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Velan Kunjuraman, PhD Suchi Hassan, PhD Ruzanifah Kosnin, PhD Aifa Rozaini Mohd Radzol, PhD

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EXPLORING THE ROLE OF NATURAL HOT SPRING IN THE CONTEXT OF WELLNESS TOURISM

Noraznieza Binti Nor Azhar, Noorfara Atika Binti Ithnan, Nor Suhada Binti Ahmad, Nur Alfazliyana Binti Mohd Zulkifli & Nor Dalila Binti Marican

Faculty of Hospitality, Tourism and Wellness, University Malaysia Kelantan

Corresponding email: *dalila.m@umk.edu.my*

ABSTRACT

Nowadays, the use of natural hot spring is one of the fastest growing sectors of world tourism. Balneology is one of the practices that use natural mineral water from hot springs to treat and prevent diseases. An in-depth interview with 7 visitors and 1 hot spring operator was conducted at La Hot Spring, Jerteh, Terengganu to explore the role of natural hot spring in the context of wellness tourism. This study was conducted to establish a comprehensive profiling of hot spring visitors and to explore the current market characteristics of hot springs as wellness tourism destinations. In addition, this study also aims to discover the wellness benefits factors that attract the hot spring visitors. All the data was collected by using an interview method and each of the conversation will be recorded as an evidence. The results showed that hot springs can give benefits to visitor to overcome the health problems. In conclusions, hot spring is one of the crucial elements that can influence the visitors to have a better lifestyle and well-being.

Keywords: Hot Spring, Wellness Tourism, Profiling, Market, Benefits

INTRODUCTION

Hot spring usually known as a place for a recreation and health treatment. This is because, the demand of hot spring has increased after the visitor aware that the natural hot spring resources can lead to a better health condition. Furthermore, the current market of hot springs also received a further increment over the years, especially in wellness tourism industry.

Asian is one of the largest and well-known destinations for hot spring tourism because it has many natural resources (Taiwan Tourism Bureau, 2011). Over the years. the reputation of hot spring has rise, simulating the growth of the hot spring tourist market. One of the reasons for the growth of renewable tourism based on hot springs is the growing trend of fitness and well-being (Erfurt-Cooper & Cooper, 2009).

Usually, researchers will scientifically conduct research related to the hot spring water but not in social research. Scientific research by Hsieh, (2007), stated that hot springs are made up of geothermal materials containing minerals, gases and certain elements underground through a single channel. This is proven to be good from a scientific health point of view. But, lack of social research in hot spring water will cause some problems from a social point of view. Other than that, Hot springs are a potential source for the cure of common diseases characterized by high water temperatures, large flow rates and excellent water quality. People who experienced stress, anxiety, skin diseases, cardiovascular, muscular problems and asthma can get treatment in the hot spring. Lastly, hot spring become one of the revenues used in the national economy (Othman et al., 2015). Malaysia's wellness tourism such as hot spring, spa and social activities has high competitiveness in tourism and it is a promotional attraction in Malaysia (Tebourbi & Neifar, 2018). This phenomenon presents a challenge for the government of tourism and entrepreneurs to promote the hot spring to the public. Therefore, Tourism Malaysia Corporate (TMC) do the 'Visit Malaysia' every year with a different theme.

There are three objectives of this research:

- 1. To establish the comprehensive profiling of hot spring visitors
- 2. To explore the current market characteristic of hot spring as wellness tourism destinations
- 3. To discover the wellness benefits factors that attract the hot spring visitors

Significance of study

GOVERNMENT

The significance of the study is to reawaken interest toward the natural hot spring treatment. This can entirely attract new market and can recognize the influences of the hot spring on local economies. This research can give benefits to the government. The government plays an important role in promoting hot springs as a new concept of the wellness tourism industry. The government will educate people with a campaign to promote hot springs to the public.

STAKEHOLDER

The research can act as the benchmark. The stakeholder of a hot spring can understand the preferences and standard of visitors in choosing wellness in the industry. The visitor feels calm and relax because the stakeholder will provide many facilities and accommodation such as spa, restaurant. The stakeholder also offers low prices to visitors. Through this, the stakeholder will get the better marketing strategies in attracting a higher number of visitors. It will boost Malaysia's wellness tourism industry.

ACADEMICIAN

Furthermore, this research can give benefit to academician or researcher. This study is about exploring the role of natural hot springs in the context of wellness tourism. This selected place is La Hot Spring, Jerteh, Terengganu. The researchers can understand and have knowledge about the role of hot springs. This publication in this aspect will increase.

