Becoming immortal: future wellness and medical tourism markets

Daniel William Mackenzie Wright and Santa Zascerinska

Daniel William Mackenzie Wright is based at the Division of Tourism, Hospitality and Events, University of Central Lancashire, Preston, UK. Santa Zascerinska is based at the University of Central Lancashire, Preston, UK.

Abstract

Purpose – Is humanity heading to immortal living? If so, what areas of society are playing an active role in achieving this? In order to understand this, the study explores the relationship between immortality and the wellness and medical tourism industry to seek potential relationships between them and ultimately, asks difficult questions about the growth of these tourism sectors and the potential need for greater regulation of them.

Design/methodology/approach - Taking a pragmatic philosophical approach and through the examination of refined information from secondary sources and published material and reports, the study presents original theoretical knowledge and a model exploring tourism and human immortality.

Findings – This paper argues that continued growth in the wellness and medical markets today could lead to a world where transhumanists and cyborgs are present in our world, even taking over from Homo sapiens. The study presents a model highlighting the potential role of wellness and medical tourism markets, illustrating the potential for future consumer services that could further fuel the search for immortality. Thus, how such markets and consumer desires are (in)directly supporting humanities desire for (non-human) immortal existence.

Originality/value - Today, individuals are driven by wellness practices and medical and cosmetic desires and are willing to travel the globe in search of companies who are either capable of carrying out the desired procedures or seeking prices more affordable to them. This research offers novel insights into these complex relationships and maps the affiliation between wellness and medical practices and the concept of immortality.

Keywords Tourism, Futures, Medical, Wellness, Immortality, Humans

Paper type Research paper

1. Introduction

Since the prehistoric era, humans have struggled to free themselves from mortality. So, they engaged in pursuing the immortality of the gods GRethexis (2018)

Foresight and future studies offer researchers an opportunity to explore the future by examining past and current trends. Indeed, "we can learn a great deal about what may happen in the future by looking systematically at what is happening now and what has taken place in the past" (Yeoman, 2008, p. 5). It is our responsibility to identify current trends and explore how these could influence our development and evolution into the future. Tourism plays a significant economic, environmental and social role across world, and its impacts (positive and negative) are often under examination and rightly so. Pre-COVID-19 tourism, generally, was increasing under pressure for growing negative impacts (overtourism, cultural impacts and environmental impacts), and going forward, new challenges will confront the industry. Therefore, studies, adopting a futures approach should continue to shine a light on how current tourism practices could impact on the wider world. Today, society (and the tourism industry) is seeing increased growth (supply) and participation (demand) in the wellness and medical sectors, areas that were thriving globally pre-COVID-19 and are likely to continue doing so, but at what future cost? According to Harari (2015, p. 24) throughout the 21 century, humans are going to make a serious attempt at becoming immortal. History shows that humans have modified the world around them, for better or worse; we

Received 14 May 2021 Revised 17 February 2022 29 August 2022 Accepted 20 September 2022

© Daniel William Mackenzie Wright and Santa Zascerinska. Published in Journal of Tourism Futures. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http:// creativecommons.org/licences/ by/4.0/legalcode

are constantly changing our environments, the natural world, our workspaces, our homes and our own physical appearance. Through scientific developments, we have the capacity to modify our bodies, internally and externally. It could be positioned that society is already in a post-human era as transhumanism is already an active development. Today and more so in the future, we will have at our hands the capacity to influence and even change our evolutionally progress. Developments in technology will further allow us to change our physical appearance; whilst it is a difficult contemplation for many, it is (becoming even more so) a reality. Expanding the human lifespan has long been an active field of scientific research. Humans have aimed to live longer healthier lives, but how far will we go? Unfortunately, some of these more complex questions will not be answered here, but what will be explored here are complex topics surrounding humanities' future and the potential role of the wellness and medical tourism markets in shaping and or supporting our desires for longevity and potentially immortality. Thus, this paper considers the future role of wellness and medical tourism markets and how they could (directly and indirectly) play a role in changing what it is to be human, taking society into a post-/trans-human era.

For many readers, the idea that humans could live forever is somewhat challenging. Nevertheless, humans have long engaged with visuals and written narratives of immortality. Today, changes and advancements in technology are moving us beyond the once science-fictional (sci-fi) realms of immortality to a time when immortal existence is being considered a genuine possibility. To do so, society needs to believe in a new social story, a story of real potential for immortal existence and that death is no longer our inevitable end. If society does become more accepting of this new story (immortality), then, alongside technological advancements, we have the potential to move to the next stage of human life. This paper draws on evidence that highlights how society is beginning to believe in a new social story and how new technologies are allowing humans to evolve in new ways. Consequently, how the tourism industry and tourist are actively participating in travel associated with practices that could lead to a post-human era and even immortal existence. Tourism and the movement of people throughout human history have played a key role in who we are, how we operate and how we manipulate our physical environment to grow and survive. Health, wellness and medical activities are key components to individual human existence. Accordingly, for some tourists, our leisure activities and travel destinations take into consideration the potential health benefits. Well-being and medical potential can be a motivating component and a push factor for travel. The medical tourism industry has been growing rapidly in recent years, and governments are recognizing its potential as they seek new sectors for sustainable growth (Kim and Hyun, 2022). Whilst presently, physical immortality might not be reachable, many authors are now identifying potential future scientific practices that could lead humanity down a different path. Today, we live in a technological and scientific world that would have been a fictional idea to our ancestors. So, as people continue to travel, seeking the elixir of life (Ward, 2022), then the role of the travel industry must be considered. Importantly, this paper therefore explores the role and potential relationship of wellness and medical tourism markets today and growing trends within them and asks the crucial question: what role do they have in supporting the human potential in achieving immortal existence? This paper shines a light on how the (wellness and medical) tourism sectors could be involved in (re)shaping not only society but who we are as a species. It does so by presenting a future wellness and medical tourism market redistribution model incorporating the concept of immortality. This paper argues that continued growth in the wellness and medical markets today offers tourists a place in which to seek out medical practices of longevity. Consequently, the industry is actively involved in leading humanity to a world where transhumanists and cyborgs are present. At what cost? Potentially, a post-Homo sapiens era where immortality is achievable.

2. Human engagement with immortality

Death is our current inevitability, but the imagined stories, the narratives allowing our imagination to conceivably think otherwise and allowing us to envisage immortality, are well documented in written and visual fiction. Our human interest in immortality is wide and varied, and for many, the narratives and ideas we have are based on those presented in the fictional world. Table 1 offers

Title and year	lmmortal means	Description
The Immortals (1962)	Biological	James E. Gunn's The Immortals (1962) is less about the lives and mental state of the eponymous humans "blessed" with immortality (a fascinating topic in itself) and more about the ramifications of their existence on the rest of society not "blessed" with such genetic structures
The Reincarnated Giant (2005)	Biological	In the short story, immortality is attainable by replacing aged body parts one at a time
The Man from Earth (2007)	Biological	An impromptu goodbye party for Professor John Oldman becomes a mysterious interrogation after the retiring scholar reveals to his colleagues he has a longe and stranger past than they can imagine (IMDB, 1990)
Holy Fire (1996) by Bruce Sterling	Technological	In an era when life expectancies stretch 100 years or more and adhering to healthy habits is the only way to earn better medical treatments, ancient "post-humans dominate society with their ubiquitous wealth and power
Repo Men (2010)	Technological	Set in the near future when artificial organs can be bought on credit, it revolves around a man who struggles to make the payments on a heart he has purchased. He must therefore go on the run before said ticker is repossessed
Accelerando (2005) by Charles Stross	Technological	The singularity. It is the era of the post-human. Artificial intelligences have surpassed the limits of human intellect. Biotechnological beings have rendered people all but extinct. Molecular nanotechnology runs rampant replicating and reprogramming at will. Contact with extraterrestrial life grows more imminent with each new day
The Picture of Dorian Gray (1890) by Oscar Wilde	Supernatural	A young, handsome man Dorian Gray, posed whilst his portrait was painted. He wished for nothing but to trade places with his portrait so that it ages instead of him. His wish is granted, but the price for it haunts him more than he could ever anticipate
St. Leon (1799) by William Godwin	Supernatural	Set during the Protestant Reformation, St Leon tells the harrowing tale of an exiled French aristocrat who is giver the secrets of the philosopher's stone and the elixir of life
Pandora and the Flying Dutchman (1951) Albert Lewin	Supernatural	In a little Spanish seaport named Esperanza, during the 30s, appears Hendrick van der Zee, the mysterious captain of a yacht (he is the only one aboard). Pandora is a beautiful woman (who men kill and die for). She has never really fallen in love with any man, but she feels ver attracted to Hendrick [] Hendrick is the Flying Dutchman, a 17th century sailor cursed by God to wander over the seas until the Doomsday [] unless a woman is ready to die for him

some examples where immortality is presented in both visual and written form. The immortal means have been presented in three ways: biological, technological and supernatural, while the first two being more relevant to the ideas that are explored later in this paper. Here focusing on the idea on attaining immortality on Earth via the enhancement of biological and technological means. Importantly, the depictions in the table (but not limited to the examples provided here) have allowed mass audiences to engage with the idea of immortality, offering viewers' vivid narratives where death is not the end.

Death is a powerful force that has been motivating human behaviour forever.

However, beyond the perceived fictional side of immortality, society shows active interest in prolonging human life. According to Hayflick (1977), the average human lifespan is about 100 years, and the maximum lifespan is about 122 years (Clark, 1999). As noted by Swedene (2009), humans are collectively approaching the upper limits of the human lifespan. Statistically, an individual born in 2000 has a greater chance of living longer than someone born in 1970; likewise, they have a greater chance of living longer than someone born in 1940. Barring some sort of pandemic disease or natural/human catastrophe, there exists a correlation between public health, private habits and our individual life expectancy. Thus, as public health and our private habits improve, our life expectancy increases. However, Swedene (2009, p. 76) suggests that society should not expect life to go beyond the limits of our longevity. "Lifespan is in the domain of the possible and life expectancy is in the domain of the probable, within the confines of the possible". But are we able to change the "confines of the possible" through technological advancements?

I do not want to achieve immortality through my work; I want to achieve immortality through not dying (Woody Allen)

According to Cave (2012, p. 2), living things look to preserve themselves into the future, whereas humans seek to preserve themselves forever. It is this will for immortality that could be recognized as the foundation of human achievement as "it is the wellspring of religion, the muse of philosophy, the architect of our cities and the impulse behind the arts. It is embedded in our very nature, and its result is what we know as civilization". The idea of being immortal has excited human minds for centuries, yet how this immortality was sought to be achieved differs. Throughout time, scientists, futurists, philosophers and religious followers have theorized and considered the potential of immortality, be it spiritual (soul) and or physical (human body), as noted the latter being the focus here. However, in religious texts (Christianity, Hinduism, Buddhism, Islam, Judaism, Jainism, Sikhism and Zoroastrianism), the immortal world has often existed in a belief in the afterlife. Still, different perspectives are often taken on the everlastingness of the body and the soul within these religions, and different philosophers throughout time have attempted to add their own opinions to the debate. For Plato, immortality was fundamentally spiritual as he attempted to prove immortality by maintaining that the soul could not be destroyed. As noted by Jaeger (1959, p. 135), "the Immortality of Man was one of the fundamental creeds of the philosophical religion of Platonism that was in part adopted by the Christian Church and that thus became one of the foundations of the Christian civilization of the Eastern and Western world". Whilst Aristotle conceived of reason as eternal, he did not defend personal immortality, believing the soul could not exist in a disembodied state. The philosopher Blaise Pascal (French mathematician) claimed, "belief in the God of Christianity, and accordingly in the immortality of the soul, is justified on practical grounds by the fact that one who believes has everything to gain if he is right and nothing to lose if he is wrong, while one who does not believe has everything to lose if he is wrong and nothing to gain if he is right" (Encyclopedia Britannica, 2019). The historical debates do often lend themselves to religious beliefs in the afterlife and the nonphysical world and the unscientific existence of a human soul. In the late 19th century, the concept of immortality began to fade as a philosophical preoccupation due to the secularization of philosophy under the growing influence of science (Encyclopedia Britannica, 2019).

