https://dergipark.org.tr/tr/pub/ijhmt Doi Number: 10.31201/ ijhmt.788628

Int Journal Of Health Manag. And Tourism 2020, 5(2), 76-101

JHMT Editorial

International Journal Of Health Management And Tourism

TRANSFORMATIONAL WELLNESS TOURISM SYSTEM MODEL IN THE PANDEMIC ERA

Deepak CHHABRA*

* Assoc. Prof. Dr. Arizona State University, U.S.A.,
deepak.chhabra@asu.edu ,
ORCID Number: 0000-0003-4565-0325

Received: 20.06.2020
Accepted: 17.08.2020
Research Article

Abstract: The key aim of this study is to suggest a transformational wellness tourism system model aimed at preparedness of future travelers. This paper is conceptual and offers an innovative way of planning a new tourism system to facilitate wellbeing and resilience of the tourism industry and its future travelers. Healing and therapeutic potential of non-medical wellness programs is highlighted. The overarching contribution of this study is its conceptual model and its potential to boost preparedness of halted markets for future travel.

Keywords: *tourism system, transformation, chaos and disequilibrium theories, yoga, wellness programs, public health, COVID 2019*

1. Introduction

An overview of a recent past, which will be penned down in history as the old normal, unarguably reveals that tourism was booming before the pandemic. According to UNWTO (2020), international tourism grew to 1.5 billion international tourist arrivals in 2019. Travel today across the globe, both international and domestic travel for leisure purpose, has almost halted. For instance, all international transportation such as airplanes, intercity trains and buses, is grounded or operating at a minimal level. Furthermore, against previous trends and patterns that have shown the poor groups, with food and health insecurities to be more vulnerable and at the receiving end, the current pandemic shows that the most at-risk groups have been international travelers and the affluent social class (Ranasinghe, Damanupola, Wijesundara, Karunarathna et al. 2020).

The global pandemic of novel Corona has paralyzed the entire socio-economic structures and damaged the operation of global supply chains and global enterprises. According to Strielkowski (2020), the re-birthing of tourism calls for a new agenda with key overwhelming focus on local/global health and economy. The World Tourism Organization (UNWTO) is fostering deeper coordination and collaboration with the World Health Organization (WHO). It has issued a call for innovative and grounded leadership from the tourism and hospitality industry so that it plays a big role in future recovery plans and initiatives. Against a backdrop of travel restrictions being introduced, UNWTO stresses on the importance of international dialogue and cooperation and emphasizes that the COVID-19 challenge offers an opportunity to show how solidarity can move beyond international borders. Health measures, in coordination with the WHO (World Health Organization) need to be crafted so that avoidable repercussions on international travel and trade are minimized. According to the UN-WTO, the worldwide travel and tourism industry needs to stand prepared to support recovery various efforts and makes several action-based recommendations broadly categorized into three core areas: managing the crisis and mitigating the impact, providing stimulus and accelerating recovery, and preparing for tomorrow (UN-WTO 2020). The role of UN-WTO is crucial; equally important is its outreach and synergistic initiatives with other global organizations such as the World Health Organization (WHO).

Paradoxically, this pandemic is still not over and is unfolding. Countries, which report flattening of the pandemic curve, remain vulnerable and in a defensive mode (Hall, Scott and Gossling

2020). Today's crisis warns of strategic preparedness for a wellness-centered and resilient/sustainable fresh beginning. Out-of-ordinary ideas are required to support the current and new normal. As implied by the UNWTO campaign- stay home today and travel tomorrow. In other words, the message is: recover or stay immune to make tomorrow's travel possible. A strategically adaptive game plan is required that aims at the long-term wellbeing and resilience of tourists and the tourism system, so that speedy and sustained recovery mechanisms can be developed.

Pandemics are not new to human history. In fact, human history has been punctured with infectious diseases that have caused thousands of millions of people dead. Some familiar examples include the 'Great Plague and the Spanish Flu' (Strielkowski 2020). The coronavirus COVID-19 pandemic is one of the few, human history has witnessed in the 21st century. For instance, SARs (the Severe Acute Respiratory Syndrome) happened in 2002-2003 and infected approximately 8000 people and caused 774 deaths in 26 countries (Wilder-Smith, 2006). In general, viral diseases have proved to be risky and unpredictable, compared to the ones generated by bacteria (Strielkowski 2020). The viruses are known to be inactive and harmless when secluded but if they get a host, they can attach themselves and rapidly multiply. But time and time again, mankind has demonstrated immense resilience for recovery and adaptability. Today's crisis stresses on healing and sustained health for future prosperity. Therefore, the overarching question in today's pandemic times is how to build and sustain healthy and robust consumer sentiments so that when the world is ready to travel, they serve as a push motivation factors and generate demand for health/wellness trips to authentic domestic and eventually international destinations. Today's crisis calls for a new tourism system premised on health, self-development, social distance, and awareness that humans are only one part of the natural ecosystem. A transformed tourism systems approach holds potential to simultaneously embrace four inter-related dimensions into consideration: health, climate, economy, and ICT (Internet Communications Technology).

The key aim of this study, therefore, is to suggest a transformational tourism system model premised on preparedness facilitated by the healing and therapeutic potential of non-medical wellness programs. This paper is conceptual and offers an innovative way of planning a new tourism system premised on the overall wellbeing and resilience of the tourism industry and its

future travelers. It critically examines emerging literature in the context of COVID 19, using a systems approach. It also discusses different theories relevant to the tourism life cycle model in the context of the pandemic times to gather insights on different ways a host community is likely to respond when tourism lands on its turf. The overarching significance of this study is its conceptual transformational wellness tourism system model and its potential to boost preparedness of halted markets for future travel.

2. Literature Review

This section offers an overview of pandemics and their impact on tourism. This is followed by a discussion of popular tourism system models and their core components. Chaos, complexity and disequilibrium theories are discussed in the context of their significance in shaping the tourism system. Next, significance of ICT and relevant digital platforms is shared in the context of their ability to convey information, offer wellness sessions, and market messages to boost preparedness for future travel. Last, therapeutic potential of yoga as an activity and as a travel experience is examined. All these components are crucial in shaping the conceptualization of the transformational tourism systems model.

2.1.Pandemics and Tourism

The tourism industry has witnessed serious disruptive events between 2000 and 2015 although none of them had severely fractured international travel (Gossling et al. 2020). Notable disruptions include September 11 terrorist attacks 2001 on US soil, SARS (the severe acute respiratory syndrome) outbreak in 2002-2003, the global economic recession of 2008/2009, and the MERS (Middle East Respiratory Syndrome) outbreak in 2015 (Gossling, Scott and Hall 2020). According to Burkle (2006), health protection and changes in the global environment play a key role in understanding the association between pandemics and travel patterns. Gossling et al. (2020) note that several warnings have been issued of pandemics and their deadly threat to host communities and non-tourism and tourism sectors (Hall, 2006; Page & Yeoman, 2007; Scott & Gossling, 2015) and health scholars (Bloom & Cadarette, 2019), as well as organizations such as the World Bank (2012) and other institutions (Jonas, 2014).

Several reasons can be attributed the increasing susceptibility of pandemic threats in the 21st century such as: increasing global mobility and worldwide population growth; population density

in urban areas; increasing reliance on international food supply chains; increasing demand for meat and the nature of global transportation networks that have played a key role in spreading pathogens (Labonte, Mohindra & Schrecker 2011). SARS, Ebola, Marburg, hantavirus, Zika and avian influenza have resulted from anthropogenic contacts and forces (Wu, Kinzig, Collins, Minteer et al 2017). This view is supported by Wu et al., who contend that "high-risk areas for the emergence and spread of infectious disease are where […] wild disease reservoirs, agricultural practices that increase contact between wildlife and livestock, and cultural practices that increase contact between humans, wildlife, and livestock [intersect]" (2017, p. 18).

The SARS outbreak, in 2002-2003, was mostly concentrated in China, Hongkong and some case clusters in Taiwan and Canada (Gossling et al, 2020). In the context of tourism, for Hongkong, it was noted that SARS did not disrupt the economy on a broad scale although a short-term reduction in visitor numbers was reported which adversely impacted the travel and tourism sectors (Siu and Wong 2004). SARS had an overall estimated global economic cost of US$100 billion, and US$48 billion in China (McKercher & Chon, 2004; Siu & Wong, 2004). In 2009, The swine flu, produced a mild impact although it caused around 284,000 mortalities across the globe (Viboud & Simonsen, 2012). Mexico suffered a financial loss because of a decline in approximately one million visitors (Russy and Smith 2013). The European markets were also impacted and underwent a slow recovery phase (Hall et al. 2020). Strategic planning of recovery mechanisms during a pandemic was stressed, a decade ago, by Keogh-Brown, Smith, Edmunds & Beutels (2010). Two more recent pandemics have been MERS, a viral respiratory disease which emerged in Egypt in 2012 (Berry, Gamieldien & Fielding 2015) and Ebola. Gossling et al. note that the travel medicine scholars had significantly focused on MERS especially in the context of large pilgrimage events such as the annual hajj pilgrimage to Saudi Arabia. Ebola outbreak in Africa came with high mortality rate across its different phases (Chowell & Nishiura, 2014).

The travel and tourism industry not only facilitates the spread of a disease and its economic outcome but is also impacted by it on a disrupting scale (Nicolaides, Avraam, Cueto-Felgueroso, Gonzalez et al 2019). The harsh truth right now is that there is no treatment so far to counter the lethal effects of COVID-19 and it has devastated the travel and tourism industry across the globe. As of the second week of May, there is no proven vaccine or treatment although United States is

pinning its hopes on remdesivir as the trial results of this drug look promising (The Economist 2020). It is manufactured by a drug maker in California (Gilead). It was originally developed to treat Ebola although it did not perform well with Ebola, laboratory tests have reported it to be effective against a broad spectrum of viruses. An ideal solution is to develop a vaccine that can stop people from contracting this virus.

Another glaring reality of COVID-19 is that people are most likely to shed the virus several days before symptoms occur (Bai, Yao, Wei, Tian, et al., 2020; Rothe, Schunk, Sothmann, Bretzel, Froeschl et al. 2020). Consequently, these asymptomatic transmissions have happened before the need to quarantine oneself or embrace social distancing measures in public or wearing the face masks to avoid the virus spread by speaking, coughing, or sneezing. It is being reported that asymptomatic transmissions are happening on a large scale and often go undetected (Li, Pei, Chen, Song, Zhang et al. 2020). As of May 15, approximately $4.31 million cases and 295,101 mortalities have been reported across 216 countries (WHO 2020).

The American Enterprise Institute has outlined four phases of recovery in terms of accomplishing the COVID-19 response and roadmap of measurable milestones or conditions to move to the next phase towards restarting the economy:

> Phase 1: Slow the spread- Much of the world is currently in phase one (slow the spread), that is, predominant focus has been on flattening the curve as cases continue to rise. That said, some countries and places have reported steady decline in positive cases such as Spain, Italy, New York and Washington (USA).
>
> Phase 2: Initial state/country level reopening- phase two is subject to four conditions: (1) continued decrease in new cases for at least 14 days, (2) Crisis regulations are need for hospitals to treat all patients requiring hospitalization, (3) it is possible to test all people who demonstrate or report COVID-19 symptoms, and (4) a mechanism is in place to actively monitor confirmed cases and contact tracing strategies are in place. In phase 2, the majority of schools, universities, and businesses can reopen although working from home working should continue and if convenient, social gatherings should remain limited to less than 50 people; People over 60 years of age and those with underlying health conditions should continue to minimize their contact within their community. phase two is a critical threshold for restarting the tourism economy at multiple scales such as the

local, national and limited international level (for instance- intra-European Union travel). Some countries have arguably reached this phase such as South Korea, Switzerland, and New Zealand, but many major domestic tourism markets might not reach this phase for the next three to eight months.

Phase 3: Establish protection and physical distancing- once a vaccine is developed and authorized for use, physical distancing controls and other NPIs can be removed. Once phase three and widespread vaccination is completed, it will be safe relaunch global. Vaccine update

Phase 4: Rebuild readiness for next pandemic- investment in this final phase is needed in ongoing research and disease monitoring, health care infrastructure and workforce, and improve governance and communication structures. Tourism, in particular air travel and airports, must be part of new international monitoring and rapid response plans. This would also include a better understanding of tourism's role in pandemics: Air travel and transport more generally support the spread of pathogens, while the sector also contributes to growing pressure on remaining forest ecosystems (through land use or industrial food sourcing), i.e. developments that are seen to increase the likelihood of future pandemics (Gossling et al. 2020, p. 12-13).

While these phases are happening, it is important for future tourists to heal and stay healthy, both mentally and physically. Hence, the focus right now should be to develop a future oriented therapeutic tourism system that prepares them and offers them recuperated settings at home. Next, I discuss the significance of a systems approach to tourism that which is dynamic and holds potential to harmoniously integrate crisis management mechanisms. Expanding this discourse, I offer an overview of how chaos and disequilibrium and other theories, premised on unpredictability and disruptions, have been integrated into the existing tourism systems. It is argued that this information is crucial to pave the path for developing a transformative system for the current crisis.

2.2.Tourism Systems

A tourism system can be defined as a complex system that evolves and remains in a state of flux, thereby requiring proactive and reactive interventions in an ongoing manner. A systems

approach to tourism encompasses both supply and demand environments and perspectives. Supply side of tourism in visited/visiting communities include "retail and wholesale travel trade, transport, accommodation, attraction, tour and amenity providers, the retail and food service sectors, local, state, and national destination management organizations, the extensive tourism related media and a whole host of other commercial and non-commercial agencies" (Mill & Morrison 2006, p. 5). A cursory review of documented literature shows that several tourism system models have been developed although the early systems were closed and did not factor chaotic disturbances caused by macro-environment factors beyond the control of different stakeholders of tourism destinations (Leiper 1990).

Gunn's (1979) tourism system model contains five inter-connected components with attractions centralized as the core point of the system. Mill and Morrison (2006) referred to a tourism system as a closed system with inter-related elements: market, travel, destination, and marketing. The authors postulated that each component propels the other component and to understand the system, all parts need to be examined in a simultaneous manner. The premise behind this argument is that "travel movements occur because of the interaction between the characteristics of the origin (visitor's place of residence), the destination (where the visitor will stay and spend most of his/her time), and the transit routes (on the way) that connect them" (2006, p. 7). However, in both cases, attention is not given to the complex and dynamic nature of tourism.

It is contended that the systems are pluralistic in nature and operate at both personal (refers to the manner a tourist functions within his or her own system of tourism) and nonpersonal levels. Some similarities can be noted in the path of the early tourism system models: tourism can be managed and a public sector approach is best; advocate for a common set of goals to plan a harmonious system and it is important to understand the role and contribution of each part in the system (McKercher 1999; Chhabra 2010). Several limitations have also been noted. For instance, the inter-relationships between various sectors and role players within the system are not recognized. Leiper (1979; 1990) tried to address this limitation by stressing on the dynamic nature of the tourism phenomenon. He argued that several nuclear parts make a tourist attraction and these stretch beyond the tangible attributes.

It is important to be distinct, for the sake of competitiveness, while being attached to the system. Next, it is important to acknowledge that all things do not work out as planned; there is an

unpredictable element which needs to be reiterated such as a single or multiple macro environment factors which are beyond the control of a single organization or a group of stakeholders (McKercher 1999: Chhabra 2015). As evidenced in crisis situations with their unforeseen impacts, Russell has argued that is important to examine the disruptions in the tourism life cycle model that integrates theories such as Lamarckian and chaos and complexity. Different analogies offer different perspectives of the chaos concept such as the butterfly effect (small causes can produce large scale effects), lock in state (situations where an incident can have a long-term effect even after the catalyst has stabilized), edge-of-the-chaos (a critical juncture of disequilibrium) phenomena and self-organizing behavior (new configured state) (Chhabra 2010; Prigogine & Stengers 1985; Russell 2006).