LITERATURE REVIEW

Hot Spring is a place where groundwater is heated by energy created by the earth. Groundwater that is hotter than 98 degrees Fahrenheit, 36.7 degrees Celsius (Mi, Chen, Cheng, Uwanyirigira, & Lin, 2019). Hot spring also refers to spring with water at a temperature substantially higher than the air temperature of the surrounding region. Hot spring tourism is a combination of a hot spring and tourism (The Global Wellness Institute, 2016). Hot spring tourism generally synergizes well with each other which is relies on the beneficial content of natural hot springs for the purpose of improving health (Valeriani, Margarucci and Spica, 2018).

Current Market Characteristics

SOCIAL DEVELOPMENT

Social development implies investing in individuals. This requires the removal of obstacles so that all people can move with trust and dignity towards the dreams (Yang et al., 2019). This is about helping individuals so people can move forward on the path to self-sufficiency (Yang et al., 2019). Hot spring tourism is literally the combination of a hot spring and tourism.

SERVICES QUALITY

Service quality is an antecedent of customer satisfaction, which can lead to customer loyalty and repeat business (Chang & Beise-Zee, 2013). The successful market of hot spring or sector are abundantly depends on their facility standards and ability to provide quality services (Su & Lin, 2006). The quality of services is considered as the ability to meet the stated and implicit needs of the customer (Su & Lin, 2006). Gradual service quality has been recognized as a key factor in gaining competitive advantage and retaining customers (Chen, 2014).

Benefits of Hot Springs

Hot springs healing has been used for over a thousand years and has been widely accepted in Europe and Japan as a natural treatment option for a variety of common ailments and is well known for several therapeutic benefits such as treating illness with bath (Danielle Pope, 2020). According to a study in Rheumatology, it is said that hot therapy can help relieve back pain, at higher temperatures (Talmadge, 2006). The benefits of soaking or bathing in hot springs can also be a good therapy which can give an effect on the skin and the entire body system (Elizabeth Reninger, 2019).

BOOST BLOOD CIRCULATION

Natural hot springs contain many different minerals, including calcium and sodium bicarbonate (Danielle Pope, 2020). According to Folklore (2006), the absorption of essential minerals in the hot springs can improve blood circulation and can accelerate the flow of oxygen throughout the body and give the signal to the body to fall asleep faster (Kristen Fisher, 2019).

RELIEVE PAIN

Soaking in the hot spring can help relieve intense pain and fatigue (Tania Tarafdar, 2017). A study published in the journal Rheumatology International found that hot mineral baths can aid in pain relieve (Danielle Pope, 2020). Additionally, when the body is immersing in the hot spring, it naturally supports and reduces the force of gravity that is compressing the joints (Carol Huegel, 2020).

HEAL SKIN PROBLEM

In natural hot springs, there is a silica that can actually help on skin problems (Sheldon Nesdale, 2016). Some minerals in natural hot springs are used to make collagen for the skin and it cleanse the skin during the summer baths which can treat some skin inflammatory diseases such as eczema and psoriasis (Danielle Pope, 2020).

REDUCE STRESS AND PROMOTE SLEEP

According to Danielle Pope (2020), hot baths can help in reducing stress by stretching the muscles. The minerals in the water can contribute to the psychological healing process, while heat relaxes tense muscles that caused by stress (Cindy Lamothe, 2018). The hot water actually helps in changing the body core temperature and gives the signal to the body to fall asleep faster (Kristen Fisher, 2019).

Belief Towards Hot Springs

Belief psychological theory is a subjective assessment and perception related to the cognitive system (Mark Hallet, 2016). Beliefs or perceptions of a matter are influenced by various attitudes based on the individual's factors. According to Mei-Ting Hsieh (2014), spring is experienced or experienced by someone to understand the meaning of psychological factors that motivate tourism. Many research sources show that hot springs have high nutritional and therapeutic content which are good for cardiovascular, asthma, inflammatory arthritis and rheumatic treatments (Oyama, Yoshihiro Kudo, Toyoki Maeda, 2013). Other than that, the researchers found that the hot spring are filled with high sulphuric mineral content that become good for skin (Yuen Wing, 2019). The researchers found that the effect of therapeutic in hot spring water can recover skin wounds, for instance, the high temperature can improve circulation both and increase blood movement (Guo & Dipietro, 2010). The ethnics in South Korean believe that the effectiveness of complementary medicine can improve physical function, disease prevention and reduction in pain (Hwang, Han, Yoo, & Kim, 2014).