In, Staying Alive: The Varieties of Immortality, Swedene (2009) explores the desire to live forever. Swedene suggests that throughout history, the notion of living forever manifests itself from a variety of forms and forums. Societies, cultures and individuals have approached the notion of immortality via a range of metrics (a measurement of longevity). These range from personalized legacy, individual fame, lasting love and parenthood to the search for spiritual immortality and longevity in the afterlife (heaven), whilst others aim for earthly immortality -the extension of human life on Earth. Swedene (2009) draws on Woody Allen's quote above and suggests that the desire for immortality through different forms exists and suggests that Allen's quote would still have meaning if the word "work" was changed with children, love or fame, but, importantly, none of these would ensure the immortality of our own personalities. The importance of this quote is that earthly immortality is the aspiration of one's own life continuing, both in body and mind. Swedene (2009) suggests that

earthly immortality will require not only biological existence via the use of medical gear such as ventilators, but the personality of the individual must be intact. Swedene continues, by recognizing, that being kept alive, but brain dead is an aspiration for earthly immortality. "The immortal person living on Earth shall be understood as one who enjoys indefinitely continued life in which his personality remains, for the most part, linked to his life already lived and to his anticipated future life without significant ontological transformation" (Swedene, 2009, p. 75).

The idea of immortality is considered by Harari (2015) in a publication entitled Homo Deus (Human Gods). Harari (2015) notes that throughout the history, our religions and ideologies did not sanctify life, instead humans sanctified something beyond our earthly existence; thus, we are tolerant of death. Many religions embrace death as death is a fundamental aspect to many religious texts. For a while, "religion solved the problem of death" (Becker, 1997, p. 203). But, as Harari notes, "modern science and modern culture have an entirely different take on life and death. They do not think of death as a metaphysical mystery, and they certainly do not view death as the source of life's meaning. Rather, for modern people death is a technical problem that we can and should solve" (2015, p. 25). Harari, recognizes that to date, modern science has not extended our natural life span (even by a single year), instead medicine has allowed us to enjoy the full measure of our body capabilities by overcoming disease, illness and threatening injuries. However, scientists will continue to explore the ability to extend human life, and every failed attempt will only drive new research and encourage people in their efforts. In our current social world, the scientific establishment and the capitalist economy are motivated by new discoveries and often financial profit. Significantly, it is suggested, that there is nothing greater than the scientific challenge than outsmarting death or a more promising consumer market than eternal youth (Harari, 2015). In line with this paper, the question being raised here is what role is the tourism industry playing?

3. The story so far: a focus on wellness and medical travel

Evidently, it is not easy to locate the origins of wellness and medical tourism, but the aim of this section is to recognize some of its earlier ancestral roots. The wellness concept holds different interpretations (Cohen and Bodecker, 2008; Smith and Kelly, 2006), and its origins for some are placed with the use of natural hot and mineral springs (Erfurt-Cooper and Cooper, 2009). However, historical evidence shows how traditional Chinese medicine (3,000-2,000 BC) influenced by Taoism and Buddhism applies holistic perspectives to achieve health and wellbeing and does so by cultivating harmony is one's life through practices such as acupuncture, herbal medicine, gi ging and tai chi, which continue to be popular in modern wellness practices (Global Wellness Institute, 2022). From a European perspective, wellness is often traced to the Greek and Roman cultures (Hall, 2003). The Greeks and Romans travelled to spas and cult centres around the Mediterranean. Ancient Greek physician Hippocrates could be recognized as one of the first physicians to focus on preventing sickness, instead of focusing on the treatment of disease, recognising disease as a product of diet, lifestyle and environmental factors (Global Wellness Institute, 2022). In the 16th and 17th centuries, spa towns such as St. Moritz (Switzerland) and Bath (United Kingdom) were popular destinations for the upperclass Europeans (Medical Tourism, 2018). In the Americas and the Asia Pacific region, the practice is likely to be much older (Lung, 2005; Schafer, 1956). The use of thermal springs can be dated back thousands of years to the Native North and South Americans, the Indus Valley, China and Japan and the Polynesian peoples in the Asian Pacific area and New Zealand (Erfurt-Cooper and Cooper, 2009). More recently, the wellness concept has expanded further. As the wellness concept grew during the 19th and 21st centuries, its focus was not on only the prevention of illness but on greater health promotion, education and encouraging a more holistic approach to nutrition and achieving mental and spiritual balance (Erfurt-Cooper and Cooper, 2009). As noted by Erfurt-Cooper and Cooper (2009), wellness facilities and programmes became worldwide tourist attractions during the 20th century, and this trend shows little sign of slowing down.

All-encompassing and reliable data are also difficult to locate. Nevertheless, some reports aim to offer some insight into the markets. According to the Global Wellness Institute (2018) report, the global wellness economy was worth \$4.5 tn market in 2018, whilst the industry grew by 6.4% annually from 2015 to 2017, from a \$3.7 to \$4.2 tn market. This was nearly twice as fast as global economic growth (3.6% annually, based on International Monetary Fund [IMF] data). World travellers made 830 million international and domestic wellness trips in 2017, representing 17% of all tourism expenditures. International wellness tourists on average spent \$1,528 per trip, 53% more than the typical international tourist. Domestic wellness tourists spent \$609 per trip, 17% more than the average domestic tourist. The key sectors of the wellness market comprise personal care, beauty and anti-ageing (\$1,083 bn); healthy eating, nutrition and weight loss (\$702 bn); wellness tourism (\$639 bn); fitness and mind-body (\$595 bn); preventative and personalized medicine and public health (\$575 bn); traditional and complementary medicine (\$360 bn); wellness lifestyle real estate (\$134 bn); spa economy (\$119 bn); thermal/mineral springs (\$56 bn) and workplace wellness (\$48 bn). The wellness tourism industry in 2017 was a \$639 bn market (Global Wellness Institute, 2018). As noted by Allied Market Research (2022), the COVID-19 pandemic has seen massive disruption across the tourism and leisure sectors, influencing new consumer behaviours, stifling entire industries and inspiring growth in others, including pockets of the health sector. Further suggesting that the COVID-19 pandemic has driven the growth of the wellness tourism market as there has been a rise in telemedicine, at-home fitness and digital therapy. The global wellness tourism market size in 2020 was valued at \$801.6 bn and is projected to reach \$1,592.6 bn by 2030 (Allied Market Research, 2022). Global Wellness Summit (2019-2020) suggests that the idea of wellness was once a more discrete idea (associated more with fitness and spa industries). Today however, everything is converging around the wellness concept, fusing itself with all industries, from music, fashion, events, travel or real estate. According to Hill (2017), there is a current trend to move beyond the elite "ghettos" of wellness. Here suggesting there will be "a growing need for wellness to reach beyond the rich elite and will intensify governments and wellness businesses to bring more healthy services to more people. Businesses will start to launch charitable initiatives, more affordable products and services will emerge, and wellness tourism will shift from high-end resorts within walls to destinations where more authentic experiences can be found" (Hill, 2017). As for medical tourism, it is often considered as a recent phenomenon. However, people have been travelling short and long distances in search of better health for thousands of years. Archaeological evidence shows that ancient Mesopotamians around the third millennium B.C. travelled to the temple of a healing God or Goddess at Tell Brak, Syria searching for a cure to eye disorders. A key phase in the birth of what is now the medical/cosmetic (plastic) surgery industry was a century ago when wounded soldiers were treated with the latest developments in plastic surgery. During the First World War there was a surge in the number of drastic facial injuries and Surgeon Harold Gillies in 1917 developed a novel method of facial reconstructive surgery for wounded soldiers. Gillies treated 2.000 soldiers with his plastic surgery techniques (Wallop, 2015). Gillies' desire, not only to restore the wounded men back to a normal appearance but his focus on functionality, was also seen as revolutionary. This was the first-time patients were able to request that doctors build a jaw or nose of their choosing in what was seen as a "strange new art" (Millard, 2016). Whilst Gillies' treatments were for wounded or disfigured soldiers, today, plastic surgery is common practice as increasingly patients seek out methods in which to beautify their physical appearance. Plastic surgery is used as a treatment to retain a youthful physical longevity in human appearance. It does not allow for immortal existence, but it can provide a sense of anti-ageing or even de-ageing. As noted by Wang et al. (2020), millennials (or individuals born between 1981 and 1996), are becoming an important group of patients seeking elective aesthetic interventions. The authors suggest that this group's unique attribute is down to their widespread exposure to social media and today's concept of the digital influencer culture. This has created a deep fixation on image consciousness, and consequently, this generation is increasingly driven by the idea of individual perfection, and cosmetic treatments are seen as a method of achieving this. Today, more people are likely to "undergo minimally invasive procedures to achieve 'prejuvenation' a term coined to define the prevention of aging through the process of rejuvenation – that is, treatment used to delay the signs of aging" (Wong, 2021, p. 1).

Throughout the 20th century, the medical tourism industry expanded as the demand for treatments grew; subsequently, the ability to supply the market with a range of practices also evolved.

Medical tourism has often been driven because what healthcare patients were seeking was not available to them locally. Evidently, a distinction could be made between pre-planned medical travel and intervention. Intervention focusing on people needed more urgent medical support whereas pre-planned medical treatments focus on people seeking out changes that otherwise would not necessarily be required in the immediacy to support and or retain life. The global medical tourism market is often segmented depending on the type of treatment and regional practices/ focus. Gill and Sumant (2019) suggest that the market consists of dental, cosmetic, cardiovascular, orthopeadic, neurological, cancer, fertility and other treatments. As noted by Horowitz et al. (2007), medical tourism can expect to see growth throughout the 21st century. The growth in medical tourism in Western countries will be driven by an imbalance between the supply of health care and the capacity to provide it. It is reported that the global medical tourism market in 2017 was valued at approximately US\$ 15.5 bn. The industry is expected to generate revenue of around US\$ 28.0 bn by the end of 2024, growing at a compound annual growth rate (CAGR) of around 8.8% between 2018 and 2024 (Gill and Sumant, 2019). According to Grand View Research (2019), the global medical tourism market size was valued at US\$ 36.9 bn in 2018, and the global medical tourism market size is expected to reach US\$ 179.6 bn by 2026. The report also suggests that Thailand is the most popular country for cosmetic procedures, whilst India is most preferred for cardiovascular and orthopeadic procedures. Bumrungrad International Hospital and Apollo Hospitals Enterprise Ltd. are the leading treatment destinations for medical tourism in Thailand and India, respectively. Brazil and Costa Rica, on the other hand, are preferred for dental procedures. In 2018, Thailand dominated the market in terms of revenue due to the significant difference in treatment cost whilst maintaining a good standard of care compared to developed countries. In 2017, Thailand saw around 2.4 million people visit in search of medical care. Some of the fastest growing medical tourism destinations in the market include Singapore, Colombia, Taiwan and Spain. Medical tourism is increasingly becoming an important revenue generator for these countries, who are boasting advanced healthcare infrastructure and skilled manpower to cater to international patients (Grand View Research, 2019).

North America is said to be leading the global cosmetic surgery market with a share of about 45% (Wise Guy Reports, 2018). The report noted that technological developments, increase in the usage of social media and growing disposable incomes are some of the factors driving the market during the forecast period (Grand View Research, 2017). As for regional categorization, the authors (Grand View Research, 2017) suggest that the medical tourism market is segmented as follows: North America (USA, Canada and Mexico), Europe (the UK, Germany, France, Italy, Spain and rest of Europe), Asia-Pacific (India, China, Indonesia, Singapore, Malaysia, Thailand, South Korea, Taiwan and rest of Asia-Pacific) and Latin America, the Middle East and Africa (LAMEA) (Brazil, Venezuela, Costa Rica, UAE, South Africa and rest of LAMEA). There is a range of factors driving the growth of the cosmetic surgery and procedure market, such as a global rise in ageing population, the rapid growth of the aesthetic industry, the growth of medical tourism in developing markets is seen as an opportunity for increased income, the preference for minimally invasive and non-invasive procedures over invasive procedures and the surge in disposable income (Inkwood Research, 2017). The growth in medical tourism is also fuelled by potential patients being able to locate their own options by researching and booking over the Internet or gaining access/support through medical travel agencies (Crouch and Louviere, 2001). As noted by de la Hoz-Correa et al. (2018), greater promotions offering a wide range of one-stop medical services have made travelling for treatment a much more convenient and attractive prospect for potential medical tourists. It was observed that the volume of both surgical and nonsurgical cosmetic procedures has increased in the past few years. This can be attributed to increasing disposable income, increasing safety of surgical procedures, growing faith of patients in such surgeries and growing medical tourism (Grand View Research, 2017).

This section has provided some historical insights into the origins, growth and development of wellness and medical tourism. However, as noted, the industries are complicated and difficult to group and categorize. Additionally, some industry figures have been provided to offer insight into the size and value of the sectors associated with them (wellness and medical).