Extrinsic theories such as Lamarckian and chaos and complexity have been instrumental in understanding the process of evolution and dynamism and the manner in which host communities respond to unforeseen disturbances and welcome tourism (Chhabra 2010, 2015; Ravenscroft & Hadjihambi 2006). Lamarckian model postulates that it is the most adaptive creatures who survive, when disequilibrium happens and that all changes or disruptions are heritable. According to Russell, the core tenets of chaos and complexity theories bring to light the fundamental forces of change and the significance of triggers at crucial stages as a destination undergoes the process of evolution. Chaos can be described as a scenario where a system is dislocated from its equilibrium state by an unplanned and unexpected catalyst (such as COVID-19). Bringing the system back into equilibrium involves assembling of its various key components to establish a "new order" while "incorporating the vestiges of the old" (Russell 2006, p. 167-168).

Unarguably, a tourism system, at any particular point of time, can move to a state of disequilibrium if a macro-environment factor becomes devastatingly dominant such as political or climate-related or biological (such as a pandemic). McKercher has proposed a chaos-centric tourism functioning model underpinned on chaos theory which refers to disturbance sparked by "loss of control," (1999, p. 428). Chaos is a state or situation when a system loses its equilibrium and it is fueled by an unpredictable catalyst (Russell 2006). On a positive note, such upset in systems do not irrevocably damage them. Systems are, for the most part, resilient and can self-organize themselves if timely initiatives are taken to develop adaptive strategies (Chhabra 2015;

Russell 2006). McKercher presented an open model where travelers move freely to (outputs) supply side of the system. He included several core inter-connected elements: 1) the traveler, 2) the communication vectors, 3) the considerations, 4) the destination or Internal tourism community, 5) the external tourism agencies, 6) other tourism-related externalities, 7) non-tourism related externalities, 8) outputs from the system, 9) and rogues or Chaos makers (Chhabra 2015; McKercher 1999). McKercher argues that although the number of actors influencing the system changes at each level, the relationships between elements remain similar, and thus the model continues to hold value. Several scholars recognize that tourism functions in a non-linear and dynamic manner and turmoil and episodes of serious disruption are a fundamental tenet of the system and are important to embrace and adapt to transformation in tourism communities.

Baggio (2008) has also supported the complexity notion and argued that the key role players (such as the tourism operators, support structures, public and private organizations and associations) partner with each other in both linear and non-linear ways. He has stressed on the inclusion of non-traditional tourism elements which exert indirect influence on the system. According to Baggio (2008) a complex adaptive system comprises of multi-faceted elements and transient non-linear relationship between these elements. Chhabra (2010) has examined chaos and disequilibrium within a rural tourism system, using a life cycle approach and notes that a tourism system is always in a state of flux. Her study illustrates that the life cycle phases of a tourism product or destination often happen in a non-linear and non-conventional fashion. In other words, the development phase might not necessarily lead to a maturity phase. A destination, attraction or product can move to a decline stage due the impact of unforeseen disturbances such as a war or a pandemic. Half a decade later, Chhabra (2015) suggests an adaptive Tourism Systems Model stressing on multi-layered supply chain linkages and synergies between a broad spectrum of tourism products and services. She has argued that competitive synergies are important to boost value-based supply chain links, for both suppliers and consumer markets. In summary, a unanimous message from a plethora of studies is that a dynamic tourism system is constantly under the sway of unpredictable factors and it can be disrupted due to chaos and disequilibrium; but these systems are resilient and with appropriate intervention strategies,

they can return to the conventional normal or transform to a new normal (Baggio 2008; Hall, Scott & Gossling 2020; Russell 2006).

Hall et al. (2020) have further argued that transformation of a system is not easy. They opine that competitiveness in the market shapes the response of a destination to disaster. For instance, competition from other destinations "may have implications for recovery trajectories as some destinations may deliberately position themselves in low cost items, with little concern for externalities (e.g., introducing a second wave into the resident population), in order to try and increase visitor numbers and employment possibilities as soon as possible. Other places may continue…… to restrict arrivals and hotel reservations to reduce the second wave of infections" (Hall et al. 2020, p. 8). Higgins-Desbioles (2020) calls for a strong social component in the tourism system. She contends that neoliberal governments, have embraced socialized policies to respond to the crisis by developing health, social and educational procedures. By broadly socializing tourism, the industry can be responsive and accountable to the communities where it happens. The biggest hurdle is control. The author argues that the society is often restricted in its management and reaping of benefits because they cannot exercise control on the markets. The notion of socializing tourism requires establishing tourism in the context of the community/society "where it occurs and to harness it for the empowerment and wellbeing of communities" (Higgins-Desbioles 2020, p. 9). In other words, a community-centric prosperity, in terms of economic and wellness, approach needs to be embedded into a tourism system model.

Recent scholars have pointed out that the corporate global approach towards tourism has crashed because global supply chains and global tourism has not passed the pandemic test and a more localized model will offer a path towards tomorrow's tourism (Gossling et al. 2020; Ransinghe et al. 2020). Current scholarship, although sparse, discusses the effects of the pandemic and projects various trajectories for the growth of future tourism. Nevertheless, it is unanimous in suggesting a more localized and health/wellness (of the tourism industry as well as the society) at large focus although it differs on key role players and strategies to jump start tourism. Regardless of the preferred route or path, the crucial importance of digitalization cannot be denied. Different communities and societies across the globe, under lock down or stay-at-home orders, have stayed connected and engaged with the outside world because of Internet. Digitalization of tourism is here to stay and can play a crucial role in shaping the mental and emotional health of disaster-

struck societies across the globe. Hence, its robust and positive interventions and entertainment can assist in filling the vacuum, social distance has created in these changing and testing times. This element of tourism system continues to hold a crucial position in the tourism system and its utility functions are expanding. According to Popescu, Nicolae and Pavel (2015), digital applications help expand outreach and offer user- friendly interfaces to facilitate stakeholder partnerships. They have transformed the tourism value chain by expediating strategic relationships between tourism organizations. Today, their crucial role lies in their utility as a platform for boosting positive psychology and stress relief.

2.3.The Digital Era

It cannot be denied that because of unprecedented growth of Internet technology, digital information has permeated all walks of contemporary life. Technological developments in tourism have progressed from online communities to web 3.0 and location-based services and mobile services. These have paved the way for more sophisticated systems such as intelligent systems which "supply tourism consumers and service providers with more relevant information, greater decision-support, greater mobility, and ultimately more enjoyable tourism experiences" (Gretzel 2011, p. 758). Such systems enhance the ability to decipher, to benefit from experience, hold knowledge, and to respond promptly and effectively in a situation (Rudas and Fodor 2008).

Web 2.0 introduced a broad spectrum of electronic applications (such as social media, review sites, blogs, interactive websites, photo and video sharing platforms) that facilitated interactions between users and between users and suppliers. This has been further augmented by the arrival of smartphones or Web 3.0. Also, new social media platforms (for instance Google+ and Instagram) and interactive websites (for instance, TripAdvisor and Yelp) now offer a user-friendly platform and eased/facilitated the sharing of experiences and different viewpoints (Dia-Andreu 2017). Pre-pandemic trends have indicated that tourists are more tech. savvy and Internet offers them opportunities to expand their knowledge base and seek added value for their time and money. They have been time constrained with a desire to do a lot within a limited period of time. Furthermore, the shift to Web 3.0 has taken human-computer interactions to the next level and broadened the scope of marketing opportunities for the tourism industry in terms of experiential and intangible offerings by engaging customers with products and services in a variety of novel ways. This has enabled the creation of 3D (three dimensional) graphic and

avatar-driven virtual worlds (Go & Gretzel 2010) with the most prominent being Second Life. Relating the aforementioned advancements in technology and interactive digital platforms in the current lock-down environments, it cannot be denied that digitalization is playing a key role in shaping the views and responses of the public. It, in fact, has been and continues to be only link to the outside world and friends and relatives especially for quarantined people.

Clearly, information sharing, digital outreach and online marketing have become more crucial in today's era of social distancing. To keep, tourism live in the minds of targeted audience, tourism experiences need to be extensively synergized with artificial intelligence and virtual and augmented reality. Small micro enterprises (SMEs) should find creative ways to partner with virtual corporations and facilitate consumer attention and engagement. An important element of a transformational tourism system is dissemination of information and its accessibility. However, unlike most of the Western countries and advanced parts of the rest of the world, several places across the globe are still not tech savvy. Their level of interest and acceptance needs to determined and guided towards a progressive path. A technology acceptance model (TAM), pioneered by Davis (1989) is based on two factors that measure user acceptance of technology: perceived utility (user's views of superior performance because of technology) and perceived easiness of use (perceived level of difficulty a user is likely to face with the application) (Koufaris 2002). Developing countries and remote areas of the developed world, have been slow in embracing digitalization, partly because of lack of means and partly because of lack of training. The TAM model can prove to be useful in promoting and assessing the acceptance level of marginalized communities.

Perceived ease of use and usefulness of virtual applications are directly linked to flow experience (Liu et al. 2009; Lu, Zhou & Wang 2009). Flow can be described "an optimal experience, the holistic sensation that people feel when they act with total involvement" (Csikszentmihalyi 1975, p. 36). Novak et al. (2000) report that flow has a positively effect on consumer behavior. Therefore, the preparedness for future travel calls for ongoing engagement, as people continue to be restricted prefer to remain (as parts of the world open to the first phase) within their local environments and home thresholds. To some extent, enjoyable wellness programs are being offered through digital platforms such as zoom (Inner Vision 2020). However, they are happening in an isolated manner. The destination marketing organizations have still to strategies

partnership synergies with them to develop collaborative messages that support the broader society's wellbeing, promote at-home leisurely activities that relax body, mind and soul. These initiatives can augment preparedness for future travel. In this paper, the transformative potential of one therapeutic intervention catalyst (yoga) is discussed because of its restorative qualities and unprecedented popularity in the west.

2.3.1.Yoga – new health norm

Yoga emerged, in the pre-covid-19 era, as a popular form of wellness tourism. Wellness tourism can be broadly defined as "travel for the purpose of stimulating health and well-being through physical, psychological or spiritual undertakings" (Karn and Swain 2017, p. 2). It is motivated by pursuit of self wellbeing. Extant literature argues that yoga as a mental and physical pursuit unites body, mind and spirit and in doing so, generates a range of physiological and psychological benefits. Therapeutic benefits of this practice are recognized by many scholars. For instance, it helps to treat "lower back pain, rheumatoid arthritis, multiple sclerosis, cancer, diabetes, eating disorders, obesity, hypertension, symptoms of menopause, scoliosis, anxiety, depression, asthma, and the management of stress. Regular yoga practice has multiple benefits for people of all ages and "it is a personal and introspective activity" (Patterson, Getz & Gubb 2016, 300, 301; Yoga Alliance 2016).

Yoga connotes intertwining of health, therapy, spirituality and healing (Oznalbant and Alvarez 2019; Patterson, Getz & Gubb 2016). Number of yoga practitioners, across the globe, continue in the upward trajectory (Maddox 2015; Sharma & Nayak 2019). A nationwide study, Yoga in America, was conducted by Yoga Journal (the California Yoga Teachers Association founded the Yoga Journal in 1975) and Yoga Alliance (an international nonprofit association, established almost two decades ago). The purpose was to broaden the understanding of the yoga practice in America and to gather insights on Americans perceptions of yoga. The study population was yoga practitioners, teachers, and yoga studio owners. Also, views of the non-patronizing section of the US public were ascertained. It was found that approximately $36.7 million Americans pursued yoga in 2016. Key highlights from the study are presented below:

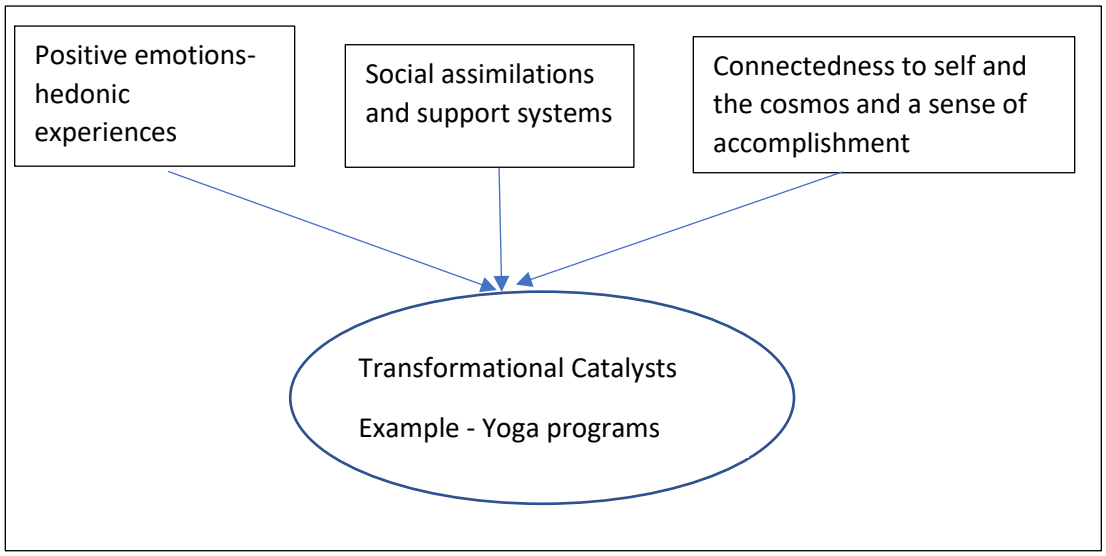
- 34 percent of Americans say they are somewhat or very likely to practice yoga in the next 12 months – equal to more than 80 million Americans
- 37 percent of practitioners have children under the age of 18 who also practice yoga
- Students spend $16B/year on classes, gear, and equipment, up from $10B in 2012
- Women represent 72 percent of practitioners; men, 28 percent
- Practitioners are significantly more involved in many other forms of exercise, such as running, cycling and weightlifting, than non-practitioners
- 30–49 years old patrons make up 43 percent of the practicing public, followed by those ages 50+ (38 percent) and 18–29 (19 percent)
- 74 percent of American practitioners have been doing yoga for five or fewer years
- The top five reasons for starting yoga are: flexibility (61 percent), stress relief (56 percent), general fitness (49 percent), improve overall health (49 percent), and physical fitness (44 percent)
- 86 percent of the practitioners self-report having a strong sense of mental clarity, 73 percent report being physically strong, and 79 percent give back to their communities – all significantly higher rates than among non-practitioners (Yoga Alliance 2016).

Clearly, Americans acknowledge the therapeutic benefits of yoga. The growing demand for yoga had resulted in a vast array of holiday/retreat options, seminars and festivals across the United States. It has been recognized as a serious leisure activity and as a positive psychology tool in the US since 1960s. It offers a unique view of opening a personal space for rejuvenating emotional, physiological and social aspects of life by integrating pranayama, asana, and meditation (Dillette, Douglas & Andrzejewski 2019). Positive psychology looks at happiness. It offers scientific basis of good things in life and prosperity in the middle of adversity (Seligman and Csikszentmihalyi 2000). Seligman (2018) developed the PERMA model of wellbeing which embraces both hedonic and eudemonic dimensions. The hedonic view refers to the goal of seeking maximum pleasure and enjoyment. The eudaimonic view refers to a happy, self-fulfilling and the concept

of leading a good life approach that holds potential to optimize meaningful behavior (Smith & Diekmann 2017).