METHODOLOGY

Research Design

In order to achieve the research objective, this research method will use qualitative research to collect data from our interviewers. The main characteristic of qualitative research is that it is most suitable for small samples, but the outcomes are not measurable and quantifiable (Langos, 2014). The aim is a complete, detailed description and data is in the form of words, pictures or subjects (Neill, 2007).

Data Collection

In the first stage, the data collection used in this study is a semi-structured interview. A semistructured interview is a meeting in which the interview does not follow the list of questions. This will provide open ended-questions, and discuss between interviewer and interviewee. Usually, this type of interview is for individuals or groups and the duration of 30 minutes, until it takes several hours to complete the task (S.; 2014). The researcher used the interview method to get information on La Hot Spring.

The second stage of data collection was a focus group. Focus group are usually used in the qualitative research method. It includes the limited number of respondents such as 6-10 people. A focus group is asked about their perception, belief, opinion and other else. Focus groups have several advantages. One of which is the effect of group interaction, which stimulates knowledge production. The second focus group can assist in defining key concept and rationalizing difference perception and opinion (O.nyumba, Wilson, Derrick, & Mukherjee, 2018).

Data Analyze

To analyze these data, researchers use thematic Analysis approach. The purpose of a thematic analysis is to find themes such as trends in the data that are important or interesting, and to use these themes to answer the study or to say something about a question. The researcher needs to transcribe the dialog communication and recording with the interview. There is much more than just summarizing the data; interpreting and making sense of a good thematic analysis.

FINDINGS

	VISITOR 1	VISITOR 2	VISITOR 3	VISITOR 4	VISITOR 5	VISITOR 6	VISITOR 7
AGE	34 year	24 year	45 year	25 year	21 year	37 year	71 year
GENDER	Male	Female	Male	Female	Female	Female	Male
RACE	Malay	Malay	China	Malay	Malay	Malay	Malay
MARITAL STATUS	Married	Single	Married	Single	Single	Married	Married

OBJECTIVE 1: TO ESTABLISH THE COMPREHENSIVE PROFILING OF HOT SPRING VISITORS.

Researchers interviewed seven respondents which is 5 females and 2 males. All respondents which are ages average of 20 to 75 years old. Each respondent was given the same question during the interview. Informants were asked about questions based on the objectives of the researcher. In this research, four items of demographic have been established which are age, gender, race and marital status.

OBJECTIVE 2: TO EXPLORE THE CURRENT MARKET CHARACTERISTIC OF HOT SPRINGS AS WELLNESS TOURISM DESTINATIONS

Theme	Findings
Social Development	- "The purpose of visiting are differ, some came here for having a picnic and some were here and back straight away, it seems like they just want to relax."
	- "Now it is more comfortable, the road is paved and the electricity also works 24 hours. Before this, the electricity only operated for only 12 hours by using a generator."
	- "Because we observed that at La Hot Spring many visitors came, so we thought, we need to create a Chalet to facilitate the affairs of visitors."

Service Quality	- "Based on the previous experiences, there is someone that used to come here with his wheelchair and he is suffering from stroke, but after receiving treatment consistently for 2 months, now he can walk normally."	
	 "In addition, people came to take a hot spring bath, but the river water can also be bathed. Other activities that people usually do is Family Day. Besides, the council people also often made some courses or events." "Here, many foreign visitors also come like Arabs, Palestinians." 	

There were three (2) major market characteristic on hot spring such as social development and service quality that was highlighted by Mi et al. (2019) on hot spring or balneotherapy.

OBJECTIVE 3: TO DISCOVER THE WELLNESS BENEFITS FACTOR THAT ATTRACT THE HOT SPRING VISITORS

Many of the respondents admit that hot springs has many benefits to them. The visitor was answering the questions rationally and they speak based on experience. Below are parts of *the conversation from the interview.*

"In terms of me who is sick when soaking at waist level will feel relieved" (Visitor 1)

"Because this hot pool water can provide smoother blood flow" (Visitor 2)

"After soaking can fresh the body, feel more energetic and relieved. I can relieve stress because can see green things". (Visitor 2)

"For the treatment of low back pain because it is always lingering." (Visitor 3)

"If soaked in hot water will sweat. When you return home, you can sleep soundly." (Visitor 3)