Nevertheless, comparable, figures, data and projections are not easy and arguably not recommended due to the uncoordinated nature of what they (wellness, medical and all other associated with them) represent on an international scale and likewise the contradicting regulations that surround the practices on a global scale. However, the importance and value of them of the industry is clearly evident, nonetheless, as its the growing and varied nature from supply and demand perspectives.

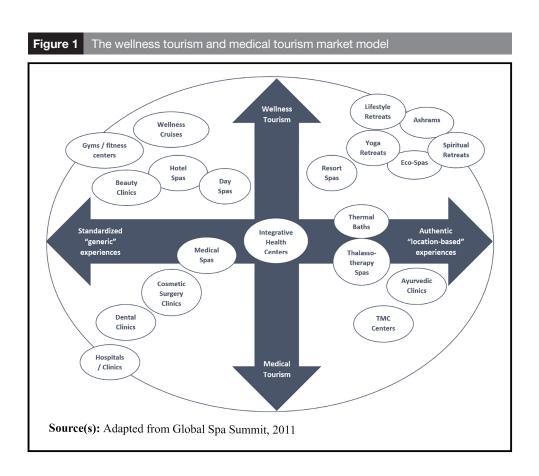
4. Wellness and medical tourism: academic considerations

It should be noted that there is no simple answer or definition available when exploring the wellness and medical tourism literature. Instead, there are a range of positions, terms and categories depending on which author one considers. Therefore, this section provides a brief overview of how these areas of the tourism industry are interpreted in the literature and consequently, how this research applies the concepts to its own study. Fetscherin and Stephano (2016) identify the somewhat loosely and poorly categorized understanding of various terms such as health tourism, medical tourism and wellness tourism as the boundaries are not always clear. Smith and Puczko (2009) suggest that "health tourism" is composed of "wellness tourism" and "medical tourism". Furthermore, that "medical tourism" is the term to be applied when considering cases of medical, surgical or dental interventions, whilst all others are categorized as "wellness tourism" (Connell, 2006). According to the World Tourism Organization and European Travel Commission (2018), wellness tourism can be defined as "A type of tourism activity which aims to improve and balance all of the main domains of human life including physical, mental, emotional, occupational, intellectual, and spiritual. The primary motivation for the wellness tourist is to engage in preventive, proactive, lifestyle enhancing activities such as fitness, healthy eating, relaxation, pampering and healing treatments".

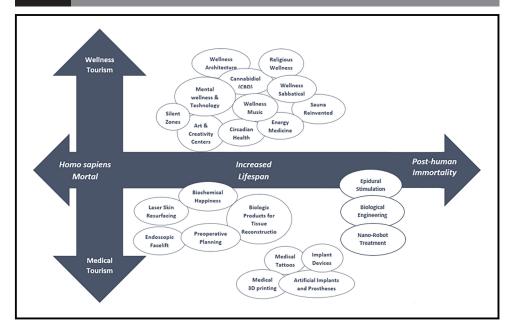
Medical tourism according to the World Tourism Organization and European Travel Commission (2018) is "A type of tourism activity which involves the use of evidence-based medical healing resources and services (both invasive and non-invasive). This may include diagnosis, treatment, cure, prevention and rehabilitation". Kumar (2009) suggests that "medical tourism" entails a cost effective (often private) medical care in collaboration with the tourism industry, where patients seek and undergo surgical and other forms of specialized treatment. Various authors (Cormany and Baloglu, 2011; Connell, 2013) see "medical tourism" as a niche form of tourism born out of a rapid rise in domestic and international tourists seeking medical surgery and therapies. Gill and Sumant (2019) define the "medical tourism" industry as "travel across international borders with the purpose of availing medical treatment of some form, which may or may not be available in the travelers' home country. This treatment may include a wide array of medical services; however, the most frequently availed services include cancer treatment, orthopedic treatment, neurological disease treatment, elective surgery, fertility treatment, and others". According to Fisher and Sood (2014), medical tourism can also be referred to as international medical migration, patient migration and medical travel. Li and Cui (2016) suggest that the term "medical tourism" invokes an image of patients flying around the globe to undergo surgery, such as a heart transplant or a tummy tuck due to the inaccessible access to medical treatment in their own country (due to long waiting times or excruciating costs). Focusing on medical tourists, Boyd et al. (2011) identify them as individuals/ patients travelling to another country to seek healthcare and the term arose due to many Americans seeking cheaper elective surgical, dental or cosmetic procedures while vacationing abroad. Gill and Sumant (2019) suggest medical tourists are likely to travel to another destination when they can achieve savings of more than 30% of the cost to that of their home country. Significantly, patients have long travelled in search of better care, and "medical tourists seek modern healthcare at affordable prices in countries at various levels of economic development" (Horowitz and Rosensweig, 2007, p. 24). Here, the following forms of travel are also of interest, euthanasia, suicide tourism and or assisted dying. According to Higginbotham (2011) as a form of medical treatment in theory, assisted suicide would qualify as a niche segment of medical tourism and a subcomponent of international tourism. However, assisted-suicide tourism was not included in the conceptual framework of medical tourism proposed by Tikkanen (2005) and Tourism Research and Marketing (2006). The framework includes four main segments: illness (i.e. medical check-ups), reproduction (i.e. fertility treatment), enhancement (i.e. cosmetic surgery) and wellness (i.e. acupuncture). The general concept of death is clearly not included as a form of medical tourism per this conceptualization. As for this research, the focus is more on seeking earthly immortality or seeking to prolong life, not to end it. The motives of supernatural immortality could be of interest in this section and could be an area of further research. Thus, potentially considering the motives of suicide tourists and if their desires are based on some form of supernatural immortality. Nevertheless, this is not the focus in this research.

In line with the above, this research focuses on wellness and medical. In doing so, it locates wellness tourism at the one end of the market and medical tourism at the other end. As noted by Global Spa Summit (2011), medical and wellness tourism are growing and gathering increasing attention around the globe as governments, industry and academic researchers attempt to define, organize and promote the sectors. Thus, a model for understanding wellness and medical tourism was presented by the Global Spa Summit (2011). In the report, they aimed to synthesize key trends, developments and challenges emerging in the medical and wellness tourism markets. The model they presented can be seen in Figure 1, the wellness tourism and medical tourism market model (a focus was positioning the spa industry into the wellness and medical markets). The aim was to present a clear distinction between medical and wellness tourism as the markets are often confused.

The model offers a useful overview of the current wellness and medical tourism market, and later in this study, it is adapted further to support a new model presented by this research (see Figure 2).



The search for immortality: Future wellness and medical tourism market redis-Figure 2 tribution model



5. Methodology

Bartunek et al. (2006) suggest that authors should aim to produce research that encourages debate, and that research should engage readers beyond the original targeted audience and outside of the academic sphere. Future research is becoming an increasingly popular method for authors. Future research is often seen as multi-disciplinary as the methodological approach often draws on data from a range of sciences (Lee, 2012). This is due to the complex and challenging nature of researching the future where authors are required to effectively integrate complex knowledge, ideas and studies from different social backgrounds. The philosophical approach of pragmatism is often viewed as the philosophical partner to the mixed-method approach to research, one which recognizes the strengths and weaknesses of both qualitative and quantitative methods (Maxcy, 2003). Likewise, a pragmatic approach also recognizes the benefits of the interpretivist or constructive research approaches (often aligned with qualitative research) and the more positivistic approaches (often associated with quantitative research). It can be suggested that a pragmatic approach rejects the philosophical idea of formalism or the notion that one scientific method or framework holds more indisputable knowledge over another. When researchers attempt to explore the future, their findings and ideas are often based on a systematic forecasting of the future, especially by the study of present day trends in human affairs and by examining social developments (The Oxford English Dictionary, 2020). The extrapolation method, meaning the extension in time of an observed trend (Thompson, 1979), is an approach often applied in futures research as it allows the author(s) to explore past and present trends. Likewise, Leigh et al. (2013, p. 3) identify how "authors strive to predict through the use of drivers and understanding current trends". Similar to previous research in the tourism futures field (Wright, 2016, 2018, 2019; Yeoman and Mars, 2012; Yeoman, 2012), the method of inquiry applied in this study takes a desk-based approach. Research is based on the examination of refined information and models from secondary sources and or published material/reports. This paper examines both qualitative and quantitative information in building its discussions and drawing conclusions from them. Taking a pragmatic research approach provided the researchers with a framework that embraces different views, both constructivist and positivist. The pragmatic philosophical approach embraces multi-disciplinary studies and ensures a more holistic consideration to social conditions

is embraced. The study aims to explore the relationship between the tourism industry and humanities relationship immortality. As a theoretical paper, the researchers apply what could be described as a convenient approach to data collection and analysis. In as much, the sources examined are selected due to the direct relevance they have to the topic under examination.

6. Analysis and discussion

Presently, the paper has introduced the reader to the focus and purpose of this study, the role of tourism alongside the human desire for immortal living. Likewise, it has identified the areas of the tourism industry likely to play an active role, the wellness and tourism markets. From here on, the analysis and discussion section will look to extrapolate past and present social structures discussed above to present a tourism future perspective whilst also calling for wider social consideration and contemplation around travel practices and what humans want to strive for in the future. The following, this considers how areas of society are currently developing, and could be driving forces leading society and humanity into an immortal future. The structures extrapolated initially focus on changes in the wider social and technological environment and consequently, how these could potentially be aligned with the tourism industry in the future.

6.1 Social media, celebrities and the medical and cosmetic movement

If you think that religious fanatics with burning eyes and flowing beards are ruthless, just wait and see what elderly retail moguls and ageing Hollywood stars will do when they think the elixir of life is within their reach (Harari, 2015, pp. 33-34).

It should be noted that medical procedures are often driven out of necessity for individuals, seeking support for illness and bodily matters. Nevertheless, for many people, the medical resources are not available in their own countries; thus, they are required to travel to other places; consequently, these people can be classified as medical tourists. However, not all medical procedures are necessary (in the sense of life defining), but more focused on personal cosmetic enhancement. Likewise, if cosmetic treatments are not available in one's own location, travelling to other destinations is required, and resulting, these people can be classified as cosmetic tourists. Today, society is seeing a growth in the desire and demand for cosmetic enhancement, much to the changing attitudes across cultures.

Maise et al. (2018) in their research identified various motivations for cosmetic enhancement which include mental and or emotional well-being, where people wanted to feel happier, improve quality of life, treat themselves and feel rewarded or as celebration. Another motive included, social wellbeing, here people wanted to look good when encountering other people, to feel less selfconscious around others and to look good at social events or make a good first impression. Physical health motives were also common, with a desire to prevent a worsening condition/ symptom(s) and the desire to protect their health in the future. Many participants cited success at work as a motive, here wanting to look good professionally in a specific field of work. Cost and convenience were also recognized as a key motivator, where people were driven to make aspect of their live easier, such as time and money spent on problems associated with makeup, hair and or cover ups, reducing the need of alternative methods (carrying make up around or looking for specific clothing) to solve/manage a problem (Maise et al., 2018).

The role of the media (traditional and social) is also significant. Previous researchers (Brown et al., 2007; Crerand et al., 2006; Swami et al., 2009) have exposed the relationship between cosmetic surgery and lower self-ratings of physical attractiveness and negative body image. It is suggested that the media not only negatively portray body image, but provide greater exposure of cosmetic surgery, which also encourages greater involvement. A survey by Furnham and Levitas (2012) carried out on 204 British participants provides further evidence of this. Participants were asked to complete a questionnaire that assessed their attitude toward cosmetic surgery, whilst it also measured their self-esteem, life satisfaction, self-rated physical attractiveness, religiosity and media consumption. "Two factors emerged from a factor analysis of their attitudes toward surgery: likelihood to undergo, and benefits of undergoing, cosmetic surgery. Females with low selfesteem, low life satisfaction, low self-rated attractiveness and little religious beliefs who were heavy television watchers reported a greater likelihood of undergoing cosmetic surgery" (Furnham and Levitas, 2012, p. 47). Of course, this is one example, and cosmetic surgery is not limited to females. In fact, society today is even blurring the lines between genders, and surgical procedures play a significant part in an individual's transitional journey. Sex and or gender reassignment surgery, also known as gender dysphoria, is a surgical procedure(s) by which a transgender person's physical appearance and function of their original (or existing) sexual characteristics are changed to resemble those the individual associated to their identified gender (van de Grift et al., 2018).

