





Study and evaluation of good practices existing "SPA THERAPY & COVID" on the European market

February-July 2022

Csilla Mezösi

Prof. Dr. med. Karl-Ludwig Resch Szilárd Szigeti

Phase 2: Quantitative survey and qualitative interviews with the European actors of thermalism, medical spas

Survey to a selection of thermal actors with the objective to measure:

- Formalizing the feelings of customers who have tested these offers;
- The relative importance that the actors give to this issue interviews with 8 partners

Phase 3: To propose a relevant analysis of the results and formulate the resulting recommendations

The selected service provider will provide proposals for recommendations. These recommendations will be based on concrete examples of adaptation identified in France or abroad.

Phase 4: Synthesis of data collected, and recommendations made

The results of the study will have to be synthesized by the provider in 2 formats:

- in a PowerPoint document for presentation to the project team.
- in a document of 10 to 12 pages (a summary of the 3 phases of the study: the findings illustrated with verbatims from stakeholders, as well as recommendations for adaptation.





Phase 2 - COMPONENT 2:

Qualitative interviews with the European actors of thermalism:

FRANCE; SLOVAKIA; LITHUANIA; HUNGARY; LATVIA; LUXEMBOURG; SLOVENIA and ROMANIA

In the qualitative part of the research, a predefined set of questions was sent out, complemented by personal in-depth interviews were conducted (July 2022) (N=8) with a spa doctors, managers, and/or other colleague or a professionals with insight into post-covid programmes in the eight countries selected.

The interviews were conducted via an online platform (approximately one hour each) in English.



Health resorts in Europe – post Covid/Long Covid treatments Special know-how

Europe's unique attraction and medical services - in spas and health resorts using natural remedies score solid supporters of patients suffering from side effects and long-term ailments. Another core competence is the prevention and strengthening of the immune system.

Some special health resorts in Europe treated extremely large number of patients, but they are rather the exceptions, such as Bad Sulza in Germany with 2.847 patients by June 2022 and Heilsustofnun in Iceland with more than 2000 patients – this health resort and spa in Iceland was the first in Europe with post-corona treatment services, including natural remedies in therapy.

Czech Republic, Latvia, Lithuania, Romania, Slovakia and Slovenia could be categorized as the 'best cases' with a high number of treated patients in medical spas and health resorts.

Interreg Europe

Interview questions

- 1.What is the most common way for Long-Covid patients get to your place (own initiative or referral by a physician). Could you please describe the "usual process"?
- 2a. Own initiative: What are the main motives for Long-Covid patients to choose your medical spa?
- 2b. Physician referral: What are the most important criteria that qualify long Covid patients for a referral to your place?
- 3. How long do long Covid patients typically stay in your place?
- 4. How big is the interest in the newly developed Long/Post Covid treatments? Where do most inquiries come from?
- 5.Are there particular long Covid symptoms, you feel particularly competent and/or successful with the long Covid treatment concept you have developed?
- 6.What are the core treatment goals for long Covid patients at your place? Have you incorporated changes in the program later with the experience?
- 7. What are the most important treatment (balneology treatments) pillars for long Covid patients at your medical spa?
- 8. What alternatives do long COVID patients have in your country, if they do not get a referral or cannopt afford the treatment at your medical spa.
- 9. What else do you think could be important to help us to draw a comprehensive overview of what long Covid patients can expect at your place?

HUNGARY

- Post-COVID programmes are mainly in hospitals (these programmes are finances by the insurance system) and in a few medical spas (4 spas were mentioned). Outpatient treatments are in case if the patient lives close to the hospital, other way there is inpatient treatment this is privately financed by the patients. In spas there are different programs, which are not just for the post-COVID patients (musculoskeletal diseases, respiratory problems), and these are combined for the post-COVID patients and take 7 days or 14 days.
- Main symptoms: cough, breathlessness, lung inflammation, dyspnoea, loss of smell
- Treatments: treatment for upper respiratory system, physical activites (all the 4 spas have different protocols)
- Started: 2021-2022

FRANCE

Medical treatments are prescribed by a doctor - these are covered 65% by the health insurance, but mini-cures are not prescribed and these are paid by the patient (out-of-pocket). People can read articles in journals or magazines about the treatment, TV reports can bee seen - so the marketing is strong.