The PERMA model postulates that important factors promote the overall wellbeing, satisfaction toward life and happiness are: positive emotion (hedonistic aspects), engagement (psychologically connected to various aspects of life (such as work, institutions and actions/events), relationships (acclimatization with one's social environment and community), meaning (value for life and connection with the bigger universe- cosmos) and accomplishment (feeling of achievement based on progress towards set goals (Dillette et al. 2019; Seligman 2011). Dillette et al. (2019) report robustness of PERMA in steering towards higher levels of well-rounded/complete wellbeing and contend that yoga tourism leads to longer-term changes that contribute to overall well-being. More specifically, the authors identified transformational alterations within specific activities and catalysts. Yoga settings have offered an optimal environment to experience nature, time alone, meditation and yoga classes. Figure 1 presents a transformational catalyst paradigm, underpinned on the PERMA dimensions, to promote resilience and wellbeing of the visited/visiting communities. Ethical/equitable and preventive/ restorative production mechanisms are crucial.

Figure 1: Transformational Catalysts



Source: After Dillette et al. 2019

In relevance to their usefulness in the pandemic time, yoga retreat programs hold tremendous restorative and therapeutic potential to heal, build immunity, and offer relief from mental and physical fatigue (Patwardhan 2017). Their innovative initiatives carry double benefits. By being adaptive, they can survive the pandemic financially while at the same time, they can contribute to public health and wellbeing by engaging patrons at home through wellness programs and messages. From a tourism perspective, they can assist with preparedness for travel tomorrow. From a public health perspective, alternate healing and therapeutic mechanisms can contribute tremendously to the mental and physiological wellbeing of people, especially in times of crisis. However, adequate support is required as explained by Patwardhan:

> Yoga can help, but before it can help, it needs help itself. The various stakeholders need to reflect and see the big picture so that they can collaborate.
>
> In former times, coal miners carried a caged canary with them to the underground mines. Being highly sensitive to the poisonous gases in the mines, a canary's survival meant survival for the miners and prosperity for everyone above the ground. On the other hand, its distress or death was a harbinger of trouble for everyone. If our current social-political-economic milieu can be seen as the metaphorical coal mine, then perhaps yoga is one of the canaries (2017, p. 178).

3. Discussion

Many people have traveled in search of self and anonymity, to lose themselves first and then to find themselves again (Smith & Diekmann 2017, p. 6). Therapeutic landscapes have been often sought where the natural and built environment, social conditions and human interactions produce an atmosphere favorable to mental cleansing and physiological healing. The Campbell's (1985) mythical quest for the self involves three essential elements: reasons for departure, the initiation or the experience of transcendence and connectivity, and the return or the presentation of the transformed self back to society. The ripple effects of journeys of pre-pandemic yoga tourists upon return home and during pandemic times, are likely to influence/shape the life style and health habits of yoga tourists. Several scholars have noted that yoga practices transfer into their home life and many of them patronize local yoga centers while at the same time, practice

yoga at home (Ali-Knight and Ensor 2017). For most of American yoga tourists, yoga has become a serious leisure pursuit (Yoga Alliance 2016) which they continue to pursue at home. It is increasingly considered to be a "body-self transforming practice" (Brown & Leledaki 2010, p. 125). Therefore, alternate prevention/healing techniques, which can be referred as non-pharmaceutical interventions, require long-term investment and government support to optimize their contribution to public health. They can serve as transformational catalysts and diminish the devastating impact of COVD-19.

The future of transformational sustainable tourism in the post-crisis era is underpinned on the industry' ability and capability to bounce back with overarching focus on long-term health agenda for the tourism stakeholders and the broader society. According to the WHO, 'health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (WHO 1948, no. 2, p. 100). Its 'Stay Home Today and Travel Tomorrow' campaign is a global outreach dialogue calling for the cooperation and ideas from entrepreneurs and innovators to mitigate Covid-19 shocks on tourism by planning and putting into action health, economic and destination revival solutions. According to the UNWTO Secretary General, "historically, tourism has proven itself as a key driver of international recovery, and as early as now, we must begin to prepare in order to build the foundations of the future resilience of tourism" (UN-WTO 2020).

In such times of a global crisis, strategies and paradigms investigating options for the enhancement of public health and wellbeing offer a crucial healing window that can focus on happiness, stress alleviation and future prosperity. All these outcomes are key to economic revival and growth. As the pandemic has shown, economic prosperity cannot be sustained if public health measures are weak; both are interdependent on each other. There is a need to provide value-added solutions to facilitate healing for good health, prosperity and happiness which are all important for healthy immune systems to enable sustainable travel tomorrow**.** Preparing for 'Tomorrow's Travel' calls for the tourism industry to build transformational resilient health systems that assist in countering the destructive elements of the current crisis (Ranasinghe et al. 2020).

The post-pandemic tourism will require stretching conventional parameters and developing transformational paradigms that highlight extended responsibility beyond the tourism

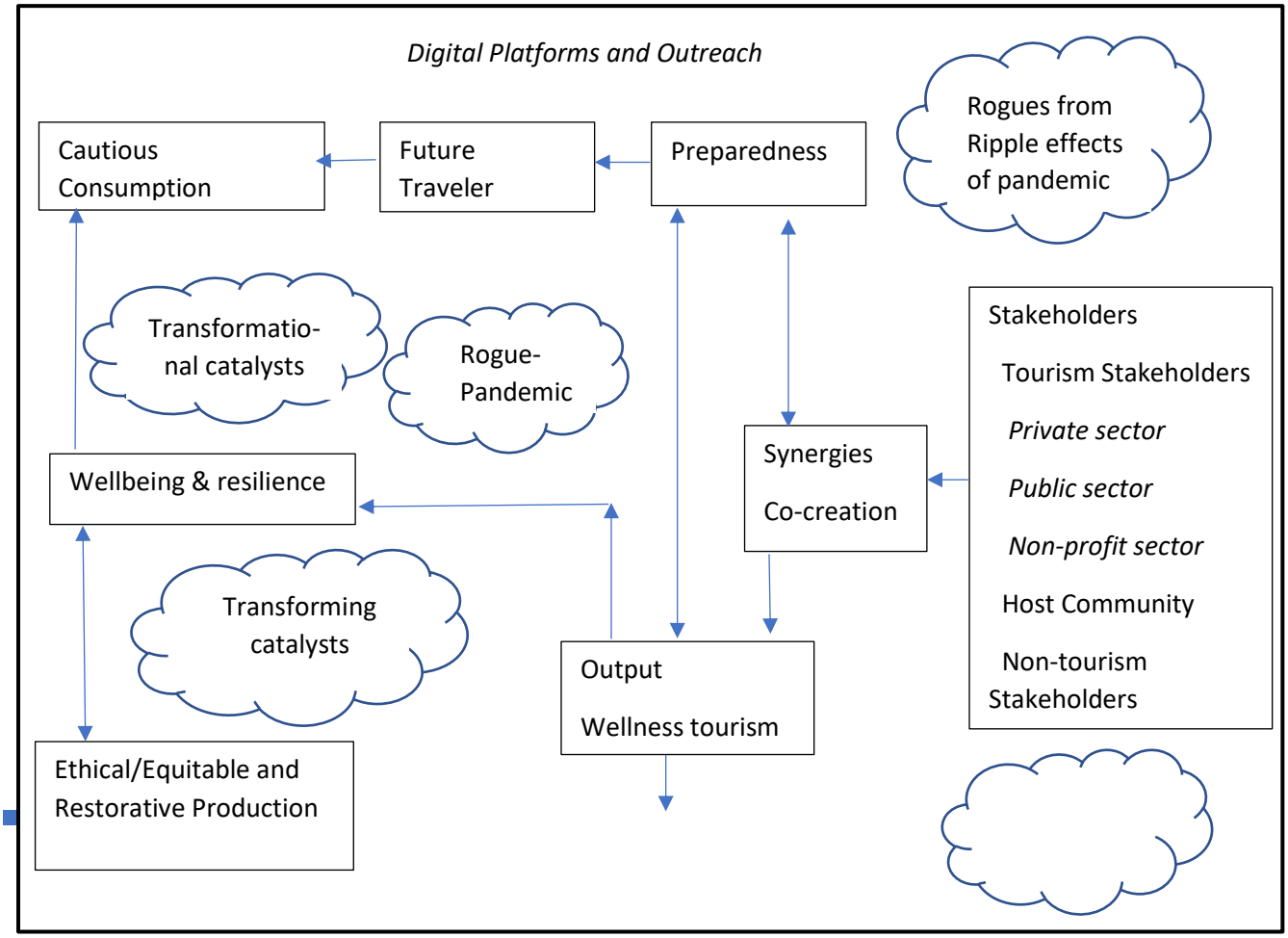
environments and support optimal restoration and promotion of the health of the society at large, both in visited and visiting communities. The wellness tourism industry can also make an important contribution in times of crisis by developing, promoting and disseminating restorative programs to extended communities. The need is to become an important player in the extended social and public recovery programs. Therapeutic potential of restorative activities can be promoted and offered at home, on a broad scale, during the pandemic as it is expected to generate more waves of virus infections for a couple of years. Yoga is, for instance, undoubtedly a universal phenomenon and holds tremendous potential to build/guard mental and physical immunity from a healthy sustainable tourism perspective (Patterson, Getz & Gubb 2016). However, many yoga programs are offered as an element of a broader wellness program (such as in gyms). Also, they are offered by small micro enterprises. The later will especially need public sector support to offer a variety of therapeutic programs on innovative digital platforms. The local government should lend credence and fund such programs.

Emerging scholarship on COVID-19 has offered several perspectives on a post-pandemic tourism system. However, no recent study has a offered a realistic systems approach that relates to the current lock-down and stay-at-home environments or places that are opening cautiously in the midst of warnings from public health experts. The core question that needs to be addressed is: what type of synergies can prevail right now to keep communities grounded, healthy, and reduces their stress levels. It is critical to advocate, on a large scale, ‘stay-at-home’ restorative mechanisms (including livestreaming outreach by different stakeholders of the travel and tourism industry) to successfully launch ‘tomorrow’s travel.’

Health is a personal obligation and is shaped by a person’s outlook, perceptions and behavior. Aligned with this idea, it is argued that the subjective wellbeing of a person is related to harmony between the inner self and the physical body and the extended natural and cultural environments (Bushell and Sheldon 2009). According to Dutta-Bergman, health conscious persons are more inclined to pursue preventive and health-maintaining dispositions and stay committed to their wellbeing for their entire lifetime. Health consciousness can be described as a psychographic state of mind that is conscious of one’s own health (Gould 1998) and refers to the extent to which “health concerns are integrated into a person’s daily activities” (Jayanti and Burn 1998, p. 9). Health conscious people are frequent patrons of restorative and therapeutic programs and visit

destinations that offer preventive and alternative healing opportunities. While travel today is on the halt, pursuing wellness activities and indulging in healthy leisure time can offer many benefits such as mental and physical wellbeing and demand for digital restorative programs/sessions based on yoga and meditation. Travel tomorrow can happen only if communities today are healthy. This study suggests a transformational wellness tourism system model (Figure 2).

Figure 2: A Transformational Wellness Tourism System



According to Brooker and Jopee (2014), health is a personal obligation and is shaped by a person's outlook, perceptions and behavior. Aligned with this idea, it is argued that the subjective wellbeing of a person is related to harmony between the inner self and the physical body and the extended natural and cultural environments (Bushell and Sheldon 2009).

Source: After McKercher (1999) and Chhabra (2015)

The Proposed system has six core components which are all, currently reliant on digital outreach mechanisms: stakeholders, synergies and co-creation strategies between them, wellness outputs (tourism attractions and experiences revolving around wellness), preparedness for future travel, the future traveler and wellbeing/resilience mechanisms developed by the suppliers. These components will continue to be impacted and shaped by rogues (chaotic interventions), the main one being the pandemic; other rogues are generated because of the ripple effects of the pandemic. The interventions and catalysts in the system are indicated by clouds. The digital platforms and digital outreach remain in the backdrop, offering crucial tools to facilitate interconnections and interactivity between the local, national and global communities. This transformative tourism system is an open system and is reliant on ethical/equitable and preventive/healing mechanisms to boost wellbeing and resilience of production and consumption patterns of tourism. For the resilience and wellbeing of tourism, tourism communities and the broader societies, social distancing and preventive/restorative mechanisms (such as yoga programs) are crucial. The key aim of the co-creation strategies between different stakeholders should be to support these mechanisms to prepare the future traveler.

Synergies between the tourism and non-tourism stakeholders will evolve as the system absorbs shocks and continues to be defensive and re-organizes itself because of the rogues. Three types of rogues are presented and the most powerful rogue is undeniably the pandemic which has generated a chain (ripple) effect by obstructing the local and global economies. Transforming catalysts can play the role of a band aid and various digital pillars (such as search engines, social media, websites, zoom etc.) offer the most secure option for authentic communication, connectivity and interactions. With regard to the life cycle curve, it can be argued that tourism has plunged because the entire system has been dislodged from a steady state after being hit by the pandemic. Several features of chaotic states can be applied to the current situation: the edge of the chaos phenomenon, the lock in state, and the self-organizing state. Tourism has reached a critical juncture of disequilibrium, and might remain in a lock-in and edge of chaos state for an

extended period of time even after the pandemic subsides. It will take time to build consumer confidence (for instance, although many states in the United States are lifting the 'stay at home' order, the consumers are still reluctant to dine at the restaurants and/or patronize retail stores). Furthermore, as the new normal is embraced, niche forms of tourism are more likely to emerge. As an example, wellness tourism holds potential. But it will be shaped by the receptiveness of host communities as or when they plan to receive tourists and transition to the development stage of the TLC. Social exchange theory, social disruption theory and/or the social representations theory offer windows to meaningfully contextualize their response and support for niche tourism.

In the context of the Lamarckian model which postulates that all changes are heritable and living beings who best manage to adapt, are able to survive. However, this model will be tested once an effective vaccine is developed against COVID-19. The system will require the multiple pillars of digital support in the initialization and other preceding phases. In summary, the future of transformational sustainable tourism in the post-crisis era is underpinned on the industry' ability and capability to bounce back with overarching focus on long-term health agenda. According to Ateljevic (2020), new worlds are emerging at the threshold of current crisis advocating change and transformation, more specifically inner transformation which will give birth to novel ways of being, knowing and acting on this earth. While time for actual travel might be not be there, consumer interest can be digitally ignited through innovative marketing messages and online interactions. As an example, a marketing campaign in Alaska says: 'Alaska will be here when it is time to travel again. For today you will have to dream of the wide open-beauty Alaska provides.'

References

Ali-Knight, J. and Ensor, J. (2017). Salute to the sun: an exploration of UK Yoga tourist profiles. *Tourism Recreation Research*, 42:484-497.

Ateljevic, I. (2020) Transforming the (tourism) world for good and (re)generating the potential 'new normal.' *Tourism Geographies*, DOI: 10.1080/14616688.2020.1759134

Bai, Y., Yao, L., Wei, T., Tian, F., Jin, D.-Y., Chen, L., & Wang, M. (2020). Presumed asymptomatic carrier transmission of COVID-19. *JAMA*, 323(14), 1406. https://doi.org/10.1001/jama.2020.2565

Baggio, R. (2008). Symptoms of Complexity in a tourism system. Tourism Analysis, 13(1), 1-20.

Berry, B., Gamieldien, J., & Fielding, B. C. (2015). Identification of new respiratory viruses in the new millennium. *Viruses*, 7(3), 996–1019. https://doi.org/10.3390/v7030996

Bloom, D. & Cadarette, D. (2019). Infectious Disease Threats in the 21st Century: Strengthening the Global Response. *Frontiers in immunology*, 10, 549. doi:10.3389/fimmu. 2019.00549.

Brown, D. & Leledaki, A. (2010). Eastern movement forms as body-self transforming cultural practices in the West: Towards a sociological perspective. *Cultural Sociology*, *4*(1), 123-154.

