detailed concepts of the mega trends in wellness tourism, which fit into the mainstream philosophy of wellness and spa [30]. These are health, the pursuit of longevity, individualization, the dominance of women in the spa, modern soulfulness and mobility of health tourists. Especially important in the context of innovation to spas, seems to be the analysis of five key trends (megatrends) in tourism spa [18]. These include trends: medi spa, beauty spa, wellness spa, ethno spa, eco spa. This shows that modern innovations in health service spa tourism should focus not only on the phenomenon of wellness, but also on the use of advanced medical technology and cosmetic therapeutic tourism. In addition, you should “make use” in an innovative way with elements of the culture, traditions and folk medicine in the resorts, and a greater degree than previously was put on ecology.

Conclusions

Taking the areas of innovation into account today all four groups of innovations can be distinguished in the health spa tourism: product and process [as examples of technical innovation (technological)] as well as organizational and marketing [as examples of non-technical innovation (non-technological)]. However, the largest group consists of product innovations, including service innovations.

Innovations in health spa tourism relate primarily to offer related to pro-health services.

Innovation in pro-health spas are recognized in the dimensions of functional (as one acts to another), useful (as a carrier of the value – the utility for the patient), technical (as the procedure in the process of diagnosis and therapy) and relational (as specific dialogue meeting recipient of the service provider).

The most innovations from many pro-health services in the tourism spa can be seen in wellness tourism, and it is associated with the rapid development of this form of health tourism resulting primarily from the changing health needs of travelling guests and the desire to create healing entities innovative and competitive product.

By creating innovation in health spas tourism the focus should be primarily on the most important trend, which is now the phenomenon of wellness in the tourism.

References