Stay: 3 weeks with balnotherapy, or 6-9 days private patients

Main symptoms: tiredness, neurologic symptoms, smell problems, problems with concentration, headache, musculoskeletal problems

Age group: different - young and old as well, but the most of them average 40 years old (working population)

Experience: At the beginning a consultation with psychologist or physiotherapist is made, so the therapy is created depending on the symptoms. There are specific workshops for different symptoms, to give the right solution for the problems. The quickest changes are in smell and breathing. Tiredness is cured with balneotherapy treatment. There are group treatments in swimming pool (physical activity) - however the patients are afraid of doing the therapy, because of tiredness. They must do short time and then repeat.

Speciality: Patient follow up (e-mail - questionnaire, or telephone call) 6 months after the therapy to ask them how they feel and give advice, if it is needed. Patients appreciate this.

Treatments: same as in respiratory tract or Rh treatment grid PLUS interviews/consultations, sports activities, workshops, breathing trainings, meditation

Start: 2021 July

LATVIA

2 possible ways to get to the spa: 1. Post-COVID patients are sent by a doctor to attend a post-COVID treatment; 2. Commercial Patients (private payers)

1. Covered by the national health insurance fund; 2. Private payers (There are cases, when a patient has a covered treatment package, but he/she can buy extra treatments out-of-pocket)

It is medical rehabilitation program, not spa. Duration: average 10 days (7-14 days) - Resort rehabilitation centre Jaunkemeri (not SPA, but special hospital). In some case patients stay 3 months (private)

The patients have the opportunity to choose the rehabilitation centre (there are 5 of them, plus 3 medical spas). Difficult cases cannot choose, those have to go to the best centres.

Main symptoms: respiratory problems, cardiovascular diseases, neurology, musculoskeletal problems

Experience: There are different therapies - individualized, what is the best for the patient. Surprisingly many private payers in the system. 50%-50% of state-funded post-Covid/Long-Covid therapy with an estimated budget of 3 million euros per year.

Treatments: mineral waters (drinking and bath), climate therapy, occupational therapy, physiotherapy, speach therapy

LITHUANIA

2 possible ways to get to the spa: 1. Post-COVID Syndrome - hospitalized patients, some of them from intensive care units (16-18 days stay); 2. Commercial Patients (8-9 days) (private payers)

1. Covered (0-18 days) by the national health insurance fund; 2. Private payers

Main symptoms: tiredness, dyspnoea, weakness, respiratory problems, cardiovascular diseases, mental health problems, neurology, musculoskeletal problems, sleeping disorders, organic insomnia

Age group: different - young and old as well (the symptoms are the same)

Experience: Treatment goals are to reduce annoying symptoms - depending on the severity of disease (personally adapted during the first appointment with the physician). The procedures are the same, only intensity varies according to the client's condition - it is not the patient's choice. After 7 days the majority of patients get better (and after 18 days of stay there are nice changes). The patients receive different (individual) treatment - prescribed by the doctor. Exercise helps. It is important if the patient understands the usefulness of the treatment. Is any treatment or it's part is bad for the patient, the treatment is skipped.

Treatments: 5 areas - physiotherapy, natural factors (mineral waters, mud etc.), massage with vibre elements, adapted natural factors, psychotherapy. Other integrated treatments: climate therapy, CO_2 gas, mofette, kinesiotherapy, psychotherapy, halotherapy, 'RESPI CARE'

LUXEMBOURG

Patients with problems are transferred by the gatekeeping system.

Multidisciplinary aspects: specialist, psychotherapist see the patient.

Average stay: 3 weeks

100% covered by the Ministry of Health (till July 2022) or by the national insurance company

Main symptoms: dyspnoe, insomnia, musculoskeletal problems - joint/muscle pain, tiredness, loss of taste and smell, panic respiratory problems

Experience: Loss of self confidence is the main problem! Patients do not trust their bodies. Individual consultations and some individual treatments. Group treatment and mobilisation is the most important (wet and dry training). Consultation with psychologist. We can also refer to the therapy as lockdown recovery. It's not just pain that needs treatment.