Furthermore, it is suggested that the growth in current trends (in medical and cosmetic surgery) is attributed to the increasing demand from a younger generation who are becoming more conscious about their own health, including the desire for body enhancements, resulting in 81% of patients travelling abroad under the age of 50 (Karuppan and Karuppan, 2010). According to the International Society of Aesthetic Plastic Surgery (ISAPS, 2018), during the 80 and 90s, the celebrity culture pushed the plastic surgery industry. Then came the 2000s, where TV shows such as the Kardashians paved the way for a cultural shift towards television as a key driver as a new generation of celebrities emerged. Heyes (2007) notes that the surge in TV shows, websites and advertisements that feature cosmetic surgery has changed public perception of what we believe to be "ideal" beauty standards. This has raised what we believe to be standard expectations of beauty, new standards of beauty that are not obtainable by natural means. Today, social media is driving the plastic surgery business forward and is likely to continue into the foreseeable future (ISAPS, 2018).

The filters and angles we use on Instagram and Snapchat are changing our perceptions of ourselves (Brucculieri, 2019b).

Increased popularity of cosmetic surgery has also been attributed to several other factors, including a heightened importance in physical appearance in contemporary societies and lower cost and access to medical procedures. Additionally, increased public awareness and exposure to cosmetic surgery has been further emphasized by an increase in media fascination with and the reporting of celebrities who have had procedures (Wen, 2009; Edmonds, 2007; Sarwer et al., 2007; Sarwer and Magee, 2006). It is also suggested that greater media exposure led to higher levels of people willing to undergo cosmetic surgery (Swami et al., 2008). Dr. Stafford Broumand, a plastic surgeon (a board-certified plastic surgeon at 740 Park Plastic Surgery in New York), noted that people are searching for more targeted cosmetic procedures because of social media (Brucculieri, 2019a). Likewise, high-profile plastic surgeons have made careers by effectively using social media as a marketing platform to share photos and videos of surgical procedures and the final results of them (ISAPS, 2018). An interesting consequence of the age of the selfie is a concept termed "Snapchat Dysmorphia", referring to a trend in which people seek cosmetic procedures to replicate their filtered faces without the filters (Brucculieri, 2019b). According to Dr. Matthew Schulman, his patients bring filtered selfies to plastic surgeons to demonstrate the look they aim to achieve. Dr. Michelle Yagoda (a facial plastic surgeon in New York City) agreed, suggesting, more and more people are turning to social media for beauty inspiration. However, Yagoda proposed, if people are regularly seeing filtered or edited photos of themselves and others, then this will become the standard of what people will expect to see in real life. Renee Engeln (professor of psychology at Northwestern University) went as far to suggest, "we're at a new level when we actually lose touch with our own face or look surprised when we look in the mirror" (Brucculieri, 2019b). The importance of this once again is the impact of such media exposure and how the social stigmas are shifting. As trends continue and the market demand for cosmetic and plastic surgery grows, our perceptions towards them begin to change. Consequently, the narrative is changing, and society is not only buying into this change but is responsible for it. However, whilst the narrative changes, society still needs actual physical places to carry out medical and surgical procedures. The medical and cosmetic tourism industries (supply) are increasingly providing physical places where people (some of whom can be classified as tourists) are able visit and arrange procedures that lead to changes in their physical appearance. The role of tourism will be considered shortly; before then, a more poignant question: what is currently evolving and developing around us, are arguably the early stages in which society is normalizing the ideas and attitudes towards changing our physical appearance, but what does this eventually lead to?

6.2 Becoming immortal: post-/trans-humanism and cyborgs

The human-technology blend has been well documented. The idea of the bionic man has been considered is many fields. With developments in technology, the "prosthetic limb" has progressed exponentially in recent decades because of new materials, and more practical and comfortable solutions have been devised. The increasing availability of 3D printing has also allowed for significant advancement in prosthetics to spread across the developing world. Significantly, there have also been promising steps in refining biological communication, thus supporting the relationship between artificial limbs and our biological signals (Towers-Clark, 2018). The fusion or the blurring of lines between robots and humans is well documented and continues to draw much attention across the academic literature (see Sugiyama and Vincent, 2013), and many terms are often used. The post-/trans-humanism concepts are known as an international philosophical movement, which supports the transformation of the human condition (Ansell-Pearson, 1997; Sorgner and Nietzsche, 2009; Hellsten, 2012; Campa, 2019). The ideology of post- and or transhumanism is based on the belief or theory that the human race, Homo sapiens, can evolve beyond its current physical and mental natural limitations. It does so through the development of sophisticated technologies that enhance the human intellect and physiology (Bostrom, 2005). Scientists predict that computers will develop artificial intelligence that can speak, interact, listen and remember. Significantly, this growth in computer capability will mean computers will grow progressively more human; likewise, humans will become more integrated with robots (Crew, 2018). Mark O'Connell provides his summary regarding the purpose of the transhumanist movement in his book To Be a Machine. The author suggests, "It is their belief that we can and should eradicate ageing as a cause of death; that we can and should use technology to augment our bodies and our minds; that we can and should merge with machines, remaking ourselves, finally, in the image of our own higher ideals" (see Mckie, 2018). Dr Pearson an engineer and lecturer on the future of our daily lives reported that he believes "anyone alive today who survives until 2050 may never have to face death" although only the rich and famous will experience it, whereas for the rest of us, immortality will become feasible in 2060. He also believes that the future will see human consciousness's being uploaded on to online servers, and people will have the ability to use android bodies to inhabit the real world.

A video on the BBC (2019) entitled, Transhumanism: How far would you go for a body upgrade? explores the journey people have been on to upgrade their body and the implants they have placed in their body to support their everyday activities. The documentary highlighted how people are seeking augmented implant parlours. The documentary interviews one individual who discusses their everyday life and the annoyances of carrying a card, keys and a mobile phone. Going on to state how transhumanism is a process to placing such everyday items into our bodies, they suggest that the next step in technology involves greater interaction with our own biology (Steven Ryall on BBC, 2019). In the BBC interview, Winter Mraz (an engineer) has installed a radiofrequency identification (RFID) chip into her left hand, which operates as her door key and in her right-hand a near-field communication (NFC) chip implanted, which is her business card. Mraz also has in the middle of her right finger, a magnet that lets her sense electromagnetic (EM) fields, a contraceptive implant, a 3D printed kneecap (by the NHS) and two LED implants. Mraz was driven to transhumanism because of a terrible car accident that required surgery to recover serious injuries, due to multiple fractures to her back, ankles and knees (BBC, 2019). Significantly, the report notes how people within the transhumanism community are taking a more "do it yourself (DIY)" approach with the implants. The report interviews Lepht Anonym (who refers to herself either as a biohacker or a grinder or a practical transhumanist), who says a person of this type, is someone who takes transhumanism into their own hands. As noted by Anonym, this is done by getting sterile tools, you then cut a hole with a scalpel or a needle, you then insert the device into the hole you have created somewhere on your body (such as your hand), insert the chip and then you might need some stitches, but more often than not, you do not. Anonym notes that there is a balance between the risks in what she does, but she is interested in the experiments and carrying out the implants and the data that she can attain from doing them (BBC, 2019). These transhumanists are pushing the boundaries of technology, with bodily implants that seek to improve one's day to day living, medical safeguarding and more importantly, developing and growing the transhumanistic ideology. However, these are some DIY examples, and more sophisticated practices are available. Clearly, there are medical and ethical debates and importantly consequences that come with such ideologies and practices. Online websites sell the products to interested individuals who can perform the procedures from home. The BBC (2019) suggests that the Scottish government want to regulate non-medical procedures to protect vulnerable people and to ensure the correct procedures are in place for the movement.

I do not think implants are inevitable, I do think they'll get better, longer lasting, look cooler, be prettier, have more functionalities, have all this type of stuff and it's going to be one more option people have. I love having my keys (implanted) in my hand so that way I do not need to carry key about with me. My partner, who could get the exact same chip I have wants nothing to do with it and that's fine, just different choices. I think we'll just have more choices (Winter Mraz, BBC, 2019).

Another concept of interest is the idea of cyborgs, also well documented and shares a similar ideological movement to transhumanism. Towers-Clark (2018) suggests that cyborgs are here, and we had better get used to it. Further noting that advances in medical technology can mitigate conditions once considered incurable (such as brain disorders) and new developments in technology could even allow us to "read minds". "As part of the growing 'transhumanist' movement, people have also implanted sensors into their bodies in order to evolve their art form or to push the limits of human experience. As new technologies such as artificial intelligence and 3D printing bring ever more possibilities, are we about to lost the boundary between human and machine?" (Towers-Clark, 2018). According to Elon Musk, humans will need to become cyborgs to stay relevant. As artificial intelligence becomes increasingly sophisticated, the result is likely to become mass unemployment, as fewer jobs will be available for humans, as robots take control of the workforce environment. Consequently, if humans wish to remain relevant in a technologically advanced society, they will need to augment their capabilities by merging biological intelligence and machine intelligence (Solon, 2017). Technology is taking us into a new human realm, one of brain-computer (or brain machine) interfaces, which reduce sluggish communication, such as typing and talking to direct lag-free interactions between brains and external devices (Solon, 2017). The theory behind this is based on the notion that with appropriate understanding of the neural activity in the human brain, it will become a possibility to create "neuroprosthetics". The result would be the capability to communicate complex ideas telepathically and provide us with additional cognitive (extra memory) or sensory (night vision) abilities, all of which Musk notes he is currently working on (a company called Neuralink). Musk suggests he is developing an injectable mesh-like "neural lace" which would be placed on the brain and provide digital computing capabilities (Solon, 2017). Clearly, such technology raises ethical questions: should we enhance our brains in this manner? As noted by Towers-Clark (2018), if the transhumanist movement is correct, which technology can support us and take sapiens to the next level, then should we ignore this as research projects like Neuralink or epidural stimulation "will enable us to overcome fundamental human limitations, such as aging, paralysis or the power of our brains" (Towers-Clark, 2018).

In an article on the World Economic Forum's website, author Liu (2020) suggests that we are entering the era of the "Internet of Bodies" where companies will be able to collect our physical data via a range of devices that people can wear, which can be implanted or even swallowed. The World Economic Forum (2020) seems to be pushing for a transhumanist and cyborg society, with much attention and focus provided on the subject. In a panelled discussion at Davos (January 24, 2020) "When Humans Become Cyborgs", the presenter (moderator, a young global leader) opens with the comment "I always wanted to be a cyborg and I have been waiting for the day to become one". The panelled discussion goes on to explore brain-computer interface and how new technologies

are blurring the lines between man and machine. Schwab (2016) has frequently raised the point that as humanity moves into the fourth industrial revolution, what it means to be human will be challenged. Schwab (2016) states "the revolutions occurring in biotechnology and AI, which are redefining what it means to be human by pushing back the current thresholds of life span, health, cognition, and capabilities, will compel us to redefine our moral and ethical boundaries".

So, our future could likely be post-human, as this section has provided an insight into, via the concepts of robots, post/transhumanism and cyborgs. It has evidenced examples of how society and various institutions are approaching the idea of humans transcending their species of origin. Evidently, people's motivations are wide and varied (beyond those considered here); as humans, we have social-cultural drivers such as curiosity, fashion trends/trendsetting and seeking simplicity in our lives. Technology has and increasingly plays a significant role in not just supporting us in these areas but also controlling us. As humans we are becoming increasingly dependent on it (for work, leisure and pleasure). Likewise, people are also forced into behaving differently to meet the needs of current social systems, and technology is often forced upon us so that we can access and interact with our society (be it people, organizations and even the natural environment). Having highlighted that not only is there a desire amongst some within society to move humans beyond our current being, to something new, people are already beginning to transcend our current species. As noted by Ward (2022), every year millions of people cross borders to undertake medical treatments. Cheap travel and lax laws have made it easier for medical tourists to travel world searching for the elixir of life. In line with this, it is necessary to consider the technological developments that are and could become part of the wellness and medical markets of the future and ultimately, potentially driving us to a post-human era and closer to becoming immortal.