"Yes, because it can help blood circulation n very good for overcome the disease such as stroke and diabetes". (Visitor 4)

"Yes, I feel become fresh. Sometimes my footprints were pain, after that my leg are getting better because it can react to nature". (Visitor 4)

"Yes, I has a problem with my skin, I has an allergic and uncomfortable for me, so after come La Hot spring my skin better and it is can save my money for buy some medicine". (Visitor 6)

"For my experience, after come here and used the hot spring, I feel something deference with my body. I feel more energy and fresh after wake-up. So really suitable and effective for me." (Visitor 6)

"Yes, it is very effective for my skin problem. When I do this treatment, I feel relaxed and comfortable." (Visitor 7)

"Last month, I came here for bathing hot spring. Flowing hot spring are great for the treatment of skin and fatigue problems". (Visitor 7)

"When I do this treatment, I feel relaxed and comfortable." (Visitor 7)

Most of the visitor gave the positive feedback towards hot spring. Some of visitor admit that hot springs can help boost blood circulation and relieve the feet pain. While the other respondent was admitted that the hot spring can heals the skin problem. Hot springs also can reduce stress and promote sleep. Therefore, this proven that hot springs are good for external and internal health.

DISCUSSION & RECOMMENDATION

Based on the research, most of the visitors who come to La Hot Spring have a various category of age, gender, race and marital status. Visitors aged 31 - 60 senior citizens showed the highest number of visits to the La Hot Spring. The demographic factor affects the arrival of visitors to the hot spring, for example those aged 61 and above have many health problems and no energy to walk in rocky areas or visit this place. Visitors coming to Hot Spring have different reasons either for health or recreation.

Next, based on the current market features such as social development and services quality, this is a perfect time for the development of hot spring destinations in locally and globally. In order to attract a completely market to this industry, a new marketing strategy or implementation are required to find out the weaknesses of the existing system, and to take steps to improve the weaknesses so that the objectives are achieved as well as measures are taken. There are many advantages of developing the current market such as the competition ensures greater quality and lower prices for consumers. In order to further the economic interests, individuals are encouraged to take business risks which benefit the economy as a whole.

The wellness benefits factor that attracts the hot springs visitors such as boost blood circulation, relieve pain, heal skin problems, reduce stress and promote sleep. Most of the visitors gave positive feedback towards hot springs. The visitors feel fresher after bathing in hot spring. This because, the hot spring contain mineral component such as Magnesium and Sulphur. Meanwhile, the balneotherapy of hot spring gives energy and benefiicial especially for visitor who have stress symptom and insomnia. This proven that hot springs are good for external and internal health.

Based on the research, most of the visitors agree that the wellness benefits factors that attract the hot spring visitors. Nowadays, health problems related to allergies or skin problems are an issue because most of the people who do treatment at the hospital and do not get a good effect. The visitor believed that hot springs could relieve stress, help blood circulation and be effective for skin problems. It is recommended that the owner should add a hot spring to attract many people who have health problems to do treatment in La Hot Springs.

CONCLUSION

In conclusion, this research has proven that La Hot Spring is a natural treatment place for tourism health. Hot springs plays an important role that influence the demographic profiling, the current market of the hot spring tourism and the benefits of hot springs in order to treat any related

health condition. The results showed that visitors believe hot springs can gave many benefits to keep the body healthy such as boost blood circulation, relieve pain, heal skin problem, reduce stress and promote sleep.