Treatments: inhalation, physical training, individual physiotherapy, taste training, consultation with psychologist, thermal water, fango, mud, peloids (On average, each patient has 55 treatments (plus 3 doctor's appointments) in the 3 weeks), nutritional consultation

Start: 2021 August The pilot project of the Ministry of Health started in August 2021 and ended with good results in December 2021, so that from January 2022 outpatient and inpatient care after the Covid and long-term Covid illness will be financed by the state health insurance

ROMANIA

Some patients go to resort directly as a part of prevention (preventive packages) - they do not have big or complex health problems. 50% of the patients coming by knowing the resort. After the population learned about post-Covid treatments, we were able to attract a large majority of new target groups. Many are also interested in the topic of prevention. This was not the case before Covid19.

14 days stay

The treatments can be performed both on the basis of health insurance and by purchasing treatment packages by patients. Financed by the government: 6-10 days up to 100%

Main symptoms: Fatigue, Myalgia, Respiratory problems, Mental health problems, Cardiovascular diseases. Neurology, Musculoskeletal

Experience: Aesthenia is the most important, plus 30-40% of the patients have loss of taste and smell and the majority of them is psychically affected because they cannot recover. Consultations, early advice, lifestyle change is important. Activities combined with aesthenia and treatment to increase the blood circulation. Guide package.

Treatments: mofette, mineral waters, fango, mud, peloids, climate therapy, seawater, thalasso, salt water inhalation, oxygen therapy, respiratory gymnastics, baths with iodine mineral water, baths with bicarbonate water with sulphur

Start: 2020 September

SLOVAKIA



Prescription/referral by a doctor-specialist (list of therapies that are financed by the insurance system)

If the patient has several symptoms, just the dominant one is the important as indication. More than 4000 Patients in the first year

3 weeks fully paid spa therapy

Big interest. Patients come from the health care system.

Main symptoms: neurological symptoms they are very serious and very frequent, chronical fatigue, sleeping disorders, low oxygen saturation, tiredness, cognitive problems

Experience: the first most important issue is to motivate the patients (group activities, special talks about the health problems and reasons). Different therapy for different age groups. Explanation and evaluation of the treatment is important. Testing the condition, status of the patient before the treatment.

Treatments: CO2 water, sulfunic water bath, massage, special physiotherapy, oxygenotherapy, nordic walking, psychologist - talks

Start: 2020 October

SLOVENIA



3 possible ways to get to the spa:

- 1. Post-COVID Syndrome hospitalized patients, ill, cannot get home (30-60 days stay);
- 2. Long-COVID Patients got ill with little problems (14-21 days stay);
- 3. Commercial Patients telephone or email reservation, many of them having long-COVID (information on web sites)

100% covered by the Ministry of Health - Through a public tender, some health resorts have been accepted as partners in the health system for post covid / long Covid treatments.; Also Privately paying patients

Main symptoms: musculoskeletal problems, poor condition, fatigue, concentration disorders, insomnia, cardiovascular problems

Experience: different (individualized) treatments are good - these depend on the patient's condition. At the beginning passive treatments and inhalation is prohibited in the beginning!

Treatments: inhalation, breathing exercises, thermal mineral baths, workout, massage, mud, group workouts, drinking treatment/cure

EXTRA: ICELAND

Post-covid patients are most often referred by their primary care physician, few referrals are from cardiologists and pulmonologists

The National Health Insurance Agency in Iceland payed fully for post-covid treatments at the 3 rehabilitation centers from 2020 until end of 2021. Today their co-payment is the same for post-covid treatments as for other rehabilitation treatments at Heilsustofnun. Everybody should be able to get a referral to us from their medical doctor if there is a valid medical reason. Others are taken care of by their primary care physician with outpatient physical therapy for example.

Stay: always 4 weeks with possibility of 1-2 weeks extension.

Main symptoms: The unusual physical and mental tiredness with worsening after exertion, headache, sleep problems, anxiety.