6.3 Research and development in medical and wellness practices

Humanity continues to seek longevity, be it in physical or non-physical forms. Our mental wellness is likely to see increased significance in this century as humanity continues to battle external issues. According to Harari (2015), scientists are developing innovative new treatments which operate in fundamentally different methods to previous medicine, noting examples where research labs are home to nano-robots. Such sci-tech in the future would see nano-robots navigating through the human bloodstream, identifying illnesses and kill pathogens and cancerous cells. The fight for beauty and youth will also likely continue. The golden threads from face lifts, the botox-filled flesh and the transplanted hair follicles inevitably follow their bearers into their finite destiny. One of the known progressive methods of sustaining the health and longevity of bodily functions is organ transplantation (Luo, 2019). With foundations of tissue engineering at the doorstop (Lavernia et al., 2019), the hope to sustain and prolong one's lifespan through organ transplantation seems viable. Perhaps, the modified and enhanced organs would have the capability to bestow a certain extent of "medical immortality" on the patient. Moreover, considering the premise of utilizing tissue engineered hearts, livers and pancreas by 2050 as a "norm", the future looks promising, albeit only for the few (Yeoman, 2012, p. 104). The medical and surgical markets are constantly seeing emerging developments and advancements in technology. Developments include the methods in which patients connect with surgeons and clinics (moving more online), and the (increased) speed in which patients are recovering from surgery (Perez, 2018). Harari (2015, p. 50) suggests that "The upgrading of humans into gods may follow any of three paths: biological engineering, cyborg engineering and the engineering of non-organic being". Tables 2 and 3 present examples of current and future technological wellness and medical practices and experiences that could become available in future markets. Whilst there is no specific categorization of the examples provided in the two tables, the aim is to offer the reader an insight into practices that consider a range of changes to the human mind and body.

It must be stressed that the medical and wellness examples presented here in Tables 2 and 3 are not all conclusive to research and development currently taking place on a global scale. These are some examples that have been located by the authors (at the time of writing) to present a picture of some of the practices that are being explored. Consequently, these examples are used in the

Table 2 Current and future medical practices		
Procedure	Description	
Preoperative planning	Doctors can now use technology to create personalized plastic surgery solutions, like using a patient's CT scans and a surgical simulation application to practice a surgery before performing it on the patient. This preoperative planning can help shorten the length of time that surgeries take. In addition, some technologies can alter photos of a patient to show them likely results of a procedure. This can give them a better idea of what they will look like after the surgery, which could lead to patients being happier with their results since they will not be as surprised by a drastic procedure (Perez, 2018)	
Laser skin resurfacing	These days, patients want to be back on their feet and out in the real world as quickly as possible. Laser skin resurfacing can improve the look and feel of skin with a much quicker recovery time and other traditional surgeries although it can also be used alongside other procedures for the optimum improvement (Perez, 2018)	
Endoscopic facelift	A traditional facelift can leave noticeable scars and carries the risk of causing nerve damage that could lead to numbness in part of the face. With an endoscopic facelift, very small incisions are made along the scalp and temples and an endoscope (basically a tube with a light and a camera at the end) is used to perform the facelift. Along with less scarring and fewer risks, surgeons can focus on specific areas of the face and provide improved results compared to a traditional facelift (Perez, 2018)	
Biologic products for tissue reconstruction	Previously, many procedures required removing tissue from one area of the body to use in another area, resulting in additional scarring and potentially more procedures. Nowadays, engineered products can create a scaffold for tissue regeneration and replacement (Perez, 2018)	
Medical tattoos	Flexible, electronic medical tattoos and stick-on sensors can take an electrocardiogram, measure respiratory rate, check blood sugar and transmit results seamlessly via Bluetooth. It is mobile vital sign tracking, but at a level once found only in an intensive care unit (Kraft, 2019)	
Implant devices	Implantable devices may include a radio-frequency ID chip under the skin that holds a patient's medical records or a subcutaneous sensor that could continuously monitor blood chemistry. Ingestible devices in capsules will deploy once swallowed to perform tasks in the gastrointestinal system, from delivering treatment to isolating foreign objects (Kraft, 2019)	
Artificial implants and prostheses	Artificial substitutes for body parts and materials inserted into tissue for functional, cosmetic or therapeutic purposes. Prostheses can be functional as in the case of artificial arms and legs or cosmetic as in the case of an artificial eye. Implants, all surgically inserted or grafted into the body, tend to be used therapeutically-see NCBI (2020) for full list	
Biochemical happiness	Each year, new drugs are born in research labs of universities, pharmaceutical companies and criminal organizations that allow for biochemical drugs to manipulate happiness. In research labs, experts are creating sophisticated was of manipulating human biochemistry, such as sending direct electrical stimuli to appropriate spots in the brain (Harari, 2015)	
Medical 3D printing	The biotechnology industry is working on printing living cells. Anyone will be able to print any kind of drugs that contain patented molecules at home. Bionic ears and simpler organs will be printed at the patient's bedside. There are already examples of 3D printing used in medicine. Through the e-NABLING the future project, a global network of passionate volunteers enable volunteers, doctors or anyone on the field to make a difference by literally "giving a helping hand" to those in need by sharing 3D Printing designs, video tutorials and other information about building prosthetic hands. Success stories come from all over the world: there are now children and adults with super-hero style or more traditionally shaped prosthetic hands in Chile, Ghana, Indonesia and many more countries (The Medical Futurist, 2016)	
Nano-robot treatment	Scientists are developing revolutionary new treatments that work in radically new ways to previous medicine. Research labs are already home to nano-robots that one day may navigate the bloodstream, identify illnesses and kill pathogens and cancerous cells (Bostrom, 2014)	
Biological engineering	For four billion years, our bodies natural selection has focused on tweaking and tinkering with our bodies. But with developments in bioengineering, society might not wait for natural selection to support our survival. Bioengineers will have the ability to rewrite our genetic code, rewrite our brain circuits, alter the biochemical balance and even grow entirely new limbs. Consequently, biochemists could create new godlings, who might be different from us Sapiens (Harari, 2015)	
Epidural stimulation	Neural lace technology consists of a nano-mesh of electrodes that encompass and eventually integrate with the brain, allowing us to upload and download digital information directly. Our attachment to mobile devices means that we are already cyborgs, "it is just that the data rate is slow" due to our clumsy finger-based output. Epidural stimulation technology would increase the "bandwidth" of this data flow, allowing us to interact directly with our digital selves and even "upload into a new unit" should our biological body die (Towers-Clark, 2018)	

theoretical model now presented in this research. Due to the fast-paced nature that technology is currently witnessing, society is likely to be presented with new surgical practices and concepts around medical and surgical enhancement/procedures. Thus, the examples are time relative to this research.

7. The relationship between medical and wellness tourism and immortality: a futures perspective

The wellness and medical tourism markets, whilst still niche, are expected to see continued growth going forward. The past decade has seen tourism authorities progressively viewing medical tourism as a significant industry, offering the potential to diversify their existing tourism markets, improve their own economies and healthcare systems, offer employment opportunities and generate further tax revenues (Suess et al., 2018; Ward, 2022). Pre-COVID-19, Yeoman (2012) suggested that by 2022, healthcare will be the world's largest industry, followed by tourism in second place. As identified by Gill and Sumant (2019), the affordability and accessibility of reliable and safe healthcare services along with assistance from tourism departments and local governments are driving factors fuelling the growth of the global medical tourism market. This is likely to expand as medical tourism hubs become more common places due to developments in technology. According to Fortune Business Insights (2022), medical tourism continues to gain immense traction globally and more so across developed regions. In their report, they draw on research from the Medical Tourism Association (MTA) who note that around 14 million people travel to other countries for medical care. It is suggested that availability of lower-cost treatment in different countries for various conditions will support the growth of the medical tourism market. Likewise, the wellness tourism market is seeing growth, and COVID-19 has seen a growth in the number of tourists seeking wellness travel experiences. According to the Global Wellness Institute (2021), the wellness tourism market will grow by 20.9% annually through to 2025, reaching an impressive \$1,1276 bn market size by the end of that year.

This research now presents its own developed model for the future wellness and medical tourism industries. The model incorporates the previous four areas used by the Global Spa Summit (2011) in their own model (see Figure 1). Importantly, in line with discussions in this paper, the future model aligns the importance of the immortality concept, one which is potentially showing signs of becoming a reality, as evidenced in the discussions above. The model and its examples aim to provide some insight into future wellness and medical tourism markets. From the model, it is suggested that the wellness markets will only take humans so far, in as much, to provide people with the ability to live out a long and healthy life. The wellness markets will unlikely lead to humans become immortal. However, and significantly, the model highlights how the growth in medical markets and procedures could support the potential of achieving (post-human) immortal existence.

The future market model maps the potential for current and new emerging wellness and medical tourism practices and their potential relationship between mortal existence, increased lifespan and eventually, post-human immortality. The examples of current and potential future markets in wellness and medical tourism used in this instance are taken for Tables 2 and 3 above. However, the value of the model should be in the application of the framework and not the actual examples of wellness and medical procedures (re)distributed on the model (as these are time limited and not all conclusive). These should be taken solely as examples that have been used to provide insight into the types of practices being discussed at the time of writing. Significantly, as time progresses, research and development will likely lead to new technologies (and practices) that could have life enhancing capabilities, thus leading to a re-shifting in the balance and value of medical and wellness market activities alongside the need of any given society and its human status. Hence, the model can be used and applied in future research when considering wellness and medical tourism markets and their impact and potential role in driving society towards a post-human era.

Importantly, the model and the medical markets presented aim to shine a light on the direction the technology and the industry could be heading in. To this point, this paper raises a more profound philosophical question, one that goes beyond the tourism industry. The role of government and regulators would be an initial starting point. However, this paper is shining a light on the role of the tourism industry and raises the following question. What role does the tourism industry want to play in supporting these potential future markets? Tourism and the sectors considered here operate independently and co-operatively with government; tourism is rarely an isolated bubble, detached from society. But the industry, destinations and tourist can take an individual stance. Our future

Practice	Description
Silent zones	As digital noise and connectivity reaches an all-time high, the Global Wellness Institute predicts that we will see a sharper focus on silence, mindfulness and nature from new "silent spa" models to silent zones at restaurants, gyms,
Circadian health	airports and works spaces (Hill, 2017) Focus Shifts from Sleep to True Circadian Health. We have never been so sleep- obsessed. We pony up for sleep-tracking Oura rings, the latest, smartest mattresses, and meditative sleep headbands; crawl into nap pods; and travel far to bed down at sleep retreats. We gobble sleep tonics, CBD and even "sleep ice cream." We've been hit by a storm of generic sleep products, driving a \$432 billion "sleep economy," and we're still not sleeping. Why? Because most sleep solutions, and our modern lives, defy the basic facts of circadian biology. We predict a major shift in wellness: less focus on solutions targeting sleep/fatigue and a new focus on circadian health optimization, not only so we can sleep but to boost the brain/body systems controlled by the circadian clock (Global Wellness Summit, 2019–2020; Töre, 2020)
Wellness architecture	As architecture begins to move away from its preoccupation with surface aesthetics, thanks to new standards and technologies, architects are beginning to design buildings based on their possible effects on human health. According to the Global Wellness Institute, this new "wellness architecture" will be one of the biggest (and most impactful) future wellness trends, with strategies ranging from the inclusion of more plant life in offices to the creation of entire homes built around the inhabitant's personal well-being (Hill, 2017)
Wellness music	Humans are hardwired for music; no other stimulus positively activates so many brain regions; and stringent studies show its dramatic impact on mood, anxiety and pain. The mainstream music industry is pivoting to "wellness music." There is an explosion of well-being playlists (stress-reducing, sleep-focused, etc.) at the big streaming sites such as Spotify. There is big, new audiences for ambient and now actually cool "New New Age" music. A fascinating development: the rise of "generative" music, with apps that pull your biological, psychological and situational data to create a tailor-made-for-you, always-changing soundscape—to improve your mental health any time you want to tune in (Global Wellness Summit, 2019–2020; Töre, 2020)
Religious wellness	If going to church once meant dolling up in a dress to sit in a pew, today it might look more like wearing leggings for a HIIT-infused sermon. More and more, faith is incorporating the latest wellness trends, signifying a shift away from viewing bodywork as vanity. There are now boutique fitness studios solely devoted to worship or which cater to religious constraints. We see Ramadan bootcamps, Jewish Sabbath service hikes, Christian wellness retreats, Catholic Pilates classes and Muslim fitness YouTube channels (Global Wellness Summit, 2019–2020; Töre, 2020)
Energy medicine	Scientific researchers are discovering that the human body is indeed a complex biofield of electromagnetic frequencies and light waves that serve as control central for our physical and mental functioning and that we are also immersed in other complex environmental electromagnetic fields that change human cells. It medicine ignored the "energy body" for a century, new discoveries are shaking up entrenched thinking in biology. The future is the medical AND wellness worlds innovating new tools and technologies to optimize human energy fields to prevent illness and boost health. Frequency therapies are crucial here: electromagnetic, light and sound interventions (Global Wellness Summit, 2019–2020; Töre, 2020)
Art and creativity centres	Taking inspiration from the phenomenon that is adult-colouring, the Global Wellness Institute predicts that the practice of art and creativity will become even more central to the future of wellness. We will start to see more classes and programming that encourages people to embrace their creative side, whether that be dancing, drawing, writing or learning (Hill, 2017) (continued)