Burkle, F. (2006). Globalization and disasters: Issues of public health, state capacity and political action. *Journal of International Affairs*, 59(2), 231–265.

Bushell, R. & Sheldon, P. (Eds.). (2009). *Wellness and tourism: Mind, body, spirit, place*. Cognizant Communication.

Campbell, J. (1985). To sing the song, to tell the tale: A study of Toni Morrison and Simone Schwarz-Bart. *Comparative Literature Studies*, 22(3), 394-412.

Childers, T., Carr, C., Peck, J., & Carson, S. (2002). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77(2001), 511-535. Retrieved from http://www.sciencedirect.com/science/article/pii/S0022435901000562

Chhabra, D. (2010). Sustainable Marketing of Cultural and Heritage Tourism. London: Routledge.

Chhabra, D. (2015). *Strategic marketing in hospitality and tourism: Building a'SMART'online agenda*. Nova Science Publishers, Inc.

Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340

Dillette, A., Douglas, A. & Andrzejewski, C. (2019) Yoga tourism – a catalyst for transformation? *Annals of Leisure Research*, 22:1, 22- 1, DOI: 10.1080/11745398.2018.1459195

Dutta-Bergman, M. J. (2004). Primary sources of health information: Comparisons in the domain of health attitudes, health cognitions, and health behaviors. *Health communication*, *16*(3), 273-288.

Go, H. & Gretzel, U. (2010). Tourism Marketing Opportunities in Virtual Worlds: The Case of Second Life. Retrieved March 2013 from: http://sites.Google.com

G€ossling, S., Scott, D., & Hall, C. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*. 10.1080/09669582.2020.1758708

Gould, W. (1998). African mortality and the newurban penalty'. *Health & place*, *4*(2), 171-181.

Gretzel, U. (2011). Intelligent Systems. *Annals of Tourism Research*, 38(3), 757-779.

Gunn, C. (1979). Tourism Planning. New York: Crane Russack.

Hall, C. (2006). Tourism, biodiversity and global environmental change. In S. G€ossling & C. M. Hall (Eds.), Tourism and global environmental change: Ecological, economic, social and political interrelationships (pp. 142–156). Routledge.

Hall, M., Scott, D. & Gössling, S. (2020): Pandemics, transformations and tourism: be careful what you wish for. *Tourism Geographies*, DOI: 10.1080/14616688.2020.1759131

Higgins-Desbiolles, F. (2020): Socialising tourism for social and ecological justice after COVID-19. *Tourism Geographies*, DOI: 10.1080/14616688.2020.1757748

Jayanti, R. & Burns, A. (1998). The antecedents of preventive health care behavior: An empirical study. *Journal of the academy of marketing science*, *26*(1), 6-15.

Jonas, O. (2014). *Pandemic risk*. World Bank.

Keogh-Brown, M., Smith, R., Edmunds, J., & Beutels, P. (2010a). The macroeconomic impact of pandemic influenza: Estimates from models of the United Kingdom, France, Belgium and The Netherlands. *The European Journal of Health Economics*, 11(6), 543–554. https://doi.org/10.1007/s10198-009-0210-1

Kim, D., Park, J. & Morrison, A. (2008). A model of traveller acceptance of mobile technology. *International Journal of Tourism Research*, 10(5), 393-407

Koufaris, M. (2002). Applying the technology acceptance model and flow theory to online consumer behavior. *Information Systems Research*, 13(2), 205-223.

Labonte, R., Mohindra, K., & Schrecker, T. (2011). The growing impact of globalization for health and public health practice. *Annual Review of Public Health*, 32(1), 263–283. https://doi.org/10.1146/annurev-publhealth-031210101225

Leiper, N. (1979). The framework of tourism: Towards a definition of tourism, tourist, and the tourist industry. *Annals of tourism research*, *6*(4), 390-407.

Leiper, N. (1990). Tourism System: An Inter disciplinary Perspective Department of Management System business Studies Faculty.

Li, R., Pei, S., Chen, B., Song, Y., Zhang, T., Yang, W., & Shaman, J. (2020). Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV2). Science, doi: 10.1126/science.abb3221

Little, J. 2012. Transformational tourism, nature and wellbeing: New perspectives on fitness and the body. *Sociologia Ruralis*, 52:257-271.

Lu, Y., Zhou, T. & Wang, B. (2009). Exploring Chinese users' acceptance of instant messaging using the theory of planned behavior, the technology acceptance model, and the flow theory. Computers in Human Behavior, 25(1), 29-39. http://dx.doi.org/ 10.1016/j.chb.2008.06.002

Maddox, C. (2015). Studying at the source: Ashtanga yoga tourism and the search for authenticity in Mysore, India. *Journal of Tourism and Cultural Change*, *13*(4), 330-343.

McKercher, B. (1999). A Chaos Approach to Tourism. *Tourism Management*, 20, 425-434.

McKercher, B., & Chon, K. (2004). The over-reaction to SARS and the collapse of Asian tourism. *Annals of Tourism Research*, 31(3), 716–719.

Mill & Morrison (2006). The Tourism System. Sydney: Prentice-Hall International.

Nicolaides, C., Avraam, D., Cueto-Felgueroso, L., Gonzalez, M. C., & Juanes, R. (2019). Hand-hygiene mitigation strategies against global disease spreading through the air transportation network. *Risk Analysis*, 40(4): 723–740. https://doi.org/10.1111/risa.13438

Novak, T., Hoffman, D. & Yung, Y. (2000). Measuring the customer experience in online environments: a structural modeling approach. *Marketing Science*, 19(1), 22-42.

Öznalbant, E. & Alvarez, M. (2019). A socio-cultural perspective on yoga tourism. *Tourism*

Planning & Development, 1-15.

Patterson, I., Getz, D. & Gubb, K. (2016). The social world and event travel career of the serious yoga devotee. *Leisure Studies*, *35*(3), 296-313.

Popescu, M., Nicolae, F. & Pavel, M. (2015). Tourism and hospitality industry in digital era:

Prigogine, I. & Stengers, I. (1985). Order Out of Chaos [preface]. London: Flamingo

Ranasinghe, R., Damunupola, A., Wijesundara, S., Karunarathna, C., Nawarathna, D., Gamage, S., ... & Idroos, A. A. (2020). Tourism after Corona: Impacts of Covid 19 Pandemic and Way Forward for Tourism, Hotel and Mice Industry in Sri Lanka. *Hotel and Mice Industry in Sri Lanka (April 22, 2020)*.

Ravenscroft, N., & Hadjihambi, I. (2006). The implications of Lamarckian theory for the TALC model. In R. W. Butler (Ed.). The tourism area life cycle (Vol. 2, pp. 150–163). Bristol: Channel View Publications

Rothe, C., Schunk, M., Sothmann, P., Bretzel, G., Froeschl, G., et al. (2020). Transmission of 2019-nCoV Infection from an Asymptomatic Contact in Germany. New England Journal of Medicine, 382(10), 970–971. https://doi.org/10.1056/NEJMc2001468.

Rudas, I. & Fodor, J. (2008). Intelligent Systems. International Journal of Computers, Communication & Control, III (Suppl.). Proceedings of ICCC, 132-138.

Sharma, P., & Nayak, J. K. (2019). Do tourists' emotional experiences influence images and intentions in yoga tourism?. *Tourism Review*.

Russsell, R. (2006). Chaos Theory and Managerial Approaches. In D. Buhalis & C. Costa (Eds.), Tourism Dynamics, Challenges and Tools: Present and Future Issues (108-115). Oxford: Butterworth-Heinemann.

Russy, D. & Smith, R. (2013) The economic impact of H1N1 on Mexico's tourist and pork sectors. *Health Economics*, 22(7), 824–834. doi: 10.1002/hec.2862

Siu, A., & Wong, Y. R. (2004). Economic impact of SARS: The case of Hong Kong. *Asian Economic Papers*, 3(1), 62–83. https://doi.org/10.1162/1535351041747996

Seligman, M. (2018). PERMA and the building blocks of well-being. *The Journal of Positive Psychology*, *13*(4), 333-335.

Stebbins, R. (2001). Serious Leisure. *Society*, 38, 53-57.

Strielkowski, Q. (2020). Recovery strategy for tourism industry. doi: 10.13140/RG.2.2.19039.82086

UNWTO. (2020). COVID-19: UNWTO calls on tourism to be part of recovery plans. https://www.unwto.org/news/ covid-19-unwto-calls-on-tourism-to-be-part-of-recovery-plans.

Viboud, C., & Simonsen, L. (2012). Global mortality of 2009 pandemic influenza A H1N1. The Lancet Infectious Diseases, 12(9), 651–653. https://doi.org/10.1016/S1473-3099(12)70152-4

WHO. (2020). Coronavirus disease 2019 (COVID-19): Situation Report 46. Available at: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200306-sitrep46-covid-19.pdf?sfvrsn=96b04adf_2 (accessed 25.04.2020)

World Bank. (2012). People, pathogens and our planet: Volume 2 – the economics of One Health. World Bank.

Wilder-Smith, A. (2006). The severe acute respiratory syndrome: impact on travel and tourism. *Travel Medicine and Infectious Disease*, 4(2), 53-60. https://doi.org/10.1016/j.tmaid.2005.04.004

Wu, T., Perrings, C., Kinzig, A., Collins, J. P., Minteer, B. A., & Daszak, P. (2017). Economic growth, urbanization, globalization, and the risks of emerging infectious diseases in China: A review. *Ambio*, 46(1), 18–29. https://doi.org/10.1007/s13280-016-0809-2.

https://dergipark.org.tr/tr/pub/ijhmt Doi Number: https://doi.org/10.31201/ijhmt.788636

Int Journal Of Health Manag. And Tourism 2020, 5(2), 102-122

JHMT Editorial

Internatıonal Journal Of Health Management And Tourism

EXAMINATION OF PRIVATE HEALTH INSURANCE IN TERMS OF HEALTH SERVICES USAGE IN TURKEY

Özden GÜDÜK*,Mehveş Tarım**

* Türkiye Sağlık Enstitüleri Başkanlığı

ozdenguduk@gmail.com

ORCID Number: 0000-0002-2268-0428,

**Marmara Üniversitesi, Prof..Dr.

mtarim@marmara.edu.tr.

ORCID Number: 0000-0002-3726-9439

Received: 04.05.2020

Accepted: 31.08.2020

Research Article

Abstract

In this study, it was aimed to investigate whether there was any difference of the usage of health services between individuals who had and had not private health insurance in Turkey. If there was any difference, which direction it effects and what kind of health care it directs individuals toward.

A questionary was created by author depending on literature review. There were questions about participants' socio-demographic, economic and health status and the usage of their health services in the last year. The sample was consisted of 852 people, 459 of whom do not have private health insurance and 393 of whom have private health insurance.

The data was analyzed with SPSS.v2 package program. Non-parametric tests such as Mann Whitney U test and Chi square were used for the analyzing.

Significant differences in terms of outpatient treatment, surgical procedure, vaccination, dentist visits, glasses-contact lenses supply and family health center (FHC) visits were found between the groups. It was found that individuals who had private health insurance tend to use therapeutic health services rather than preventive health services. Also, the usage of primary health care in this group was lower than others.

Key Words: Health Services, Health Finance, Private Health Insurance

Introduction

In recent years, increasing demand for health services, technological innovations in health sector, longer life of humans and burdens caused by chronic diseases have been forcing governments to make health financing more effective (Yıldırım, 2012). On the one hand, a universal health coverage that should include all individuals living in the country is aimed, on the other, there is an effort to reduce the burden of health services on the state budget even in the developed countries (Mathauer and Kutzin, 2019; OECD, 2004a).

Each country chooses a different health financing method considering their economic, administrative and cultural structure (WHO, 2010, Tatar, 2011). Today, countries mostly adopt a main financing method for health coverage, however, they also use different financing methods to increase risk sharing and obtain more resources as well (Preker et al. 2007; Daştan and Çetinkaya, 2015).

Health financing methods are generally divided into two groups; public finance models and private finance models. Two major types of public finance models are Beveridge Systems and Bismarck Systems. Private finance systems consist of Private Health Insurance System (PHI), Medical Savings Accounts and Out-of-Pocket Payments (OOP) (Tatar, 2011;Liaropoulos and Goranitis, 2015).

This study focuses on PHI. The aim of the study is to examine the health services usage of individuals both who have private health insurance and who have not. Thus the result could reveal whether the type of health insurance increases the health care usage or not.

1. Private Health Insurance

A private health insurance (PHI) is an insurance scheme financed through private health premium payments that a policyholder agrees to make. An insurance policy consists of a contract

that is signed by an insurance firm and covered person (Sekhri and Savedoff, 2004; OECD, 2019).

Even though all types of private health insurances are not the same (community-based or risk-based, long-term, etc.), they often contain the same elements. The most common examples of private health insurances are short-term forms prepared annually. However, even though it is not very common, there are also some other types known as long-term health insurances in some countries such as Australia, Germany, Belgium and Ireland. In these types, the insured person is under protection for a long time (Deloitte, 2013; PKV, 2016).

There are four sub-types of private health insurance. According to the OECD's definition, these are listed below (OECD, 2017).

1.1. Principal/substitute private health insurance: Public or social health insurance (SHI) does not exist or individuals do not meet the conditions for inclusion in public health insurance. This situation is defined as principal private health insurance. When individuals prefer to leave the system despite being covered by a public insurance, it is called substitute private health insurance (OECD, 2004b).

The best known example has been implemented in the USA; weighted health financing method in this country is PHI. In addition, some conditions such as the income status of individuals in Germany and the Netherlands, their job status or occupation in Belgium or Austria allow individuals to choose PHI instead of SHI. Those with an income above a predetermined level in Germany can leave the compulsory public health insurance and purchase a basic guarantee package by getting PHI. Thus, they are exempt from paying premiums to compulsory health insurance (OECD, 2017; TSB, 2016).

1.2.Complementary private health insurance: It covers the costs (cost sharing, contribution etc.) that are not covered by the public insurance and which are not reimbursed and are expected to be covered by the individual. Thus it complements public health insurance (OECD, 2017).

1.3.Duplicate private health insurance: It is a PHI that offers access to different providers (eg. private hospitals) or service levels (for example; faster care access) while offering coverage for health services already covered by public health insurance. This type of private health insurance does not prevent individuals from contributing to public health insurance programs (OECD, 2017). One of the most important reasons for being preferred is the long waiting times in public health service providers (Kiil, 2012).

1.4.Supplementary private health insurance: It is a type of private health insurance that provides additional health services that are not covered by public health insurance. The purpose of this type of insurance, which is frequently applied in countries such as Greece, Italy, Spain and the UK; to enable the individual to choose a health institution and to provide access to more comfortable healthcare services (OECD, 2017; TSB, 2016).

In the social insurance system, the premiums that a person must pay are determined by the person's earnings and have no relation with the person's health status, while they are mostly determined by the person's health status and risk ratio in private health insurance system.

In the process of determining the PHI policy price, variables such as the age, gender and frequency of using health services are taken into consideration. Net Risk Premium (NRP), which expresses the amount that will be sufficient to cover the health expenditure that is thought to be made for a year, is calculated according to the type of guarantee requested (Özsarı, 2003).

2. Health System and Health Finance in Turkey

In 2003, when the Health Transformation Program was launched, it was observed that health financing in our country was mainly provided by public sources. The remaining 30-40% were

provided through private resources such as out-of-pocket payments, private health insurance purchased by companies and individuals (OECD, 2008).