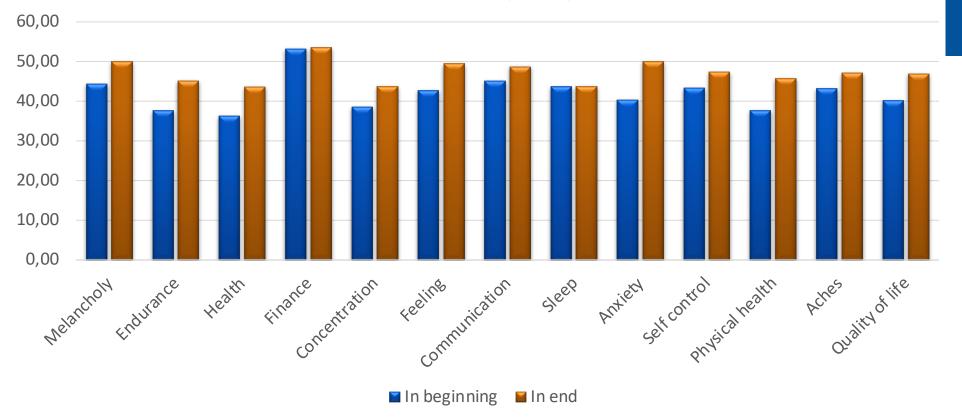
Experience: The core treatment at Heilsustofnun for our post-covid patients with unusual fatigue (almost everyone) is to teach them pacing; they learn to manage their physical, mental, social and emotional energy. Today less cardiac rehabilitaion and more relaxation therapies are used for these patients. There is a specially trained physiotherapist who supervises the treatment for all post-covid patients, most of them are able to take mild exercise tolerance test upon entering the program and again before discharge. They also fill out questionnaire about physical, mental and social health (HTL), in addition to questionnaire about sleep and fatigue

Treatments: Pacing, various water treatments (water gymnastic, floating, kneipp, hot and cold tubs, swimming, various water exercises, sauna, steam bath), organized relaxation times with guidance lying on a floor and/or in a lazy-boy chair, massage, meditation.

Start: 2020 August

EXTRA: ICELAND

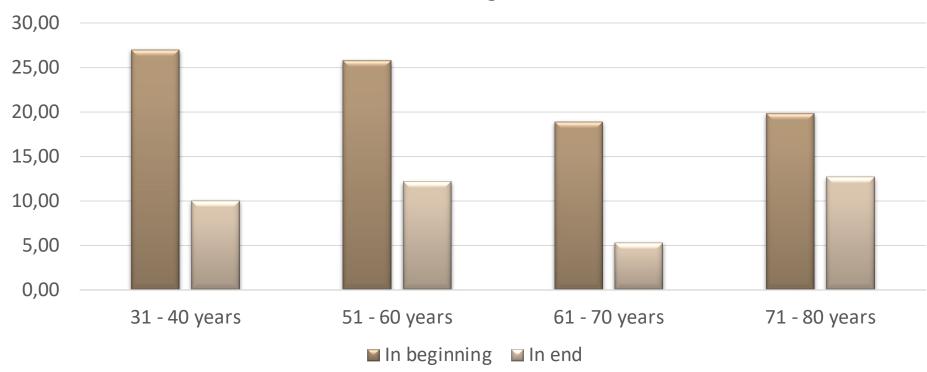
Covid HTL - total (N=60) - 2021



- All post-covid patients younger than 70 years of age filled out a questionnaire about physical, mental and social health, so called HTL-questionnaire.
- 40-60 is a normal range. "Quality of life" is a summary of all previous columns. We see improvements in almost every field from beginning of the rehabilitation until discharge.

EXTRA: ICELAND

Chalder fatigue scale



- Chalder fatigue scale measures physical and mental tiredness. 30 is max.
- The graph shows improvements/less tiredness at the end of 4 weeks stay.

(Some major) complaints that particularly affected the patients:

FATIGUE

MUSCULOSKELETAL PROBLEMS

PROBLEMS WITH CONCENTRATION

WEAKNESS

PSYCHOLOGICAL PROBLEMS

HEADACHE

COUGHING

RESPIRATORY PROBLEMS

TIREDNESS

INSOMNIA

GASTROINTESTINAL PROBLEMS

PROBLEMS WITH BLOOD PRESSURE

DATA SYNTHESIS- part I.

1. Long Covid health care demand covered by national social security schemes

In most countries distinct treatment programmes for Long Covid are covered by national health insurance schemes.

- COVERAGE: GP's or gate keeping organization; 1 leading symptom
- PATIENTS: Majority inpatient treatment; typically lack physical power and self esteem to care for themselves and/or their convalescence.
- ROLE OF SPAS: Therapeutic modules relying on natural resources and/or are based on balneological concepts are often part of a programme, generally well accepted, but typically play a minor role in the therapeutic concept proper.

DATA SYNTHESIS- part II.