Table 3 Continued		
Practice	Description	
Cannabidiol (CBD)	Consumers are becoming increasingly conscious of the multitude of benefits these holistic remedies offer –from preventative health measures to alleviating chronic symptoms. CBD has taken centre stage on the global wellness scene and propelled the market at an unprecedented rate. CBD is one of the most hyped up, invested in and scrutinized wellness trends to emerge in the 21st century. Not to be confused with medicinal marijuana – which is a completely different type of complexity – CBD is one of the most well-known naturally-occurring cannabinoids or anti-inflammatory flavonoids of hemp, a member of the cannabis family of plants (Rider, 2019)	
Sauna reinvented	According to the Global Wellness Institute, the disconnect between Northern, Central and Eastern Europe, where sauna-going is a way of life, and the rest of the world, is beginning to disappear. Set for a dramatic transformation, the rituals and facilities associated with sauna culture will become far more creative and social as the rest of the world catches up with the benefits of the age-old practice. Paving the way, experiences like the "Hot Box Sauna", located in Scotland which boasts panoramic views as well as a bar and live music (Hill, 2017)	
Wellness sabbatical	Kamalaya in Thailand just unveiled a well-being sabbatical program, which (with a minimum 21-day stay) goes far deeper than a mere "recharge," and where the comprehensive daily healing experiences (including personal mentoring) are flexibly designed around guests' work schedules. Vana in India just unveiled its 30-day wellness sabbatical, where great technology and workspaces mean having that conference call after an appointment with a Tibetan Healing doctor. At Mexico's Rancho La Puerta, execs are checking into casitas with private pools and offices to interweave a few hours of work each day with immersion in their 365-degree wellness offerings. We predict more top wellness resorts, typically designed around 1–2 week stays, will expand to 21-day, flexible work + wellness programs. (Global Wellness Summit, 2019–2020; Töre, 2020)	
Mental wellness and technology	Mental wellness and technology: rethinking the relationship. A broad category includes mental illness and neurological disorders but also new categories spanning anxiety, stress and despair. Mental health tech will move into the mainstream as cultural norms continue to shift. Industry analysts predict the next year will see a big spike in the adoption of telehealth, both in the mental healthcare space as well as primary care. Consumers' embrace of convenient treatment as well as interest in self-care will transform how employers, universities and local governments offer subsidized mental wellness care. Nearly 10,000 mental health apps currently crowd the market, ranging from behavioural health coaching to meditation content (Global Wellness Summit, 2019–2020; Töre, 2020)	

should not be pre-determined and addressing issues such as the ones concerned here should be done before retrospective action or consideration becomes the narrative. Maybe a more fundament and philosophical question that needs addressing is do we want to evolve beyond Homo sapiens into post-human immortal cyborgs? If not, then should we be regulating the markets in the lower (medical) half of the model? Do we want to just maximize our current lifespan and live long healthy lives? If so, promoting wellness markets (in the higher section of the model) should be prioritized. Or maybe, the future of society is a place where transhumanists/cyborgs and Homo sapiens live together, something we are arguably currently moving towards. Again, a philosophical question that arguably deserves wider public scrutiny: In which case, we are likely to see wellness and medical markets grow, not limited to the examples considered here, but new wellness and medical markets that will develop as we move further into the 21st century?

7.1 Wellness and medical tourism: shaping the future of Homo sapiens

We are - if not yet Terminators - at least a little more integrated with our machines (Wittes and Chong, 2014).

As society moves into the 21st century, we are going to witness new practices and relationships between the patient and client. As noted by Perez (2018), society no longer operates on phone books and client referrals to develop and sustain business. Today's online environment has become a double act, part science, part art. Today, social media marketing is powerful as patients share their experiences on digital platforms. Businesses in the future might look to "offer incentives to clients who mention your plastic surgery practice when they show off their new look on their social media" (Perez, 2018).

Humans have often used technology to support their bodies, through devices such as wooden legs, hearing aids, spectacles and false teeth. However, the transhumanist and cyborg concepts are moving us into a new reality. These ideological outlooks consider the use of augmented implants that enhance our senses, allowing us to detect infrared or ultraviolet radiation, boost our cognitive processes by connecting ourselves to memory chips. Such advancements are already becoming available for more medical purposes, being adopted by younger individuals looking to boost their lifestyle needs, and this is something that is even being advised if humans are to remain relevant. Historically, humans have sought and discussed the immortality of the soul in the spirit (other) world, and this will continue to be, but more aligned to our mental wellness. With developments in new technologies and our ever-growing advancements in science, the preservation and extension of the material body and its connection with technology is becoming significantly real. This will lead to a shift in the human perspective, in human consciousness, as our once imagined realities begin to change, as we begin to believe in different stories, stories where death is not the end, but stories of immortality.

McNamee and Edwards (2006) recognize how transhumanist advocates call for the value and opportunity it could offer, planning for a new future for human beings and our Homo sapiens species. Arguing that transhumanism presents a new evolutionary path that limits the chance for random mutations and illness. Thus, leading towards more tailored humans, were the ideal "human blueprint" is already created. Only time will tell precisely which "ideal blueprint" will end up being developed. What are the consequences of this movement, as humans and machines merge, what does this mean for Homo sapiens? Supporters of transhumanism claim that recruitment or deployment of such technologies can create individuals who are not only intelligent, but immortal. However, these individuals would no longer be part of the Homo sapiens species. These individuals would be ambiguous, part human and part machine (McNamee and Edwards, 2006, p. 514). As we continue to embrace technology, will we evolve from "Homo sapiens" to "Homo Technologicus" or even "Homo Deus" (Mckie, 2018; Harari, 2015). Whilst a challenging idea, Harari (2015, p. 53) notes, "once technology enables us to re-engineer human minds. Homo sapiens will disappear, human history will come to an end and a completely new kind of process will begin, which people like you and me cannot comprehend".

Currently, as evidenced in this research, tourism is (in)directly playing a significant role in supporting the evolution of the human being from Homo sapiens to something different, a more technologically enhanced being. Global Spa Summit (2011, p. iii) stress that in their model (see Figure 1) of market sectors, all four "typologies" of medical and wellness tourism offerings are significant and potentially lucrative markets. Importantly, they suggest that industry stakeholders should carefully "consider the varying opportunities and tourists needs/interests across the four quadrants when developing and marketing a menu of offerings for medical tourists and/or wellness tourists". Thus, if immortality or transhumanist ideologies are our evolutionary path, as humans (could) become cyborgs, what responsibility today does the wellness and medical tourism sectors play in supporting, fuelling, promoting and encouraging such practices? As evidenced in the future wellness and medical tourism market redistribution model, the future could see new types of market opportunities, ones that could directly support the evolution of the Homo sapiens into something new. As recognized above, medical and wellness tourism form part of the travel industry and are likely to see continued growth in the coming years. People travel to international destinations to carry our procedures that form part of these industries/sectors. If these sectors in the future develop in a manner in which tourists travel for "life extending procedures", away from

their place of residence, then the medical and wellness markets are (in)directly involved with the (re)shaping of the human species. Thus, governments and regulators must shine a greater light on the movements and practices within these sectors, today and as we move into the 21st century. Importantly, the wider tourism community must research and further our understanding of how new markets in the wellness and medical tourism sectors will impact on who we are as a species and what species we may help evolve.

So, what story of the future do we want to share?

8. Changing the collective story: from death to immortality

If the genius of invention were to reveal tomorrow the secret of immortality, of eternal beauty and youth, for which all humanity is aching, the same inexorable agents which prevent a mass from changing suddenly its velocity would likewise resist the force of the new knowledge until time gradually modifies human thought Nikola Tesla (see Valderrama, 2016, p. 8).

Valderrama (2016) suggests that Tesla is stressing the idea of eternal youth and beauty. To Tesla, the search for immortality has the potential of becoming a reality as long as people believe in the idea. Further suggesting, death is what humans believe to be their natural state of end in life's journey. This paper opened with the idea of fictional narratives offering us visions of the future and that of immortality. The "inexorable agents" are the processes in society that prevent change, but through new knowledge, society and what humans believe to be real can change. The questions are what knowledge will be key in changing our collective consciousness towards the overpowering idea that death is the end? Aubrey de Grey drew on the notion of mentality change and championed a new medical research that highlighted the potential of people living much longer lives (as discussed by Morley Safer). Safer (1931-2016) asks the question, how long would you like to live, what if you could live 400-500 years or more, all in good health. Whilst recognising it as arguably a utopian and a nightmare scenario, such visions are discussed. Today, we live longer healthier lives than our grandparents, but due to disease and old age, 100 remains to be our outer limit. However, this is said to be old-fashioned thinking, and in the next 20-30 years, humans will begin to recondition ourselves towards the first steps of immortality (Safer, 1931-2016).

Harari (2011, p. 35) notes, "Over the years, people have woven an incredible complex network of stories [...]." Furthermore, "The kinds of things that people create through this network of stories are known in academic circles as 'fictions', 'social constructs' or 'imagined realities'" (see Berger and Luckmann, (1967) for more on social constructs). Importantly, "An imagined reality is something that everyone believes in, and as long as this communal belief persists, the imagined reality exerts force in the world." So, individuals at birth are educated into imagined realities; they are constantly reminded of the principles of the imagined order. But death is not an imagined reality, death is real. But what if people begin to change their beliefs in death and begin to believe that death is not the end. What if the fictional ideas of immortality become reality? If society is programmed to think that death can be defeated, then the stories begin to change. Science fiction and popular culture (novel and visual) play a significant role here as they produce imagined stories of immortality, paving the way for society to see alternative future realities. Consequently, this begins to change our mindsets, our stories and if we change our stories, we might end up changing our reality, and this has begun. People being born today are being born into a world that is showcasing the early signs of a post-human world. According to Giddens (2014), what is taking place is a world were reality is outdistancing science fiction.

According to Renee Engeln, "You are never going to meet this culture's beauty standard. If we all started meeting the standard, the standard would just be changed" (Brucculieri, 2019b). Harari (2015, p. 33) stresses that "as long as people assumed that death is inevitable, they trained themselves from an early age to suppress the desire to live for ever, or harnessed it in favour of substitute goals. People want to live for ever, so they compose an 'immortal' symphony, they strive for 'eternal glory' in some way, or even sacrifice their lives so that their soles will 'enjoy everlasting bliss in paradise'. A large part of our artistic creativity, our political commitment and our religious piety is fuelled by the fear of death". As this paper has showcased, humans have created the imagined stories of immortality in visual and written guises. However, are we now on (if we have not already leap beyond) the brink of those imagined stories becoming a reality. As explored here, the movement of people (medical and wellness tourists) to global destinations will play a role in shaping the future of human, our species. Evidently, the tourism industry will not be solely responsible for such potential manipulation of our species evolution. However, the fabric of our species future, one that is no longer Homo sapiens could be woven by the movement of tourists today seeking medical treatments that prolong life. This is no small issue and requires greater scrutiny and examination within the tourism sector and beyond. After all, as noted by Harari (2015), humans are reaching a place where they are capable of being Gods. This level of human power, control and enabling should not be considered lightly, as our species and what it means to be human is either seeing a controlled modification by those with the power to do so, or could be seen to be under attack.

9. Conclusion

Tourism has a responsibility to continuously examine and scrutinize its current development strategies and its wider social and cultural roles and responsibilities. Technology is increasingly becoming the future's elixir of life. With developments in technology, what once seemed fictional ideas of immortality (shared by our ancestors) are now becoming a reality; the immortal story is changing from the fictional to real. We live in a time where technology, travel and social changes are so frequent that society often fails or even lacks the capacity to consider how current practises will ultimately lead humanity into the future. In the past, medicine and surgery allowed doctors and surgeons to carry out procedures to support victims of war and disease. Today, technology and medicine are increasingly being used in the medical (tourism) sector so consumers can attain the ideal version of themselves. The idea of physically beautifying oneself is driven by growing promotional content on social media, promoted in movies and novels and by celebrities and social influencers. These groups of people and the narratives they portray have not only encouraged people to seek alternative versions of themselves but have actually changed our social understanding of what we can achieve and who we can become.