In Turkey, the financing and institutional structuring of the health services until the General Health Insurance (GHI) system has been introduced, was diverse and had a complex and inefficient structure (Sağlık Bakanlığı, 2008). With the law 5502 enacted on 20 May 2006, SSK, Bağ-Kur and Retirement Fund were put under one roof under the name of "Social Security Institution". Later in 2008, the law 5510 was enacted to prevent inequality in access to healthcare and financing, and the universal coverage principle was adopted (Sağlık Bakanlığı, 2008). The reform process was completed with the inclusion of Green Card holders in SSI in 2012 (SGK, 2013).

As stated in the Law, entering the General Health Insurance system is not left to the preference of individuals in Turkey. All citizens are mandatorily included in the system and have to pay premiums. However, the general health insurance premiums of some who are in special condition and whose income is below a specified level are covered by the state through taxes (Resmi Gazete, dated 16/06/2006 and numbered 26200).

In Turkey, PHI can be defined as “Optional Health Insurance”. It is not possible to leave the compulsory health insurance by choosing a substitute private health insurance. Insurance companies offer individuals two options as “Complementary Health Insurance” or “Supplementary Health Insurance”. Private health insurance is used as optional and secondary insurance in Turkey (Uzun, 2015; TSS, 2016).

The financing sources of the health system in our country are premiums collected from workers and employers, treasury aid (through taxes), contributions made by individuals, and other out-of-pocket payments and private health insurance premiums (Gülay, 2017).

Research Methodology

In this study, Istanbul and Ankara were included in the sample because they had the largest population and PHI policies were mostly registered in these cities. Ethics approval was obtained from Marmara University Institute of Health Sciences Ethics Committee before the study.

A questionnaire created by the researcher as a result of the literature review. It was applied to 852 individuals, volunteering to participate in the research, via face-to-face and online interviews. Information about the socio-demographic characteristics and participants' healthcare usage were collected. Individuals over 18 years of age living in these two cities were included in the study and questionnaires were conducted between April 2018 and April 2019. Before conducting the questionnaire, the necessary explanations were made to the individuals and their written consents were obtained.

Because the foreigners who have a residence permit in our country are subject to "private health insurance for foreigners", the persons in this group were not be included in the study. Travel health insurance was also excluded. Also, individuals under the age of 18 were not included in the study because the decision to purchase PHI is made by their parents instead of them. In addition, Turkish citizens living abroad were not covered because they received health services in a different country of where health system may differs.

Due to the nature of our country's health system, it is known that all citizens are covered by social health insurance (SHI-General Health Insurance). Even if an individual has a private health insurance, he/she can use social health insurance at any time. On the other hand, although all citizens are included in social health insurance, they can benefit from private health service providers by paying out of pocket. Due to this complex situation, the participants were asked about their health-care usage while considering both options during the quastionnarie. People who have PHI were first asked about the health services they received by using PHI and then the

health services that they received from public hospitals through SHI without using private health insurance. Likewise, the people who do not have PHI were asked about the health services they received from public hospitals within the scope of SHI, and the status of receiving services from private health service providers by paying out of pocket. For both groups, the first option is called “priority health services usage” and the second option is “secondary health services usage”. In addition, each of the participants asked, "Have you visited to a family health center in the past year?" The application grouping for priority and secondary health services usage and family health center are shown in the table below.

Table 1. Grouping the health services used by the participants

	Priority health services usage	**Secondary health services usage**	
With PHI	Health services received by using private health insurance (PHI)	Health services received bynot using private health insurance (using SHI)	**Family health center (FHC) usage**
Without PHI	Health services received by using social health insurance (SHI)	Health services received bynot using social health insurance (paying OOP)	

While analyzing the obtained data, the suitability of the variables to normal distribution was examined. It was tested by examining the central and prevalence criteria, evaluation of histograms and One Sample Kolmogorov-Smirnov Test. It was determined as not normal distribution. For this reason, non-parametric hypothesis tests were used in analysis and evaluations.

Analysis

Of the 852 respondents, 66.1% (563) are women and 33.9% (289) are men and the majority of the participants live in Istanbul (%91.1). When the socio-demographic characteristics of

individuals with and without private health insurance were examined, it was seen that there were differences in terms of many variables.

There was a statistically significant difference between the groups according to age (p=0.021), it is thought that this is due to the fact that people with PHI are mostly young and middle-aged. PHI is less preferred by individuals in the high age group because the age increases risk of illnesses, thus PHI companies demand higher rates of premium from risky groups. Also, older people earn less money than younger people to pay premiums. As another reason; corporate group insurance has a large share in total private health insurance. For this reason, most of the people with PHI are young people of working age (Table 2).

There was a significant difference between the groups according to the number of children owned (p=0.00). It is a known that high-income and working individuals have fewer children nowadays. As can be seen in the table above, while 46.3% of individuals with PHI had no children, 35.1% had only one child and there was no more than 3 children in this group. In the group without PHI, having no children and having only one child, 4, 5, 6 and more children were 44.4%, 20.5%, 1.7%, 0.9% and 0.7% respectively (Table 2).

Similarly, when the number of people living at home was analyzed, it was observed that individuals with PHI had been living with fewer people in their homes (p=0,00). While 9.2% of those with PHI stated that five or more people had been living at home, this rate was 19.6% for those without PHI (Table 2).

While education level of the people with PHI was 43.3% undergraduate and 35.4% graduate, there was no primary school graduate among that group. When we look at the other group, it was seen that rates of undergraduate and graduate were 34.4% and 19.6% respectively, there were 12.2% primary school graduates as well. There was a significant difference in education level between the two groups (p=0.00) and people with PHI had higher education levels. It was

thought that there was a difference in education level among the groups because more educated people more prefer PHI (Table 2).

As it can be seen in Table 2, people with PHI worked mostly in the private sector (77.1%) although 53.2% of those without PHI worked in the public sector.4.1% of those with PHI stated that they did not work in any job. On the other hand, the number of people not working was higher in those who without PHI (12.6%).

Table 2. Socio-demographic characteristics of the participants

		Health insurance status				Total		X^2	S.d	P
		With PHI		Without PHI						
City	Istanbul	364	%92,6	412	%89,8	776	%91,1	2,132	1	0,144
	Ankara	29	%7,4	47	%10,2	76	%8,9			
Age	18-25	44	%11,2	53	%11,5	97	%11,4	11,599	4	**0,021**
	26-35	133	%33,8	123	%26,8	256	%30,0			
	36-45	154	%39,2	172	%37,5	326	%38,3			
	46-55	48	%12,2	80	%17,4	128	%15,0			
	56 ve over	14	%3,6	31	%6,8	45	%5,3			
Gender	Female	270	%68,7	293	%63,8	563	%66,1	2,238	1	0,135
	Male	123	%31,3	166	%36,2	289	%33,9			
Marital status	Single	138	%35,1	204	%44,4	342	%40,1	7,670	1	**0,006**
	Married	255	%64,9	255	%55,6	510	%59,9			
Number of children	0	182	%46,3	204	%44,4	386	%45,3	51,774	6	**0,000**
	1	138	%35,1	94	%20,5	232	%27,2			
	2	66	%16,8	107	%23,3	173	%20,3			
	3	7	%1,8	39	%8,5	46	%5,4			
	4	0	%0	8	%1,7	8	%0,9			
	5	0	%0	4	%0,9	4	%0,5			

	6 and more	0	%0	3	%0,7	3	%0,4			
Number of people living in the house	1	34	%8,7	39	%8,5	73	%8,6	23,081	4	**0,000**
	2	89	%22,6	95	%20,7	184	%21,6			
	3	139	%35,4	117	%25,5	256	%30,0			
	4	95	%24,2	118	%25,7	213	%25,0			
	5 and more	36	%9,2	90	%19,6	126	%14,8			
Education	Primary education	0	%0,0	56	%12,2	56	%6,6	83,909	4	**0,000**
	High school	49	%12,5	98	%21,4	147	%17,3			
	Vocational school	35	%8,9	57	%12,4	92	%10,8			
	Undergraduate	170	%43,3	158	%34,4	328	%38,5			
	Graduate	139	%35,4	90	%19,6	229	%26,9			
Sector	Public	39	%9,9	244	%53,2	283	%33,2	255,778	5	**0,000**
	Private	303	%77,1	115	%25,1	418	%49,1			
	Independent	14	%3,6	11	%2,4	25	%2,9			
	Not working	16	%4,1	58	%12,6	74	%8,7			
	Student	8	%2,0	10	%2,2	18	%2,1			
	Retire	13	%3,3	21	%4,6	34	%4,0			
Position	Senior manager	39	%9,9	21	%4,6	60	%7,0	94,804	6	**0,000**
	Middle Level Manager	50	%12,7	35	%7,6	85	%10,0			
	Sub-level Manager, Expert, Academician, Project Manager, Master etc.	155	%39,4	85	%18,5	240	%28,2			
	Administrative, Technical or Salesperson etc.	99	%25,2	218	%47,5	317	%37,2			
	Other	15	%3,8	12	%2,6	27	%3,2			

	Retire	14	%3,6	20	%4,4	34	%4,0			
	Not working	21	%5,3	68	%14,8	89	%10,4			
Individual income (monthly)	None	16	%4,1	42	%9,2	58	%6,8	116,802	4	**0,000**
	0-3500 TL	119	%30,3	236	%51,4	355	%41,7			
	0,023	151	%38,4	166	%36,2	317	%37,2			
	7501-10000 TL	43	%10,9	9	%2,0	52	%6,1			
	10001 TL and over	64	%16,3	6	%1,3	70	%8,2			
Chronical illness	Yes	57	%14,5	94	%20,5	151	%17,7	5,184	1	
	No	336	%85,5	365	%79,5	701	%82,3			

The working positions of participants were differ between groups (p=0.00). While people with PHI were working in higher positions, the majority of people without PHI were in administrative/technical/sales person position (Table 2).

There was also a significant difference between the groups in terms of the individual income of the participants (p=0.00). Individuals with PHI had higher income.10.9% of people with PHI and 2.0% of those without PHI stated that their monthly income was between 7500-10000 TL. Those who said that they earn more than 10001 TL per month constitute 16.3% and 1.3% of the people with PHI and people without PHI respectively (Table 2).

In order to determine their health status, the participants were asked if they had any chronic diseases. A significant difference was found between the groups according to the responses given (p=0.023). 14.5% of those with PHI and 20.5% of those without PHI stated that they had at least one chronic disease. It was thought that the group with PHI consists of more younger people and this situation may have an effect on this result. However another reason may be the following; PHI does not cover an existing chronic illness or insurance companies demand higher premiums from these individuals. For this reason, people with chronic illnesses prefer PHI less (Table 2).

Table 3. Priority health services usage by type of health insurance owned

	With PHI						Without PHI						U	Z	P
	Number	Median	Mean	Std. D.	Min.	Max.	Number	Median	Mean	Std. D.	Min.	Max.			
Outpatient	357	3,00	2	2,908	0	21	459	2,83	2	3,983	0	50	73669,500	-2,505	**0,012**
Inpatient	391	0,23	0,00	0,862	0	8	459	0,17	0,00	0,975	0	11	86536,000	-0,909	0,363
Surgery	393	0,08	0,00	0,295	0	2	459	0,04	0,00	0,225	0	2	86629,000	-2,468	**0,014**
Delivery	315	0,02	0,148	0,166	0	1	459	0,01	0,00	0,081	0	1	71158,500	-1,897	0,058
Emergency department visits	393	0,68	0,00	1,441	0	15	459	0,62	0,00	1,181	0	10	89438,000	-0,252	0,801
Ambulance	393	0,01	0,00	0,112	0	1	459	0,03	0,00	0,245	0	3	89169,500	-1,216	0,224
Home healthcare	393	0,00	0,00	0,050	0	1	459	0,01	0,00	0,238	0	5	90029,500	-0,446	0,655
Check-up	393	0,11	0,00	0,316	0	1	459	0,13	0,00	0,416	0	3	89146,000	-0,429	0,668
Vaccination	393	0,05	0,00	0,247	0	2	459	0,18	0,00	0,652	0	8	84032,500	-3,569	**0,000**
Dentist visits	145	0,21	0,00	0,719	0	5	459	0,51	0,00	1,124	0	10	28046,000	-3,842	**0,000**
Glasses, contact lens	218	0,18	0,00	0,474	0	3	459	0,26	0,00	0,624	0	6	40200,500	-5,805	**0,000**

A significant difference was found between outpatient health services (priority) received by participants (p=0.012). At the priority health services usage, the median of usage of outpatient health services in the past year was 3.00 for private health insurers and was 2.83 for non-private health insurers (Table 3).

The number of surgical procedures performed at the level of priority health services usage between groups was significant with a significance level of 0.014. The median of undergoing surgical procedures was 0.08 for those with PHI, while it was 0.04 for those without PHI (Table 3).

It can be seen in Table 3, altough the median of vaccination was found to be 0.05 in people with PHI, it was 0.18 in people without PHI. There was a significant difference between the two groups (p=0.00).

The median of number of visits to the dentist was 0.21 for those with PHI and 0.51 for those without PHI. Similarly, when looking at glasses and contact lens medians, it was seen that those with PHI used those kind of health services lower than those without PHI (Table 3).

Considering the responses of the participants; It was observed that those with PHI continued to benefit from social health insurance, while those without PHI benefited from private health institutions by paying out of pocket.

At the level of secondary health services usage, there was no statistically difference between the groups in services such as outpatient, inpatient, surgical procedure, delivery birth, and emergency department use. There was a significant difference only according to the number of dentists visits (p=0.00). It was thought that this may be due to the fact that the provision of dental health services is limited in public health institutions, so that individuals prefer to go to private dental health centers (Table 4).

Table 4. Secondary health services usage by type of health insurance owned

	PHI						SHI						U	Z	P
	Number	Median	Mean	Std. D.	Min.	Max.	Number	Median	Mean	Std. D.	Min.	Max.			
Outpatient	393	0,79	0,00	1,509	0	15	459	1,02	0,00	1,799	0	15	84724,500	-1,747	0,081
Inpatient	393	0,10	0,00	0,458	0	4	459	0,06	0,00	0,456	0	7	88700,500	-1,196	0,232
Surgery	393	0,03	0,00	0,288	0	5	459	0,04	0,00	0,261	0	3	89303,000	-0,868	0,386
Delivery	393	0,02	0,00	0,266	0	1	459	0,01	0,00	0,093	0	1	90059,500	-0,224	0,823
Emergency department visits	393	0,17	0,00	0,545	0	5	459	0,15	0,00	0,606	0	5	88186,000	-1,068	0,286
Ambulance	393	0,01	0,00	0,071	0	1	459	0,00	0,00	0,00	0	0	89734,500	-1,529	0,126
Home healthcare	393	0,02	0,00	0,262	0	5	459	0,00	0,00	0,00	0	0	89505,000	-1,874	0,061

Dentist visits	393	0,12	0,00	0,531	0	7	459	0,42	0,00	1,394	0	14	81586,500	-4,177	**0,000**
Radiology	393	0,22	0,00	0,632	0	5	459	0,19	0,00	0,759	0	10	87530,500	-1,298	0,194
Invasive procedurs	393	0,02	0,00	0,315	0	6	459	0,02	0,00	0,255	0	5	89934,000	-0,388	0,698
Other	393	0,02	0,00	0,225	0	4	459	0,74	0,00	14,014	0	10	87988,000	-2,242	**0,025**

Table 5. Visits to the Family Health Center by type of health insurance owned

	PHI						SHI						U	Z	P
	Number	Median	Mean	Std. D.	Min.	Max.	Number	Median	Mean	Std. D.	Min.	Max.			
Number of visits to FHC	393	0,76	0,00	1,438	0	15	459	1,36	0,00	2,359	0	20	76950,500	-4,135	**0,000**

There was also a significant difference between the groups in terms of visits to the FHC (p=0.00). It was observed that those without PHI were using more often primary health care

services. While the median of visiting to the FHC among those with PHI was 0.76, this number was 1.36 for those without PHI (Table 5).