2. Long Covid programs offered for privately paying clients

PATIENTS/CLIENTS:

- High proportion of "best agers"
- Most individuals already had received some kind of treatment covered by the respective national security system
- Typical symptoms observed by doctors and therapists include preexisting chronic conditions like diabetes, hypertension and/or autoimmune problems
- Somatic and psychosomatic symptoms as well

DATA SYNTHESIS- part II.

2. Long Covid programs offered for privately paying clients

CHARACTERISTICS OF PROGRAMMES:

- Typical duration is 1 or 2 weeks
- Package typically includes accommodation
- Therapeutic pillar is "spa therapy", in particular application of the natural healing resources of the respective spa (for instance, baths, mud packs, CO2 applications, radon baths, salt inhalation, massage and others)
- Light physical exercises seem to be relatively well tolerated
- Social interaction may be another key factor of a successful programme (group therapy, exercices)

DATA SYNTHESIS- part II.

2. Long Covid programs offered for privately paying clients

ROLE OF SPAS:

- For many (if not the majority of) individuals suffering from the sequalae of COVID-19 disease the complex "healing environment" of a spa together with the balneological therapeutic concept of repeated regulative stimuli, and sufficient time and space to "let it happen", may be associated with a markedly more pronounced perceived effectiveness than other, more focused medical concepts.
- Typical features of the post covid syndrome, are not at all specific to long covid, but rather well known (and well documented in the literature) as typical sequalae of a wide variety of severe and/or chronic health disturbances such as myocardial infarction, cancer, various viral infections.
- Long Covid may therefore be key for a revival of a long term future market without any thinkable threatening competition with other contemporary medical concepts.

DISCUSSION & CONCLUSION - part I.

- Differences in funding between programmes \rightarrow affects the number of patients and the length of the programme.
- The national health insurance system finances the treatment of patients who are admitted to the medical spa or the roundhouse on medical indication.
- Long covid patients are complaining of is broad, often not well specific and typically not limited to one problem dimension (as, e.g. neurology, musculoskeletal pain, or fatigue).
- Patients who have been referred seem to suffer from more severe forms of Long Covid and/or are typically transferred soon after the onset of symptoms.

DISCUSSION & CONCLUSION - part II.

- Clients booking a programme (paid out of pocket) may have gone through some sort of treatment provided by the national health care system before (which may probably not have been convincingly successful from the point of view of the patient), suffer from more subtile, yet subjectively inacceptable symptoms.
- It is advisable for the specialist available at the spa to examine the patient and determine what main problems the patient needs treatment for with particular emphasis on the patients' personal demands.
- The better health patients' reported, the better they achieved their personal goals during treatment.
- The better the patients' health status, the less these factors affected them during the treatment period.

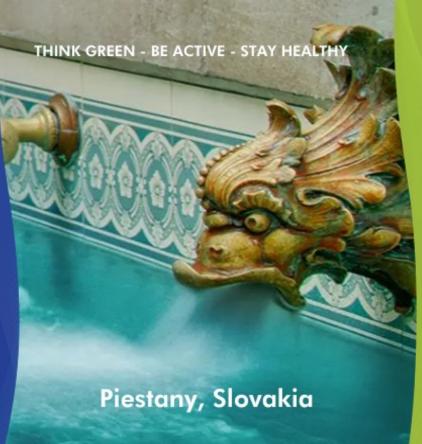
Balneologic/spa treatments

- Different natural resources are available in different places and countries, as they have different natural characteristics.
- This type of medical approach is not normally available outside of a spa (town).
- Post-COVID programmes are also based on different protocols and apply the environmental conditions and specificities of each country.
- TOP 3 most effective therapies are in a relationship with the dominant symptoms of the patients treated in medical spa facility (depends on the country and spa!):
 - ☐ Inhalation (aerosoltherapy) e.g.: Czech Republic and Slovakia,
 - ☐ Physiotherapy e.g.: Latvia, Luxembourg, France, Slovenia,
 - ☐ Pysical medicine e.g.: Slovenia, Czech Republic and Slovakia.

ESPA invites you to SLOVAKIA, Pieštany 21-23. SEPTEMBER 2022

- ESPA CONGRESS many of our partner doctors are invited and the exchange of further information and discussions takes place
- Two press trips are in the venue (international with 12 participant one for the Central European media)
- INNOVATION AWARDS last year special subcategory for post Corona





SPACE Experience

The 13th

SPA-CE Experience

The first and only boutique Spa & Wellness Workshop

20-23 September 2022