REFERENCES

- Abbasi, B., Kimiagar, M., Sadeghniiat, K., Shirazi, M. M., Hedayati, M., & Rashidkhani, B. (2012). The effect of magnesium supplementation on primary insomnia in elderly: A double-blind placebo-controlled clinical trial. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences, 17*(12), 1161.
- Agishi, Y., & Ohtsuka, Y. (1998). Present features of balneotherapy in Japan. GLOBAL ENVIRONMENTAL RESEARCH-ENGLISH EDITION-, 2, 177-186.
- Albu, M., Banks, D., & Nash, H. (2012). *Mineral and thermal groundwater resources*: Springer Science & Business Media.
- Altman, N. (2000). Healing springs: the ultimate guide to taking the waters: Inner Traditions/Bear & Co.
- An, J., Lee, I., & Yi, Y. (2019). The thermal effects of water immersion on health outcomes: an integrative review. *International journal of environmental research and public health*, 16(7), 1280.
- Bajgai, J., Fadriquela, A., Ara, J., Begum, R., Ahmed, M. F., Kim, C.-S., . . . Lee, K.-J. (2017). Balneotherapeutic effects of high mineral spring water on the atopic dermatitis-like inflammation in hairless mice via immunomodulation and redox balance. *BMC complementary and alternative medicine*, *17*(1), 481.
- Bender, T., Bálint, G., Prohászka, Z., Géher, P., & Tefner, I. K. (2014). Evidence-based hydroand balneotherapy in Hungary—a systematic review and meta-analysis. *International journal of biometeorology*, *58*(3), 311-323.
- Booth, A., & Camacho, P. (2013). A closer look at calcium absorption and the benefits and risks of dietary versus supplemental calcium. Postgraduate medicine, 125(6), 73-81.
- Bote, M., Garcia, J., Hinchado, M., & Ortega, E. (2014). An exploratory study of the effect of regular aquatic exercise on the function of neutrophils from women with fibromyalgia: role of IL-8 and noradrenaline. Brain, behavior, and immunity, 39, 107-112.
- Carbajo, J. M., & Maraver, F. (2017). Sulphurous mineral waters: new applications for health. *Evidence-based complementary and alternative medicine, 2017*.
- Chen, S.-H., & Huang, C.-I. (2011). Application of importance-satisfaction model to identify critical success factors of hot-spring industry in Taiwan. International Journal of Physical Sciences, 6(10), 2470-2477.
- Gabriel, S. P. (2015). The meaning of race in Malaysia: Colonial, post-colonial and possible new conjunctures. Ethnicities, 15(6), 782-809.
- Goto, Y., Hayasaka, S., Kurihara, S., & Nakamura, Y. (2018). Physical and mental effects of bathing: A randomized intervention study. *Evidence-based complementary and alternative medicine, 2018*.
- Hayakawa, K., & Kobayashi, K. (2013). Effects of training with hot spring and cognitive movement training machine for middle-aged and elderly persons. International Journal of Human Culture Studies, 2013(23), 310-318.

- Huang, A., Seité, S., & Adar, T. (2018). The use of balneotherapy in dermatology. *Clinics in dermatology*, *36*(3), 363-368.
- Jena, R., Pradhan, B., & Abdollahi, A. (2018). Curable Properties of Hot Water Springs in Odisha Related to Eastern Ghats Minerals: A Review. Scenario of Environmental Research and Development.
- Lee, L. S., Goh, K. M., Chan, C. S., Annie Tan, G. Y., Yin, W. F., Chong, C. S., & Chan, K. G. (2018). Microbial diversity of thermophiles with biomass deconstruction potential in a foliage-rich hot spring. *MicrobiologyOpen*, 7(6), e00615.
- Liang, J., Kang, D., Wang, Y., Yu, Y., Fan, J., & Takashi, E. (2015). Carbonate ion-enriched hot spring water promotes skin wound healing in nude rats. *PLoS One, 10*(2), e0117106.
- Liu, A. (2006). Tourism in rural areas: Kedah, Malaysia. Tourism management, 27(5), 878-889.
- Matsumoto, S. (2018). Evaluation of the role of balneotherapy in rehabilitation medicine. *Journal* of Nippon Medical School, 85(4), 196-203.
- Rose, R. A. C., Jusoh, N. F., Zainol, R. M., Lyndon, N., & Jaafar, M. (2017). Perkembangan dan cabaran sektor perniagaan sebagai pemangkin pembangunan bandar kecil: Kajian empirikal di Daerah Besut, Terengganu (Development challenges of the business sector as a catalyst for the development of small towns: An empirical study of Besut, Terengganu). Geografia-Malaysian Journal of Society and Space, 11(8).
- Saengsiriroj, P. (2011). Hot Spring Goers: A Case Study of Raksawarin Hot Spring, Ranong Province, Thailand. AU-GSB e-JOURNAL, 4(1).
- Shafaei, F., & Mohamed, B. (2017). Malaysia's branding as an Islamic tourism hub: An assessment. Geografia-Malaysian Journal of Society and Space, 11(1).
- Skirnisdottir, S., Hreggvidsson, G. O., Hjörleifsdottir, S., Marteinsson, V. T., Petursdottir, S. K., Holst, O., & Kristjansson, J. K. (2000). Influence of sulfide and temperature on species composition and community structure of hot spring microbial mats. Applied and Environmental Microbiology, 66(7), 2835-2841.