Discussion

In different countries, there are studies investigating howPHI affects healthcare usage. Some of these studies reveal that PHI increases the usage of services (Alexander and Currie, 2017; Bolhaar et al., 2008; Jones et al., 2006; Buchmueller et al., 2002; Kiil and Arendt, 2017).According to Jeon and Kwon; PHI is effective in initiating healthcare demand and increases the search for healthcare (Jeon and Kwon, 2013).In some studies, the results show that there is no difference between health insurance in terms of service use(Bolhaar et al., 2008; Balan, 2002).For example; having private health insurance or public health insurance in Australia was not different in terms of hospitalization and overnight stay (Cheng, 2014).In another study conducted in Ireland, they found that those who have private health insurance do not use health services more than those who do not.In his study, Balan revealed that although the use of services was not different, the health expenditure of private health insurers was higher than those of public health insurance (Balan, 2002)

In a study conducted in the United States, it was observed that there was a difference between hospitalizations among children according to their public or private health insurance coverage.It was revealed that the applications of the children covered by private health insurance to the emergency department result in more hospitalization than the other group.It was stated that this difference was more pronounced especially in periods when the demand for hospital service use increased due to the flu epidemic.In the study, it was stated that private health insurance companies pay more for the same service than public insurance and therefore hospitals tend to invest more in private health insured patients (Alexander and Currie, 2017).

In a study conducted in Denmark, a questionnaire was applied to 2098 family physicians. In the study, 90% of the participants stated that they think PHI causes excessive service demand. Also 46% of the participants stated that when they examined patients with supplementary private health insurance, they felt a pressure to refer these patients to a specailisteven if it was not necessary according to their own findings.In addition, 11% of family physicians stated that they sent patients asking referral to a specialist by not asking any questions or not examining (Andersen et al., 2017).

In a study conducted in 11 countries in Europe it was investigated that whether having a PHI affects health care usage such as hospital services, physician, specialist and dentist visits of individuals aged 50+. In other countries except Denmark and Sweden, it was found that PHI

References

Alexander D. and Currie J. (2017). Are publicly insured children less likely to be admitted to hospital than the privately insured (and does it matter)? Economics and Human Biology. 25:33-51.

Andersen MK, Pedersen LB, Dupont M, Pedersen KM, Munck A. and Nexøea J. (2017). General practitioners' attitudes towards and experiences with referrals due to supplemental health insurance. Family Practice. 34:581-586.

Balan DA. (2002). The Relationship Between Insurance Type And Health Care Costs, Use And Choice Of Outpatient Provider. Western Michigan University Department of Economics, Doktora Tezi, Michigan.

Besley T, Hall J. and Preston I. (1998). Social Security and Health Care Consumption: A Comparison of Alternative Systems Private and public health insurance in the UK. European Economic Review. 42:491-497.

Bíró A. (2014). Supplementary private health insurance and health care utilization of people aged 50+. Empir Econ. 46:501-524.

Bolhaar J, Lindeboom M. and Klaauw B.A. (2008). Dynamic Analysis of the Demand for Health Insurance and Health Care. Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor. IZA Discussion Paper No. 3698 Bonn, Germany.

Buchmueller T.C, Couffinhal A, Grignon M. and Perronnin M. (2002). Access to Physician Services: Does Supplemental Insurance Matter? Evidence From France. Health Economics. 13(7):669-87.

Cheng T C. (2014). Measuring the effects of reducing subsidies for private insurance on public expenditure for health care. Journal of Health Economics. 33:159-179.

Colombo F. and Tapay N. (2014). Private Health Insurance in OECD Countries: The Benefits and Costs for Individuals and Health Systems. Paris: OECD Health Working Papers.

Daştan İ. and Çetinkaya V. (2015). OECD Ülkeleri ve Türkiye'nin Sağlık Sistemleri, Sağlık Harcamaları ve Sağlık Göstergeleri Karşılaştırması. SGD Sosyal Güvenlik Dergisi. 5(1):104-134.

Deloitte. Health Insurance Market Overview. Deloitte Consulting LLP, 2013.

Gülay A. (2017). Türkiye'de sağlık sisteminin finansmanı ve İngiltere ile karşılaştırması. Marmara Sosyal Araştırmalar Dergisi. 12:17-37.

Jeon B. and Kwon S. (2013). Effect of private health insurance on health care utilization in a universal public insurance system: A case of South Korea. Health Policy. 113:69-76.

Jones A M, Koolman X. and Doorslaer E. (2006). The Impact of Having Supplementary Private Health Insurance on the Use of Specialists. Annales D'économıe Et De Statıstıque. 83/84:251-275. DOI: 10.2307/20079170.

Kiil A. and Arendt J N. (2017). The effect of complementary private health insurance on the use of health care services. Int J Health Econ Manag. 17:1-27. DOI 10.1007/s10754-016-9195-3

Kiil A. (2012). What characterises the privately insured in universal health care systems? A review of the empirical evidence. Health Policy. 106:60-75.

Liaropoulos L. and Goranitis I. (2015). Health care financing and the sustainabilityof health systems. International Journal for Equity in Health. 14:80

Mathauer I. and Kutzin J. (2019). Voluntary health insurance: its potentials and limits in moving towards UHC, Policy Brief, Department of Health Systems Governance and Financing, Geneva: World Health Organization; 2018 (WHO/HIS/HGF/PolicyBrief/18.5). Licence: CC BY-NC-SA 3.0 IGO. WHO, 2019. Global Spending on Health: A World in Transition

OECD. (2004a). Private Health Insurance in OECD Countries. Retrieved 15.04.2019,https://www.oecd.org/health/privatehealthinsuranceinoecdcountries-theoecdhealthproject.htm

OECD. (2004b). Proposal For a Taxonomy of Health Insurance. Paris. Retrieved 21.02.2019, https://www.oecd.org/health/health-systems/31916207.pdf

OECD. (2008). OECD Sağlık Sistemi İncelemeleri Türkiye. Yayın No: 756. Paris. Retrieved 25.04.2019, https://sbu.saglik.gov.tr/ekutuphane/kitaplar/oecdkitap.pdf

OECD (2017). Health at a Glance 2017. OECD Indicators. OECD Publishing, Paris.Retrieved 22.01.2019, http://dx.doi.org/10.1787/health_glance-2017-en

OECD. (2019). OECD Health Statistics 2019 Definitions, Sources and Methods. Paris. http://www.oecd.org/health/health-data.htm

Özsarı S.H. (2003). Bir Özel sağlık Sigortacılık Kurumunda Kullanıcıların Özellikleri ve Risk Profilleri. Hacettepe Üniversitesi Sağlık Bilimleri Üniversitesi, Doktora Tezi, Ankara (Danışman: Prof. Dr. Çağatay Güler).

PKV. 2016. Verband der Privaten Krankenversicherung e.V. [Association of German private healthcare insurers]. Financial report for private healthcare insurance 2015. Retrieved 25.11.2019, https://www.pkv.de/service/broschueren/daten-und-zahlen/financial-report-2015.pdb.pdf

Preker A. S, Scheffler R. M. And Bassett M.C. (2007). Private Voluntary Health Insurance in Development. Friend or Foe? The World Bank: Washington, DC

Sağlık Bakanlığı (2019). Sağlık İstatistikleri Yıllığı 2018. Ankara. Retrieved: 20.04.2020, https://www.saglik.gov.tr/TR,62400/saglik-istatistikleri-yilligi-2018-yayinlanmistir.html

Sağlık Bakanlığı. (2008). İlerleme Raporu Türkiye Sağlıkta Dönüşüm Programı. Sağlık Bakanlığı Yayın No: 749. Ankara

Sekhri N. and Savedoff W. (2004). Private Health Insurance: Implicatıins For Developing Countries. World Health Organization: Geneva

Sosyal Güvenlik Kurumu. (2013) Sosyal Güvenlik Reformunun 4. Yılında 400 Yenilik. Sosyal Güvenlik Kurumu Yayın No: 80. Ankara

T.C. Resmi Gazete. Sosyal Sigortalar ve Genel Sağlık Sigortası Kanunu. 16 Haziran 2006. Sayı: 26200, Başbakanlık Basımevi: Ankara

Tatar M. (2011). Sağlık hizmetlerinin finansman modelleri: sosyal sağlık sigortasının Türkiye'de gelişimi. Sosyal Güvenlik Dergisi. 1:103-133

Türkiye Sigorta Birliği. (2016). Türkiye Sigorta Birliği Sektör Raporu 2016. İstanbul

Uzun S. (2015). Tamamlayıcı Sağlık Sigortası. Okan Üniversitesi Sağlık Bilimleri Enstitüsü Sağlık Yönetimi Anabilim Dalı, Yüksek Lisans Tezi, İstanbul (Danışman: Yrd. Doç. Dr. Cem Dikmen).

WHO. (2010). The world health report: health systems financing: the path to universal coverage. WHO Press: Geneva Switzerland.

Yıldırım HH. (2012). Sağlık Harcamaları ve Sağlık Finansmanı, İçinde: Yıldırım HH (editör) Sağlık Sigortacılığı, Anadolu Üniversitesi Yayını: Eskişehir

https://dergipark.org.tr/tr/pub/ijhmt Doi Number: https://doi.org/10.31201/ijhmt.788675

Int Journal Of Health Manag. And Tourism 2020, 5(2), 123-144

I JHMT Editorial

Internatıonal Journal Of Health Management And Tourism

THE RELATIONSHIP BETWEEN PERCEIVED ETHICAL LEADERSHIP, ORGANIZATIONAL JUSTICE, AND TURNOVER INTENTION AMONG GENERAL HOSPITAL NURSES

Nükhet Bayer* , İsmet Şahin **

* Faculty Member Asst. Prof. Lokman Hekim University, Health Sciences Faculty, Nursing Department
nukhetbayer@yahoo.com
ORCID Number: 0000-0003-3177-0596

**Prof.Dr., Lokman Hekim University, Health Services Vocational School
ismet.sahin@lokmanhekim.edu.tr
ORCID Number: 0000-0003-0878-5669

Received: 11.05.2020
Accepted: 31.08.2020
Research Article

Abstract:

This study aims to was to investigate the relationship between perceived ethical leadership, organizational justice, and turnover intention among nurses. The research was conducted in a general-purpose private hospital in Ankara. The subjects of the study consist of all nurses working in the private hospital, and the sample consisted of 234 nurses who agree to participate in the study voluntarily. After the necessary permissions were obtained, the data were collected with a structured data collection tool based on the factual and behavioral attitude measurement consisting of personal information form, ethical leadership, organizational justice and turnover intention scales. The scores of the nurses' ethical leadership and organizational justice scales were above average, however, the score of turnover intention scale was below the average. While there was a strong linear positive relationship between ethical leadership and organizational justice, there was a linear negative medium level relationship between organizational justice and turnover intention. There was a linear negative and significant relationship between ethical leadership and turnover intention. The study concludes that ethical leadership will increase the perception of justice in the organization and reduce turnover intention amongst nurses.

Keywords: Nursing management, ethical leadership, organizational justice, turnover intention, healthcare professionals

1. INTRODUCTION

Despite the scarce resources in the provision of health services, providing high quality services is considered as an important success factor in the health sector in the face of the increasing number of hospitals and a competitive environment. The pursuit of excellence in service is a strategy, and nurses have a significant impact on the evaluation of the patient-centered care service and the long-term success of hospitals. The behavior of the nurses has critical implications for hospitals, thus maintaining an adequate nursing workforce has become both a national and international priority (Zhang, Li, Gong, & Xu, 2019). Organizational commitment is a psychological condition that defines the relationship between employees and the organization and can affect employees' decisions to work or not to work in the organization (Cao, Liu, Liu, Yang, & Liu, 2019).

Since nurses play a very significant role in the health care system, it is important to figure out the causes of the turnover rate of nurses. There are studies in the literature that determines why and how nurses leave their jobs (Tummers, Groeneveld, & Lankhaar, 2013). Mobbing, negative work environments, and low organizational justice are among the reasons for turnover in the health sector (Huang, Li, & Wan, 2019). However, there are limited studies in the literature examining the effect of organizational justice perception and ethical leadership, an important factor in the formation of this perception (Barkhordari-Sharifabad, Ashktorab, & Atashzadeh-Shoorideh, 2017), on turnover intention among nurses. From this point of view, the study examines the impact of ethical leadership on organizational justice and turnover intention.

2. BACKGROUND

This section describes the theoretical framework of the variables discussed in the research to understand the impact of the organizational justice, which defines the perception of nurses working in health institutions about whether they are treated fairly, and ethical leadership behaviors of managers, who play an important role in the development of personal attitudes and behaviors, on turnover intentions of employees.

2.1. Ethical Leadership

Ethical leadership exhibits normatively appropriate behavior, focusing on personal actions and interpersonal relationship, and the promotion of such behavior to followers using mutual communication, augmentation, and decision making". An ethical leader is someone who reacts to any mistake within the organization and tries to prevent it. Ethical leadership behavior plays an important role in developing employees' attitudes and behaviors (Brown, Treviño, & Harrison, 2005). The purpose of ethical leadership is to clarify and present the ethical dimensions that exist in every administrative decision and to establish ethical principles that guide the decision-making process in organizations. Leaders with ethical leadership qualities establish a positive relationship based on respect and trust with the people around them, guide them with his/her attitudes and interactions, and positively influence the followers.

Nurses' service provision and care for patients express useful behaviors and can be defined as patient-oriented ethical behavior. Ethical leadership engages nurses in consists of creating and supporting a convenient environment for providing good quality and efficient health services, as well as providing ethical behavior to individuals (Barkhordari-Sharifabad et al., 2017). Therefore, ethical leadership is assumed to be able to provide positive and desired changes in the nursing profession (Gagné & Deci, 2005). Ethical leadership behavior has many positive consequences such as employee performance, trust to the leader, intrinsic motivation, job satisfaction, and emotional commitment (Cheng, Chang, Kuo, & Cheung, 2014). Ethical leadership is known to be positively associated with the psychological well-being of the professional care team, which positively reflects patients' perceptions of the quality of nursing (Gillet et al., 2018). There are studies indicating that ethical leadership enables employees to develop fiduciary relationships with their managers, thereby leading to low levels of burnout while ensuring a high level of employee participation (Brown et al., 2005; Gillet et al., 2018). Many studies on ethical leadership have revealed that ethical leadership has positive behavioral results that will reflect on organizational performance. However, there is also a deficit in the nursing management literature regarding the behavioral consequences of ethical leadership for keeping or quitting the job (Islam, Ahmed, & Ali, 2019).

2.2.Organizational Justice

Organizational justice Colquitt et al.(2001) have defined organizational justice as the subjective perceptions of people of fairness in organizations. Generally, organizational justice can be classified into three types including procedural, distributive, and interactional justice. Distributive and procedural justice are often perceived as the structural forms of justice that focus on the organization. On the other hand, interactional justice is considered as the interactional form of justice that focus on the manager or the supervisor ((Loi, Yang, & Diefendorff, 2009). Organizational justice is the process of evaluating managerial decisions for variables such as the distribution of employees' duties, compliance with overtime, empowerment of employees, wage level, and reward distribution. Thus, organizational justice can be defined as employees' positive perception toward the managers' decisions and practices about the organization and employees. In the literature, organizational justice includes three sub-dimensions: distributional, procedural, and interactive justice (Colquitt et al., 2001). These dimensions are briefly explained as follows:

Distributional Justice: It means that the distribution of the decisions taken in organizations is fair and all kinds of gains such as wages and reward promotions are perceived fairly by employees.

Procedural Justice: It refers to the fair perception of the decision-making processes of distribution made within the organization by the employees. It is of great importance for the employees to adopt these decisions, as they approve these operations are fairly made.