Another key feature in all of this is the travel industry. This research highlighted the important historical growth, meaning and current practice of wellness and medical tourism. Today, individuals are driven by wellness practices and medical and cosmetic desires and are willing to travel the globe in search of companies who are either capable of carrying out the desired procedures or seeking prices more affordable to them. However, this research offers novel insights and maps the relationship between wellness and medical practices and the concept of immortality. The research presents a wellness and medical tourism market redistribution model, illustrating the potential for future consumer services that could further fuel a post-human and immortal era. This paper set out to explore what potential role and impact the wellness and medical tourism markets will have on the future of humanity and more so, Homo sapiens. According to this research, tourism and the global travel industry is creating (and will continue to create) greater opportunities for people to participate in wellness and medical tourism practices. It concludes that these sectors of the travel industry are playing and will continue to play a significant (in)direct role in shaping the evolution of *Homo sapiens* because they are providing places in which consumers can access medical procedures and, eventually, ones that could lead to immortality.

We often look back into the past to seek what trends have led us to where we are today and who was responsible for our current predicaments, good or bad. If future generations look back on the current expanding wellness and medical industry, what do we want them to see? Who is taking responsibility to consider how the current growth in the industry will end up? Do we want future generations to look back and say that the travel industry encouraged people globally to access medical provisions that eventually led to transhumanists and cyborgs? We should be asking these difficult questions now, before it is too late. Now is the time to consider what responsibility the tourism industry has in managing the growth of wellness and medical markets, where should the

marketing and promotional emphasis be placed in these industries? Should greater restrictions and regulations be put in place so to manage the distribution and growth of the industry? Should wellness travel take greater priority over medical travel, offering consumers healthier lives, but few opportunities to become transhumanist/cyborgs? Society today is increasingly being covered by globalist ideas, agendas and corporations. COVID-19 has shown how globalists feel that a standard approach is needed to deal with transborder issues and challenges. In tourism, organizations such as the World Tourism Organization (UNWTO) and World Travel Council champion themselves as leaders in the industry, supporting nations and companies globally, so they hold a valuable responsibility in the development and promotion of wellness and medical tourism, so what future do they envisage? This research opens up new areas of investigation, such as the continued mapping of practices and tourism offerings within the wellness and medical markets globally. Countries should consider their wellness and medical practices and fit them alongside the model presented here, ideally asking the question: what future(s) do they want to encourage for society and our species?

If earthly physical immortality or at least longevity is what we seek, then should we return to the practices of our ancestors, focusing on more holistic and spiritual methods, rather than relying on medicine, or is there a need to better understand the balance between the different methods? Travel and tourism have played a key role throughout time, moving people across the globe, distributing knowledge, ideas and resources, all of which have shaped the way we live, work and play. As humans evolve, possibly beyond Homo sapiens, this paper asserts that current wellness and more so medical travel are likely to play a central role. As tourists will continue to travel to destinations which will provide services that meet our ranging motivations around wellness and medical practices, offering the opportunities for personal beautification, to engage our curiosity, to provide life-saving treatments or maybe our quest for immortality, a once fictional image becoming a reality.

Just because we can, it does not mean we should!

References

Allied Market Research (2022), "Wellness tourism market by service type (transport, lodging, food and beverage, shopping, activities and excursion, and others), location (domestic and international), travelers type (primary and secondary): global opportunity analysis and industry forecast, 2021-2030", available at: https:// www.alliedmarketresearch.com/wellness-tourism-market#:~:text=The%20global%20wellness%20tourism %20market,highest%20share%20in%20the%20market (accessed 15 February 2022).

Ansell-Pearson, K. (1997), Viroid Life. Perspectives on Nietzsche and the Transhuman Condition, Routledge, London and New York.

Bartunek, J.M., Rynes, S.L. and Ireland, R.D. (2006), "What makes management research interesting, and why does it matter? Academy of management editors' forum", Academy of Management Journal, Vol. 46 No. 1, pp. 9-15.

BBC (2019), "Transhumanism: how far would you go for a body upgrade?", available at: https://www.bbc. co.uk/news/av/uk-scotland-49908957/transhumanism-how-far-would-you-go-for-a-body-upgrade (accessed 21 October 2019).

Becker, E. (1997), The Denial of Death, Free Press, New York.

Berger, P.L. and Luckmann, T. (1967), The Social Construction of Reality, Anchor Books, New York.

Bostrom, N. (2005), "A history of transhumanist thought", Journal of Evolution and Technology, Vol. 14 No. 1, pp. 1-25.

Bostrom, N. (2014), Superintelligence: Paths, Dangers, Strategies, Oxford University Press, Oxford.

Boyd, J.B., McGrath, M.H. and Maa, J. (2011), "Emerging trends in the outsourcing of and surgical care", The Archives of Surgery, Vol. 146, pp. 107-112.

Brown, A., Furnham, A., Glanville, L. and Swami, V. (2007), "Factors that affect the likelihood of undergoing cosmetic surgery", Aesthetic Surgery Journal, Vol. 27, pp. 501-508.

Brucculieri, J. (2019a), "Plastic surgeons reveal the ways social media influences patients", available at: https://www.huffingtonpost.co.uk/entry/plastic-surgery-social-media_I_5cdc1b9fe4b0437438c4fbea? guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAMgL72

Eh6GMzGfY8qZhN9kkJ_gmoa4pgTJTqB-bfpqZ7MlcC6h2q2eLZNDLBRUr_psL0mKfeg9ZqiYO9ig-ZZ-MTsthbSBagOfEh23RbdUUBQFE_edE8vRdtFcZVI6myPZ7nACqq95ZEMk4N3P1Xr2ECVsBs6tRm8ogmTiwm-AOZ (accessed 4 September 2019).

Brucculieri, J. (2019b), "Snapchat Dysmorphia' points to A troubling new trend in plastic surgery", available at: https://www.huffingtonpost.co.uk/entry/snapchat-dysmorphia_n_5a8d8168e4b0273053a680f6 (accessed 4 September 2019).

Campa, R. (2019), "Nietzsche and transhumanism: a meta-analytical perspective", Studia Humana, Vol. 8 No. 4, pp. 10-26.

Cave, S. (2012), Immortality: The Quest to Live Forever and How Is Dives Civilisations, Crown Publishers Group, New York.

Clark, W.R. (1999), A Means to an End: The Biological Basis of Aging and Death, Oxford University Press, Oxford.

Cohen, M. and Bodeker, G. (2008), Understanding the Global Spa Industry: Spa Management, Butterworth & Heinemann, London.

Connell, J. (2006), "Medical tourism: sea, sun, sand and... surgery", Tourism Management, Vol. 27 No. 6, pp. 420-434.

Connell, J. (2013), "Contemporary medical tourism: conceptualization, culture and commodification", Tourism Management, Vol. 34, pp. 1-13.

Cormany, D. and Balogly, S. (2011), "Medical travel facilitator websites: an exploratory study of web page contents and services offered to the prospective medial tourist", Tourism Management, Vol. 32 No. 4, pp. 709-716.

Crerand, C.E., Franklin, M.E. and Sarwer, D.B. (2006), "Body dysmorphic disorder and cosmetic surgery", Plastic and Reconstructive Surgery, Vol. 118, pp. 167-180.

Crew, B. (2018), "This is what humans will look like in 1,000 years", available at: https://www.sciencealert. com/watch-this-is-what-humans-will-look-like-in-1-000-years (accessed 5 September 2019).

Crouch, G. and Louviere, J. (2001), "A review of choice modelling research in tourism, hospitality and leisure", Consumer Psychology of Tourism, Hospitality, and Leisure, Vol. 2, pp. 67-86.

de la Hoz-Correa, A., Muñoz-Leiva, F. and Bakucz, M. (2018), "Past themes and future trends in medical tourism research: a co-word analysis", Tourism Management, Vol. 65, pp. 200-211.

Edmonds, A. (2007), "'The poor have the right to be beautiful': cosmetic surgery in neoliberal Brazil", Journal of the Royal Anthropological Institute, Vol. 13, pp. 363-381.

Encyclopedia Britannica (2019), Immortality: Philosophy and Religion, available at: https://www.britannica. com/topic/immortality (accessed 4 September 2019).

Erfurt-Cooper, P. and Cooper, M. (2009), Health and Wellness Tourism: Spas and Hot Springs, Channel View Publications, Bristol.

Fetscherin, M. and Stephano, R.-E. (2016), "The medical tourism index: scale development and validation", Tourism Management, Vol. 52, pp. 539-556.

Fisher, C. and Sood, K. (2014), "What is driving the growth in medical tourism?", Health Marketing Quarterly, Vol. 31, pp. 246-262.

Fortune Business Insight (2022), "Medical tourism market size, share and Covid-19 impact analysis", available at: https://www.fortunebusinessinsights.com/industry-reports/medical-tourism-market-100681 (accessed 23 August 2022).

Furnham, A. and Levitas, J. (2012), "Factors that motivate people to undergo cosmetic surgery", Canadian Society of Plastic Surgeons, Vol. 20 No. 4, pp. 47-50.

Giddens, A. (2014), "Between immortality and armageddon: living in a high opportunity", High Risk Society, available at: https://www.youtube.com/watch?v=2Dk7IYx4x-s&t=1298s (accessed 6 September 2019).

Gill, S. and Sumant, O. (2019), "Medical tourism market by treatment type (dental treatment, cosmetic treatment, cardiovascular treatment, orthopedic treatment, neurological treatment, cancer treatment, fertility treatment, and others): global opportunity analysis and industry forecast, 2018-2025", available at: https:// www.alliedmarketresearch.com/medical-tourism-market (accessed 5 September 2019).

Global Spa Summit (2011), Research Report: Global Spa Summit 2011. Wellness Tourism and Medical Tourism: Where Do Spas Fit?, New York.

Global Wellness Institute (2018), Global Wellness Economy Monitor.

Global Wellness Institute (2021), The Global Wellness Economy: Looking Beyond COVID.

Global Wellness Institute (2022), "History of wellness", available at: https://globalwellnessinstitute.org/whatis-wellness/history-of-wellness/ (accessed 15 February 2022).

Global Wellness Summit (2019-2020), "Global wellness trends report: the future of wellness 2020", available at: https://www.globalwellnesssummit.com/ (accessed 5 March 2022).

Grand View Research (2017), "Medical tourism market size, share & trends analysis report by country (Turkey, Costa Rica, Thailand, India, Mexico, Singapore, Brazil, Malaysia, Taiwan, Colombia, South Korea), and segment forecasts, 2019 - 2026", available at: https://www.grandviewresearch.com/industry-analysis/ medical-tourism-market (accessed 10 February 2020).

Grand View Research (2019), "Medical tourism market size, share & trends analysis report by treatment type, by service provider, by country, and segment forecasts, 2022 - 2030, available at: https://www. grandviewresearch.com/industry-analysis/medical-tourism-market (accessed 10 February 2020).

GRethexis (2018), "Meet the divine: the source of immortality", available at: http://www.grethexis.com/thesource-of-immortality/ (accessed 9 January 2019).

Hall, C.M. (2003), "Spa and health tourism", in Hudson, S. (Ed.), Sport and Adventure Tourism, Haworth Hospitality Press, New York, pp. 273-292.

Harari, Y.N. (2011), Sapiens: A Brief History of Humankind, Penguin, London.

Harari, Y.N. (2015), Homo Deus: A Brief History of Tomorrow, Penguin, London.

Hayflick, L. (1977), "Perspectives on Human Longevity, in Extending the human life span: social policy and social ethics", Bernice Levin Neugarten and Robert James Havighurst, University of Chicago, Chicago.

Hellsten, S.K. (2012), "The meaning of life during a transition from modernity to transhumanism and posthumanity", Journal of Anthropology, Vol. 1, pp. 1-8.

Heyes, C.J. (2007), "Normalisation and the psychic life of cosmetic surgery", Australian Feminist Studies, Vol. 22, pp. 55-59.

Higginbotham, G. (2011), "Assisted-suicide tourism: is it tourism?", Tourismos, Vol. 6, pp. 177-185.

Hill, L. (2017), "8 future wellness trends according to the global wellness Institute", available at: https://www. welltodoglobal.com/8-future-wellness-trends-according-to-the-global-wellness-institute/ (accessed 5 March 2020).

Horowitz, M.D., Rosensweig, J.A. and Jones, C.A. (2007), "Medical tourism: globalization of the healthcare marketplace", The Medscape Journal of Medicine, Vol. 9 No. 4, pp. 1-22.

IMDB (1990-2019), "Movies and TV shows with immortality/where the main character is immortal", available at: https://www.imdb.com/list/ls066955083/ (accessed 10 January 2019).

Inkwood Research (2017), "Global cosmetic surgery and procedure market forecast 2019-2027", available at: https://www.inkwoodresearch.com/reports/cosmetic-surgery-and-procedure-market/ (accessed 10 February 2020).