Interactive Justice: It includes behaviors such as valuing employees, treating them with respect, and disclosing a decision defined as social value to employees. It refers to disclosing of the processes related, to the decision-making by the managers to be honest and transparent toward the employees.

Organizational justice also covers moral and ethical evaluations of managerial behavior (Imamoglu, Ince, Turkcan, & Atakay, 2019). It has also been found to be very influential on workers' health (Elovainio et al., 2005). Low organizational justice has been found to be associated with psychological disorder, insomnia, cardiovascular death, and low rates of personal health (Heponiemi et al., 2007). It has been determined that the performed applications are fairly evaluated by the employees if a decision is applied duly, that is, if the

procedures are applied consistently in accordance with the common interests, ethical and ethical rules of all parties, based on the correct information without the benefit of a particular person (Brockner et al., 1994).

Justice is the most promising approach to improve motivation and performance in the workplace and to ensure peace among the employees. The reason for the feeling of revenge is the feeling of injustice. The injustice when felt can turn into aggression or another way of harming the target (Jawahar, 2002). The perception of justice in the organization affects not only employees' beliefs, emotions, attitudes and behaviors, but also their esteem and social identities (Elovainio et al., 2005).

2.3.Turnover Intention

As in all countries of the world, the shortage of nurses in Turkey is also of great importance. According to the Ministry of Health's 2018 data, the number of nurses per 100,000 people is 301 while the OECD average is 938, 1823 in Norway, and 1755 in Switzerland. For the number of nurses per person among OECD countries, Turkey is listed in the last rows (SB, 2019). In Turkey, 73% of nurses are employed in the medical institutions that are bound to the Ministry of Health, 12% in the university hospitals, and 15% in the medical institutions bound to private sector. Personnel expenditures constitute 45-60% of total expenditures of health institutions. Organizations spend a significant part of their budget to hire and train new employees (Holtom, Mitchell, Lee, & Eberly, 2008). The costs of low of a level of commitment to work, disruption of daily work, emotional stress and excessive workload on rest of the employees in the organization aren’t easy to be under debate in monetary terms. The number of staff leaving the job may result in a negative for the organization both internally and externally (Singh & Loncar, 2010).

There are many organizational and individual factors that cause nurses to turnover. Organizational variables include poor working environment, work stress, workload, and insufficient career opportunities, while age, gender, working house, etc are among the individual factors. (Staggs & Dunton, 2012). In addition to these, the other factors of turnover intention are the limited leadership support of nurse managers on employees, intimidation from the work, mobbing, harassment and negative relationships with other nurses or other health personnel (Hayward, Bungay, Wolff, & MacDonald, 2016). This study provides

evidence to healthcare administrators and policy makers to raise the number of nurses per person at an appropriate level and to prevent experienced nurses from leaving the job.

The objective of the research was to investigate the relationship between perceived ethical leadership, organizational justice, and turnover intention among nurses that working in a special general hospital of Turkey. For the aim of the research, the following hypotheses have been established:

- A significant difference will be found in organizational justice perception, organizational environment and turnover intention among the different variables participants' characteristics (age, gender, working hours, etc.).
- Perceived ethical leadership will have a positive influence for the turnover intentions of nurses.
- Perceived organizational justice dimensions (interactive, procedural, and distribution justice) will have a positive influence for the turnover intentions of nurses.

3. METHODS

3.1. Subjects

The subject of the study consists of nurses working in a general-purpose private hospital in Ankara. It was aimed to reach all of the subject. Purpose sampling method was applied in the study, though. The subjects of the study were male and female nurses of at least 1 year experience and volunteered to participate.

3.2. Measures/Instruments

The research data were collected by using the form developed by the researchers to determine the factual (individual and professional) characteristics of nurses, and the scales of ethical leadership, organizational justice, and turnover intention were also used.

Ethical leadership scale: Ethical leadership was measured using the 10 items ELS scale developed by Brown et al (2005), then adapted to Turkish by Tuna et al. (2012) and validity and reliability survey has been done. Ethical leadership consists of 10 items created on the

Likert scale. Ethical leadership of their immediate supervisor was rated by the respondents, using a five item Likert scale (where 1 = strongly disagree and 5 = strongly agree).

Organizational justice scale: "Organizational Justice Scale" developed by Niehoff was applied by Moorman (1993). The scale, which was translated and adapted into Turkish by Polat (2007), consists of a total of 20 items in the five-point Likert scale. Among the items in the scale, the first 9 expressions measure interactive justice, expressions 10-15 measure procedural justice, and expressions 16-20 measure distribution justice.

Turnover intention scale: Turnover intention scale was developed by Cammann et al (1983) and adapted to Turkish and used Mimaroğlu (2008). Three items were adapted to measure turnover intentions from prior research and the scale consists of 3 items in five-Likert style.

For the research, approval was obtained from the Ethics Committee of Non-Invasive Clinical Researches from Lokman Hekim University. Written permission was obtained from the hospital administrations where the study was conducted. Nurses who were invited to the study were informed about the research, and the data collection tool were distributed to the volunteers by the researcher, then the data collection forms were collected in an appropriate time.

3.3. Data Collection and Analysis

The data collection tool used in the study was distributed to the nurses working in the hospital, who volunteered to participate in the research, by the researchers between September and November 2019. The questionnaire was given to each nurse separately to get enough feedback from the nurses. They were required to read the instructions very carefully and were encouraged to ask questions where unclear. After the administrations, the questionnaires were immediately collected from the participants. Missing incorrect and empty data were excluded and data were collected from a total of 234 people.

The analysis of the research was conducted by using SPSS 22 statistical software. Variables that are not normally distributed are expressed as median (minimum and maximum) values. When comparing scale attitude averages according to individual and professional characteristics of nurses, Mann Whitney U test was used for the comparison of two independent groups, while Kruskal-Wallis Variance analysis was used for more than two group comparisons. $P<0.05$ was accepted for statistical significance.

3.4. Limitations

This study had some limitations. First, since this study was only one of general-purpose private hospital in Ankara, Turkey, this might lead to restricted generalsability. Second, although subjects were informed that investigation was anonymous and the result will be confidential from their leaders, they might still have some concerns to express their most honest thoughts, which might induce some bias.

3.5. Reliability of the Data Collection Tool

The reliability coefficients of the scales used in the research are given.Table 1 shows the Cronbach Alpha values of ethical leadership, organizational justice and turnover intention scales. Organizational Justice and its sub-dimensions have high reliabilities (0.940, 0.903, 0.926, 0.944, respectively). The ethical leadership scale Cronbach Alpha coefficient is 0.962 and has high reliability. The Cronbach Alpha coefficient of turnover intention scale is 0,761 and its reliability is very high.

Table 1- Ethical leadership, Organizational Justice, and Turnover Intention Reliability Coefficient (N = 234)

Scales	Cronbach Alfa	No. of Items
Organizational Justice	0.940	20
Interactive Justice	0.903	9
Procedural Justice	0.926	6
Distribution Justice	0.944	5
Ethical leadership	0.962	10
Turnover Intention	0.761	3

4. Findings

Table 2 presents the demographic characteristics of the sample. A total of 234 participants finished the questionnaires. Most of them were female (77.78%) and single (59.83%). And 43.59% of nurses got a health vocational high schools (HVHS) graduates, and the mean age of participants was 27.25 (SD = 6.16). When the education level of nurses is examined, there

are health vocational high schools (HVHS) graduates (43.59%), associate degree (23.08%), bachelor (29.91%) and post-graduate (3.42%). 11.11% of the nurses work in an emergency, 11.97% in the operating room, 25.64% in surgery, 30.77% in internal medicine and 20.51% in the intensive care unit.

Table 2- Descriptive statistics of socio-demographic information of individuals participating in the study

Variables	Number (n)	Percentage (%)
Gender		
Male	52	22.22
Female	182	77.78
Marital Status		
Married	94	40.17
Single	140	59.83
Age	27.25±6.16	
Education Level		
HVHS	102	43.59
Associate's Degree	54	23.08
Bachelor Degree	70	29.91
Postgraduate Degree	8	3.42
Working Unit		
Emergency	26	11.11
Operating room	28	11.97
Surgery	60	25.64
Internal medicine	72	30.77
Intensive care	48	20.51
Job Duration		
1-3 year	80	34.19
4-6 year	62	26.50
7-9 year	34	14.53
10-12 year	36	15.38
13 year and above	22	9.40
TOTAL	**234**	**100.00**

Table 3 shows the nurses' ethical leadership, organizational justice, subdimensions, and turnover intention scale mean scores. Descriptive statistics regarding the scale scores are given in Table 3. Organizational justice scale mean score was 3.59 ± 0.76, interactive justice subscale score average was 3.14 ± 0.87, procedural justice subscale point average was 3.96 ± 0.92, and distribution justice subscale point average was 3.99 ± 0.97. The ethical leadership scale mean score was 33.33 ± 10.65, and the mean score of turnover intention was 6.96 ± 2.85.

Table 3 - Distribution of Nurses' Ethical Leadership, Organizational Justice, Sub-Dimensions and Turnover Intention Scale Mean Scores

Variables	Mean	Std.Dev.	Min.	Max.
Organizational Justice	3.59	0.76	1.70	5.00
Interactive Justice	3.14	0.87	1.11	5.00
Procedural Justice	3.96	0.92	1.17	5.00
Distribution Justice	3.99	0.97	1.20	5.00
Ethical leadership	33.33	10.65	10.00	50.00
Turnover Intention	6.96	2.85	3.00	14.00

Table 4- Organizational Justice, Ethical Leadership and Turnover Intention Scale Score Mean According to the Socio-demographic Characteristics of Individuals (N = 234)

Variables	Organizational Justice		Interactive justice		Procedural Justice		Distribution Justice		Ethical Leadership		Turnover Intention	
	Mean±S.D	Test value and p value	Mean±S.D	Test value and p value	Mean±S.D	Test value and p value	Mean±S.D	Test value and p value	Mean±S.D	Test value and p value	Mean±S.D	Test value and p value
Gender												
Male	3.55(2.75-5.00)	z=-1.106 p=0.269	3.11±0.83	t=-0.286 p=0.775	4(3.17-5.00)	**z=-2.666 p=0.008**	4.6(3.00-5.00)	**z=-2.443 p=0.015**	31.5(14.00-50.00)	z=-1.851 p=0.064	9(3.00-12.00)	z=-0.211 p=0.833
Female	3.7(1.70-5.00)		3.15±0.88		4(1.17-5.00)		4(1.20-5.00)		37(10.00-50.00)		6(3.00-14.00)	
Marital Status												
Married	3.54±0.78	t=-0.972 p=0.332	3.22(1.11-5.00)	z=-1.626 p=0.104	3.83(1.83-5.00)	**z=-2.543 p=0.011**	4(1,60-5,00)	**z=-2.680 p=0.007**	32,26±12,74	t=-1.188 p=0.237	6(3,00-14,00)	**z=-3.035 p=0.002**
Single	3.64±0.74		3(1.11-5.00)		4.08(1.17-5.00)		4,4(1,20-5,00)		34,06±8,96		8(3,00-13,00)	
Age	**r=-0.340 p<0.001**		r=-0.083 p=0.207		**r=-0.405 p<0.001**		**r=-0.469 p<0.001**		**r=-0.356 p<0.001**		r=-0.005 p=0.936	
Education Level												
HVHS	3.85[a](1.85-5.00)	**K=25.146 p<0.001**	3.12±0.81	**F=4.120 p=0.017**	4.67[a](1.83-5.00)	**K=29.163 p<0.001**	4.60[a,c](1.60-5.00)	**K=49.081 p<0.001**	35.26±9.76[a]	**F=9.991 p<0.001**	8(3.00-14.00)	K=3.339 p=0.188
Associate's Degree	3.75[b](1.85-5.00)		3.42±0.88[a]		4.00[b](1.83-5.00)		4.00[b,c](1.60-5.00)		35.82±10.11[b]		6(3.00-11.00)	
Bachelor-Postgraduate Degree	3.20[a,b](1.70-4.85)		2.99±0.9[a]		3.67[a,b](1.17-5.00)		3.60[a,b](1.20-5.00)		29.1±10.99[a,b]		6(3.00-12.00)	
Working Unit												
Emergency	3.85(1.85-4.60)	K=3.005 p=0.557	3(1.11-4.11)	K=2.757 p=0.599	4.5(1.83-5.00)	K=3.942 p=0.414	4.2(1.60-5.00)	K=3.685 p=0.450	36(16.00-48.00)	K=3.891 p=0.421	7(3.00-11.00)	K=7.448 p=0.114
Operating room	3.65(1.90-5.00)		3.11(1.78-5.00)		4(1.83-5.00)		4.2(1.80-5.00)		33.5(13.00-50.00)		5(3.00-14.00)	
Surgery	3.65(1.70-4.80)		3(1.11-4.56)		4(1.17-5.00)		4(1.20-5.00)		37(16.00-50.00)		6(3.00-11.00)	
Internal medicine	3.45(2.00-4.70)		3(1.56-4.67)		4(1.83-5.00)		4.2(2.60-5.00)		32(10.00-50.00)		8(3.00-13.00)	
Intensive care	3.7(3.05-4.75)		3.22(2.22-5.00)		4(3.00-5.00)		4(2.40-5.00)		35(27.00-50.00)		9(3.00-12.00)	
Job Duration												
1-3 year	3.95[a,c](1.70-4.85)	**K=45.596 p<0.001**	3.11(1.78-5.00)	K=11.551 p=0.05	4.67[a,d](1.17-5.00)	**K=66.474 p<0.001**	4.70[a,d](1.20-5.00)	**K=62.338 p<0.001**	38.00[a,c](13.00-50.00)	**K=39.420 p<0.001**	7(3.00-14.00)	**K=17.314 p=0.002**
4-6 year	3.90[b,d](2.65-5.00)		3.44(1.11-5.00)		4.50[b,e](3.00-5.00)		4.60[b,e](2.40-5.00)		37.00[b,d](17.00-50.00)		7.00[a](3.00-12.00)	
7-9 year	3.85[e](1.85-5.00)		2.89(1.11-5.00)		4.00[c,f](1.83-5.00)		4.60[c,f](1.60-5.00)		28(10.00-50.00)		7(3.00-11.00)	

10-12 year	2.95[c,d,e](1.85-4.80)	2.78(2.00-4.56)	3.17[d,e,f](1.83-5.00)	3.20[d,e,f](1.60-5.00)	25.00[c,d](10.00-49.00)	9.00[b](3.00-13.00)
13 year and above	3.35[a,b](2.80-4.05)	3.33(2.22-4.44)	3.17[a,b,c](3.00-4.00)	3.40[a,b,c](2.00-4.00)	25.00[a,b](16.00-43.00)	4.00[a,b](3.00-13.00)

* Variables that are not normally distributed are expressed as median (minimum and maximum) values. t: t-test in independent samples, z = Mann Whitney U test z statistics, K = Kruskal Wallis test test statistics, F: One-way Variance Analysis F statistics

The group originating from the difference is expressed with the same letter index.

When the ethical leadership, organizational justice and turnover intention according to some of the individual and professional characteristics of the nurses are considered, there was no significant difference in the scale and sub-dimensions concerning working units (p>0.05). There is a significant difference in the scores of procedural justice and distribution justice sub-dimensions which are the sub-dimensions of organizational justice concerning gender (p<0.05). There was a significant difference in nurses' procedural justice and distribution justice, which are the sub-dimensions of organizational justice, and turnover intention concerning marital status (p <0.05). This difference was higher among single nurses than the married ones (procedural justice, distribution justice, and turnover intention scores) (z=-2.543; p=0.011; z=-2.680; p=0.007; z=-3.035; p=0.002, respectively).