ISAPS (2018), "How social media and plastic surgery go hand in hand", available at: https://www.isaps.org/ blog/how-social-media-and-plastic-surgery-go-hand-in-hand/ (accessed 4 Sepetember 2019).

Jaeger, W. (1959), "The Greek ideas of immortality", Harvard Theological Review, Vol. 52 No. 3, pp. 135-147.

Karuppan, C. and Karuppan, M. (2010), "Changing trends in health care tourism", The Health Care Manager, Vol. 29 No. 4, pp. 349-358.

Kim, H.L. and Hyun, S.S. (2022), "The future of medical tourism for individuals' health and well-being: a case study of the relationship improvement between the UAE (United Arab Emirates) and South Korea", International Journal of Environmental Research and Public Health, Vol. 19 No. 9, p. 5735, doi: 10.3390/ ijerph19095735.

Kraft, D. (2019), "12 innovations that will revolutionize the future of medicine", available at: https://www. nationalgeographic.com/magazine/2019/01/12-innovations-technology-revolutionize-future-medicine/ (accessed 5 Sepetember 2019).

Kumar, R. (2009), Global Trends in Health and Medical Tourism, SBS Publishers & Distributors, New Delhi.

Lavernia, L., Brown, W., Wong, B., Hu, J. and Athanasiou, K. (2019), "Toward tissue-engineering of nasal cartilages", Acta Biomaterialia, Vol. 88, pp. 42-56.

Lee, M. (2012), Knowing Our Future: The Startling Case for Futurology, Infinite Ideas, Oxford.

Leigh, J., Webster, C. and Ivanov, S. (2013), Future Tourism: Political, Social and Economic Challenges (Advances in Tourism) Oxon, Routledge.

Li, H. and Cui, W. (2016), "Patients without borders. The historical changes of medical tourism. History of Medicine", Department of History, Department of Surgery. University of Western Ontario Medical Journal, available at: https:// www.uwomj.com/wp-content/uploads/2014/12/v83no2_08.pdf (accessed 10 January 2019).

Liu, X. (2020), "Tracking how our bodies work could change our lives", available at: https://www.weforum. org/agenda/2020/06/internet-of-bodies-covid19-recovery-governance-health-data/ (accessed 14 February 2020).

Lung, J.W. (2005), "Basic principles of balneology and examples in the United States", Proceedings of the World Geothermal Congress 2005, Antalya, Turkey, pp. 24-29.

Luo, E. (2019), "Everything you need to know about organ transplants", available at: https://www. medicalnewstoday.com/articles/325631.php (accessed 6 Sepetember 2019).

Maisel, A., Waldman, A., Furlan, K., Weil, A., Sacotte, K., Lazaroff, J.M., Lin, K., Aranzazu, D., Avram, M.M., Bell, A., Cartee, T.V., Cazzaniga, A., Chapas, A., Crispin, M.K., Croix, J.A., Digiorgio, C.M., Dover, J.S., Goldberg, D.J., Goldman, M.P., Green, J.B., Griffin, C.L., Haimovic, A.D., Hausauer, A.K., Hernandez, S.L., Hsu, S., Ibrahim, O., Jones, D.H., Kaufman, J., Kilmer, S.L., Lee, N.Y., McDaniel, D.H., Schlessinger, J., Tanzi, E., Weiss, E.T., Weiss, R.A., Wu, D., Poon, E. and Alam, M. (2018), "Self-reported patient motivations for seeking cosmetic procedures", JAMA Dermatol, Vol. 154 No. 10, pp. 1167-1174.

Maxcy, S.J. (2003), "Pragmatic threads in mixed methods research in the social sciences: the search for multiple modes of inquiry and the end of philosophy of formalism", in Tashakkori, A. and Teddlie, C. (Eds), Handbook of Mixed Methods in Social Behaviour Research, Sage Publications, London, pp. 51-90.

Mckie, R. (2018), "No death and an enhanced life: is the future transhuman?", available at: https://www. theguardian.com/technology/2018/may/06/no-death-and-an-enhanced-life-is-the-future-transhuman (accessed 5 Sepetember 2019).

McNamee, M. and Edwards, S. (2006), "Transhumanism, medical technology and slippery slopes", Journal of Medical Ethics, Vol. 32 No. 9, pp. 513-518.

Medical Tourism (2018), "A little history of medical tourism", available at: https://medicaltourism.com/Forms/ medicaltourismguide/alittlehistoryofmedicaltourism.aspx (accessed 10 January 2019).

Millard, S. (2016), "Exposing the face of war", available at: https://blog.sciencemuseum.org.uk/exposing-theface-of-war/ (accessed 4 Sepetember 2019).

NCBI (2020), "Prostheses and implants", available at: https://www.ncbi.nlm.nih.gov/mesh/68019736 (accessed 5 March 2020).

Perez, J. (2018), "How new technologies are shaping the future of plastic surgery", available at: https://www. healthcareguys.com/2018/12/26/how-new-technologies-are-shaping-the-future-of-plastic-surgery/ (accessed 6 Sepetember 2019).

Rider, S. (2019), "Cashing in on cannabis - is CBD the next billion dollar wellness industry?", available at: https://www.welltodoglobal.com/cashing-in-on-cannabis-is-cbd-the-next-billion-dollar-wellness-industry (accessed 5 March 2020).

Safer, M. (1931-2016), 60 Minutes, Immortality. Produced by Bruce Ferguson, fl. 2004, Columbia Broadcasting System; Interview by Morley Safer, 1931-2016, in 60 Minutes, Columbia Broadcasting System, New York, NY.

Sarwer, D.B. and Magee, L. (2006), "Physical appearance and society", in Sarwer, D.B., Pruzinsky, T., Cash, T.F., Goldwyn, R.M., Persing, J.A. and Whitaker, L.A. (Eds), Psychology of Reconstructive and Cosmetic Plastic Surgery: Clinical, Empirical, and Ethical Perspectives, Lippincott, Williams, & Wilkins, Philadelphia, pp. 23-36.

Sarwer, D.B., Crerand, C.E. and Gibbons, L.M. (2007), "Cosmetic surgery to enhance body shape and muscularity", in Thompson, J.K. and Cafri, G. (Eds), The Muscular Ideal: Psychological, Social, and Medical Perspectives, American Psychological Association, Washington, DC, pp. 183-198.

Schafer, E.H. (1956), "The development of bathing customs in ancient and medieval China and the history of the floriate clear palace", Journal of the American Oriental Society, Vol. 76 No. 2, pp. 57-82.

Schwab, K. (2016), "The fourth industrial revolution: what it means, how to respond", available at: https:// www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/ (accessed 14 February 2022).

Smith, M. and Kelly, C. (2006), "Wellness tourism", Tourism Recreation Research, Vol. 31 No. 1, pp. 1-4.

Smith, M. and Puczko, L. (2009), Health and Wellness Tourism, Elsevier, Oxford.

Solon, O. (2017), "Elon Musk says humans must become cyborgs to stay relevant. Is he right?", available at: https://www.theguardian.com/technology/2017/feb/15/elon-musk-cyborgs-robots-artificial-intelligence-ishe-right (accessed 5 March 2020).

Sorgner, S. and Nietzsche, L. (2009), "The overhuman, and transhumanism", Journal of Evolution and Technology, Vol. 20 No. 1, pp. 29-42.

Suess, C., Baloglu, S. and Busser, J.A. (2018), "Perceived impacts of medical tourism development on community wellbeing", Tourism Management, Vol. 69, pp. 232-245.

Sugiyama, S. and Vincent, J. (2013), "Social robots and emotion: transcending the boundary between humans and ICTs", Intervalla, Vol. 1, pp. 1-6.

Swami, V., Arteche, A., Chamorro-Premuzic, T., Furnham, A., Stieger, S., Haubner, T. and Voracek, M. (2008), "Looking good: factors affecting the likelihood of having cosmetic surgery", European Journal of Plastic Surgery, Vol. 30, pp. 211-218.

Swami, V., Chamorro-Premuzic, T., Bridges, S. and Furnham, A. (2009), "Acceptance of cosmetic surgery: personality and individual difference predictors", Body Image, Vol. 6, pp. 7-13.

Swedene, J.K. (2009), Staying Alive: The Varieties of Immortality, University Press or America, New York.

The Medical Futurist (2016), "20 medical technology advances: medicine in the future - Part I", available at: https://medicalfuturist.com/20-potential-technological-advances-in-the-future-of-medicine-part-i (accessed 5 September 2019).

The Oxford English Dictionary (2020), "futurology", available at: https://www.lexico.com/definition/futurology (accessed 6 March 2020).

Thompson, A.E. (1979), Understanding Futurology: An Introduction to Futures Study, David & Charles Publishing, Devon.

Tikkanen, I. (2005), "Sectors in healthcare tourism: case Kuopio region", Paper presented at the 3rd Tourism Industry and Education Symposium, Jyväskylä, Finland.

Töre, Ö. (2020), "Top 10 future wellness trends for 2020", available at: https://ftnnews.com/health-a-spa/ 38746-top-10-future-wellness-trends-for-2020 (accessed 5 March 2020).

Tourism Research and Marketing (2006), Medical Tourism: A Global Analysis, Arnhem, Netherlands: Atlas.

Towers-Clark, C. (2018), "Cyborgs are here and you'd better get used to it", available at: https://www.forbes. com/sites/charlestowersclark/2018/10/01/cyborgs-are-here-and-youd-better-get-used-to-it/? sh=26ea2959746a (accessed 4 September 2019).

Valderrama, J. (2016), Blueprint for Immortality, Xlibris, Bloomignton, Indiana.

van de Grift, T.C., Elaut, E., Cerwenka, S.C., Cohen-Kettenis, P.T. and Kreukels, B.P.C. (2018), "Surgical satisfaction, quality of life, and their association after gender-affirming surgery: a follow-up study", Journal of Sex and Marital Therapy, Vol. 44 No. 2, pp. 138-148.

Wallop, H. (2015), "100 years of plastic surgery", available at: https://www.telegraph.co.uk/women/ womens-health/11731223/100-years-of-plastic-surgery.html (accessed 4 September 2019).

Wang, J.V., Akintilo, L. and Geronemus, R.G. (2020), "Growth of cosmetic procedures in millennials: a 4.5year clinical review", J Cosmet Dermatol, Vol. 19 No. 12, pp. 3210-3212. doi: 10.1111/jocd.13768.

Ward, P. (2022), Medical Tourists' Are Travelling the World in Search of the Elixir of Life, available at: https:// www.theguardian.com/commentisfree/2022/may/05/medical-tourists-are-travelling-the-world-in-search-ofthe-elixir-of-life (accessed 23 August 2022).

Wen, H. (2009), "Being good-looking is capital: cosmetic surgery in China today", Asian Anthropology, Vol. 8 No. 1, pp. 89-107.

Wise Guy Reports (2018), "Global cosmetic surgery and procedure market size study, by Application (Surgical, Non-Surgical), by End-User (Medical Applications, Others) and Regional Forecasts 2018-2025", available at: https://www.wiseguyreports.com/reports/3606287-global-cosmetic-surgery-proceduremarket-size-study-by (accessed 5 Sepetember 2019).

Wittes, B. and Chong, J. (2014), Our Cyborg Future: Law and Policy Implications, Center for Technology Innovation at Brookings.

Wong, V. (2021), "Resurface, retone and reboost: a multi-modality approach for prejuvenation of millennial patients", Journal of Clinical and Experimental Dermatology Research, Vol. 12 No. 549, pp. 1-3.

World Economic Forum (2020), "When humans become cyborgs", available at: https://www.weforum.org/ events/world-economic-forum-annual-meeting-2020/sessions/when-humans-become-cyborgs (accessed 14 February 2020).

World Tourism Organization and European Travel Commission (2018), Exploring Health Tourism, UNWTO,

Wright, D.W.W. (2016), "Hunting humans: a future for tourism in 2200", Futures, Vol. 78, pp. 34-46.

Wright, D.W.M. (2018), "Cloning animals for tourism in the year 2070", Futures, Vol. 95, pp. 58-75.

Wright, D.W.M. (2019), "Sport hunting and tourism in the twenty-second century: humans as the ultimate trophy", Foresight, Vol. 21 No. 3, pp. 419-442.

Yeoman, I. (2008), Tomorrow's Tourist, Elsevier, Amsterdam.

Yeoman, I. (2012), Tomorrow's Tourism, Channel View Publications, Bristol, p. 2050.

Yeoman, I. and Mars, M. (2012), "Robots, men and sex tourism", Futures, Vol. 44, pp. 365-371.

Corresponding author

Daniel William Mackenzie Wright can be contacted at: dwright3@uclan.ac.uk