While no linear relationship was found between age of the nurses and their interactive justice and turnover intention (p> 0.05), there is a relationship between their ages and total score of organizational justice scale, sub-dimensions of process justice, distribution justice and ethical leadership scale. There was a linear negative weak relationship between the age variable of the nurses and the organizational justice scale and the ethical leadership scale (r=-0,340 p<0,001; r=-0,356 p<0,001), and there is a linear negative moderate relationship between their ages and procedural justice and distribution justice which are sub-dimensions of organizational justice (r=-0,405 p<0.001; r =-0.446 p<0.001).

There was a significant difference in terms of organizational justice scale scores according to the educational status of nurses (K=25,146 p<0.001). There was a significant difference in terms of interactive justice mean scores, which is subdimension of organizational justice, according to the educational status of nurses (F=4,120 p=0,017). The interactive justice sub-dimension score means of those with an associate degree (3.42 ± 0.88) are higher than the average score of those with a bachelor degree (2.99 ± 0.9). There is a statistical difference in terms of procedural justice sub-dimension according to the education level of the nurses (K= 9,163 p<0.001). The median score of nurses with having a bachelor/post-graduate degree (3.67(1.17-5.00)) was lower than those of with HVHS/associate degree. And, distribution justice scale sub-dimension scores were significantly different (K=29,163 p<0.001). The median scores of the nurses having a HVHS, associate, bachelor and post-graduate education levels were found to be different from each other. There was a significant difference in terms of ethical leadership score averages according to educational status (F=9,991 p<0,001). The

mean of ethical leadership scores (29.1 ± 10.99) of those who have a bachelor/post-graduate degree is lower than the mean of other education levels.

There was a significant difference in terms of organizational justice scale scores according to the job duration of the nurses (K=45,596 p<0.001). The median score of nurses working for 1-3 years (3.95(1.70-4.85)) was higher than those of the median of 13 years and above (3.35(2.80-4.05)) and 10-12 years (2.95(1.85-4.80)). The median score of nurses working for 4-6 years (3.90(2.65-5.00)) was higher than those of the median scores of 13 years and above (3,35 (2,80-4,05)) and 10-12 years (2,95 (1,85-4,80)). The median score of employees working for 7-9 years (3.85 (1.85-5.00)) was higher than the median score of employees working for 10-12 years (2.95 (1.85-4.80)).

There was a significant difference in terms of procedural justice scores, which is sub-dimension of organizational justice, according to the job duration of the nurses in the profession (K=66.474 p<0.001), the median score of 1-3 years employees (4.67(1.17-5.00)) was higher than the median score of 13 years and above (3.17(3.00-4.00)) and 10-12 years (3.17(1.83-5.00)); the median score of employees working for 4-6 years (4.50(3.00-5.00)) was higher than the median score of 13 years and above (3.17(3.00-4.00)) and 10-12 years (3.17(1.83-5.00)); the median score of employees working for 7-9 years (4.00 (1.83-5.00)) was higher than the median score of 13 years and above (3.17(3.00-4.00)) and 10-12 years (3.17(1.83-5.00)).

There was a statistically noticeable difference in terms of distribution justice scores, which is sub-dimension of organizational justice, according to the job duration of the nurses in the profession (K=62,338 p<0.001). The median score of nurses working for 1-3 years (4.70(1.20-5.00)) was higher than the median score of those who worked for 13 years and above (3.40(2.00-4.00)) and 10-12 years (3.20(1.60-5.00)). The median score of nurses working for 4-6 years (4.60(2.40-5.00)) was higher than the median score of 13 years and above (3.40(2.00-4.00)) and 10-12 years (3.20(1.60-5.00)), and median score of employees working for 7-9 years (4.60 (1.60-5.00)), was higher than the median score of 13 years and above (3.40(2.00-4.00)) and 10-12 year (3.20 (1.60-5.00)).

There was a statistically meaningful significant difference in terms of ethical leadership scale scores according to the job duration of the nurses in the profession (K=39,42 p<0,001). The median score of the nurses working for 1-3 years (38.00 (13.00-50.00)) was higher than the

median score of those working for 13 years and over (25.00(16.00-43.00)) and 10-12 years (25.00(10.00-49.00)). The median score of 4-6 years employees (37.00(17.00-50.00)) was higher than the median score of those working for 13 years and above (25.00(16.00-43.00)) and 10-12 years (25.00(10.00-49.00)).

There was a measurable difference in terms of the scores of turnover intention according to the job duration of the nurses (K=17,314 p = 0,002). The median score of employees working for 4-6 years in the profession (7.00 (3.00-12.00)) was higher than the median of those working for 13 years and above (4.00 (3.00-13.00)); and the median score of employees working for 10-12 years (9.00(3.00-13.00)) was higher than the median score of those working for 13 years or more (4.00(3.00-13.00)).

Table 5- The relationship of variables with each other

Variables	Organizational Justice	Interactive Justice	Procedural Justice	Distribution Justice	Ethical Leadership	Turnover Intention
Organizational Justice	1.000					
Interactive Justice	**0.799**	1.000				
Procedural Justice	**0.909**	**0.504**	1.000			
Distribution Justice	**0.808**	**0.317**	**0.896**	1.000		
Ethical Leadership	**0.767**	**0.669**	**0.677**	**0.553**	1.000	
Turnover Intention	**-0.494**	**-0.590**	**-0.356**	**-0.191**	**-0.403**	1.000

p<0.05 was shown in dark color.

Table 5 shows the relationship be the scales with each other. There was a linear positive strong relationship between organizational justice and ethical leadership (r=0.776 p<0.05), whereas there was a linear negative medium level relationship between organizational justice and turnover intention (r=-0.494 p<0.05). While there was a linear positive medium level relationship between interactive justice, one of the organizational justice scale sub-dimensions, and ethical leadership (r=0.669 p<0.05), there is a linear negative medium level relationship between interactive justice and turnover intention (r=-0.590 p<0, 05). While there was a linear positive medium level relationship between procedural justice and ethical leadership (r = 0.677 p <0.05), there is a weak linear negative relationship between procedural justice and turnover intention (r = -0.356 p <0.05). While there was a linear positive medium level relationship between distribution justice and ethical leadership (r=0.553 p<0.05), there

was a weak linear negative relationship between distribution justice and turnover intention (r=-0.191 p<0.05). There was a linear negative relationship between the ethical leadership scale and the turnover intention scale (r=-0,403 p<0.05).

5. DISCUSSION

Health care is provided in institutions that allow different professional groups to work together, which are structurally complex, where the division of labor and specialization is high, and that can provide services for twenty-four hours. Nurses are important in maintaining the existence of these institutions. The increasing complexity of health services, high pressure, demand and workload reduce nurses' level of job participation (Yin & Yang, 2002). However, efficiency and quality of nursing in healthcare delivery is closely related to the performance of nurses (. The results of the study, nurses have positive perceptions about organizational justice in the general-hospitals. Support the previous researches that the result indicated that organizational justice perception had a significant relationship with organizational commitment and turnover intentions.

Considering that the nurses' ethical leadership, organizational justice and turnover intention scale and sub-dimension scores were evaluated over 5, the total score of the organizational justice scale was 3.59 ± 0.76, the mean score of the interaction justice sub-dimension was 3,14 ± 0.87, the mean score of the procedural justice sub-dimension was 3.96 ± 0.92, and the mean score of the distribution justice was 3.99 ± 0.97. The most common difficulties nurses face in their work life are role ambiguity, perceived organizational support, and perceived low organizational justice (Huang et al., 2019). Considering that the highest mean score of the turnover intention scale was 14, and the highest score was 6.96 ± 2.85 in our study. It is difficult to handle some of the costs in monetary terms such as the low level of commitment to work in the organization, disruption of daily work, emotional stress and excessive workload on the rest. The number of staff leaving the job may have a negative outlook both inside and outside the organization (Singh & Loncar, 2010).

When ethical leadership, organizational justice, and turnover intention according to some individual and professional characteristics of nurses are examined, there was a significant difference in nurses' procedural justice and distribution justice, which are sub-dimensions of

organizational justice, and turnover intention according to marital status (p<0.05). Brooks and Zeitz (1999) found that in the study involving 507 nurses in twelve hospitals, the perceived justice mediated the commitment to the organization and the intention to remain as an employee. When employees perceive that decisions at the workplace are taken using fair and egalitarian procedures, it seems that they feel more attached to the organization. There was a linear negative intermediate level relationship between the age of the nurses and the process justice and distribution justice which are sub-dimensions of organizational justice scale (p<0.001). Concerning the job duration of the nurses, there was a significant difference in terms of distribution justice scores from the sub-dimensions of organizational justice scale (K=62,338 p<0.001) and turnover intention scale (K=17,314 p= 0.002). Individual factors provide evidence for small but stable relationships between marital status, education and turnover intention. Some studies have suggested that older nurses who are married and have lower education work are more stable in their jobs (Yin & Yang, 2002).

When correlations between scales are examined in the study, there was a strong linear positive relationship between organizational justice and ethical leadership (r=0,767 p<0,05). In the study conducted on 285 nurses in an education and research hospital in İzmir, Özden et al (Özden, Arslan, Ertuğrul, & Karakaya, 2019) stated that there was a significant positive relationship between the nurses' mean scores for the ethical climate, ethical leadership and job satisfaction, and that the nurses' ethical leadership perceptions were affected by their educational status, workplaces and service periods. It has been demonstrated that there is a positive correlation between the perception of organizational justice of health workers and quality performance (Mohamed, 2014). Organizational justice is also a structure that defines the quality of social interaction in the workplace (Greenberg, 1990).

There was a linear negative medium level relationship between organizational justice and turnover intention (r=-0.494 p<0.05). Reasons for turnover include mobbing, negative work environments and low organizational justice (Köksal, 2018). There is a linear negative relationship between the ethical leadership scale and the turnover intention scale (r=-0,403 p<0.05). Ethical leadership behavior has found to be led to many positive outcomes such as employee performance, trust in the leader, inner motivation, job satisfaction and emotional commitment (Cheng et al., 2014). Leaders are expected to satisfy employees and prevent stress and dissatisfaction from the environment. Therefore, it is essential to use an effective and harmonious leadership style for the nursing population which constitutes a large working

group in hospitals. Many studies have shown that the ethical behavior of the leader leads to positive results such as an increase in function quality, and a decrease in turnover and professional stress, and most importantly, increase job satisfaction (Kim & Brymer, 2011; Zhu, 2008).

The low level of commitment to work in nurses can negatively affect an institution's capacity to meet patient needs and provide quality nursing care. The increase in the number of nurses turnover may disrupt the morale of the nurses in the unit, while also reduce their efficiency (Hayes et al., 2006).

6. CONCLUSION

Leadership, organizational justice, identification and commitment in the field of organizational theory and organizational behavior have been important concepts and research areas. Nurses are the most important component of healthcare delivery programs and patient care functions. Therefore, there is a lack and gap of empirical study related to the relationship between organizational behavior factors in the field of health care.

Therefore, in this study, the possible effect of the attitudes on ethical leadership and organizational justice factors of nurses on turnover intention was investigated to bridge this gap in the current literature from the medical organization hospital perspective. Results showed that nurses' perception of ethical leadership and justice is an important determinant of decisions to keep or leave their jobs in the organizations. These findings are in line with the studies in the literature, which state that the perception of justice will greatly affect the turnover.

The growth and development in the fields of nurses, which is the largest group of staff providing health services, is also important for the health institution to achieve professional success. The result of this study indicated that ethical leadership will increase the perception of justice in the organization and decrease the turnover. The ethical leadership behaviors exhibited by the managers increase productivity and job satisfaction and provide a basis for reducing turnover.

According to the results of the research, strengthening the organizational justice and ethical leadership perceptions of nursing staff can further improve their commitment to work and reduce their turnover intention. Such a relationship in the research literature related to nurses in Turkey is almost never discussed. The present study confirms the argument that hospital human resource management should focus on behavioral variables that improve such organizational commitment-enhancing attitudes to increase efficiency and performance.

REFERENCES

Barkhordari-Sharifabad, M., Ashktorab, T., & Atashzadeh-Shoorideh, F. (2017). Exploration of pioneering as a major element of ethical leadership in nursing: a qualitative study. *Electronic physician, 9*(7), 4737.

Brockner, J., Konovsky, M., Cooper-Schneider, R., Folger, R., Martin, C., & Bies, R. J. (1994). Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss. *Academy of management Journal, 37*(2), 397-409.

Brooks, A., & Zeitz, G. (1999). The effects of total quality management and perceived justice on organizational commitment of hospital nursing staff. *Journal of Quality Management, 4*(1), 69-93.

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational behavior and human decision processes, 97*(2), 117-134.

Cao, Y., Liu, J., Liu, K., Yang, M., & Liu, Y. (2019). The mediating role of organizational commitment between calling and work engagement of nurses: A cross-sectional study. *International journal of nursing sciences, 6*(3), 309-314.

Cheng, J.-W., Chang, S.-C., Kuo, J.-H., & Cheung, Y.-H. (2014). Ethical leadership, work engagement, and voice behavior. *Industrial Management & Data Systems, 114*(5), 817-831.

Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O., & Ng, K. Y. (2001). Justice at the millennium: a meta-analytic review of 25 years of organizational justice research. *Journal of applied psychology, 86*(3), 425.

Elovainio, M., van den Bos, K., Linna, A., Kivimäki, M., Ala-Mursula, L., Pentti, J., & Vahtera, J. (2005). Combined effects of uncertainty and organizational justice on employee health: testing the uncertainty management model of fairness judgments among Finnish public sector employees. *Social Science & Medicine, 61*(12), 2501-2512.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational behavior*, *26*(4), 331-362.

Gillet, N., Fouquereau, E., Coillot, H., Bonnetain, F., Dupont, S., Moret, L., . . . Colombat, P. (2018). Ethical leadership, professional caregivers' well-being, and patients' perceptions of quality of care in oncology. *European Journal of Oncology Nursing*, *33*, 1-7.

Greenberg, J. (1990). Organizational justice: Yesterday, today, and tomorrow. *Journal of management*, *16*(2), 399-432.

Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., . . . Stone, P. W. (2006). Nurse turnover: a literature review. *International journal of nursing studies*, *43*(2), 237-263.

Hayward, D., Bungay, V., Wolff, A. C., & MacDonald, V. (2016). A qualitative study of experienced nurses' voluntary turnover: learning from their perspectives. *Journal of clinical nursing*, *25*(9-10), 1336-1345.

Heponiemi, T., Elovainio, M., Laine, J., Pekkarinen, L., Eccles, M., Noro, A., . . . Sinervo, T. (2007). Productivity and employees' organizational justice perceptions in long-term care for the elderly. *Research in nursing & health*, *30*(5), 498-507.

Holtom, B. C., Mitchell, T. R., Lee, T. W., & Eberly, M. B. (2008). 5 turnover and retention research: a glance at the past, a closer review of the present, and a venture into the future. *The Academy of Management Annals*, *2*(1), 231-274.

Huang, X., Li, Z., & Wan, Q. (2019). From organisational justice to turnover intention among community nurses: A mediating model. *Journal of clinical nursing*, *28*(21-22), 3957-3965.

Imamoglu, S. Z., Ince, H., Turkcan, H., & Atakay, B. (2019). The Effect of Organizational Justice and Organizational Commitment on Knowledge Sharing and Firm Performance. *Procedia Computer Science*, *158*, 899-906.

Islam, T., Ahmed, I., & Ali, G. (2019). Effects of ethical leadership on bullying and voice behavior among nurses. *Leadership in Health Services*.

Jawahar, I. (2002). A model of organizational justice and workplace aggression. *Journal of management*, *28*(6), 811-834.

Kim, W. G., & Brymer, R. A. (2011). The effects of ethical leadership on manager job satisfaction, commitment, behavioral outcomes, and firm performance. *International Journal of Hospitality Management*, *30*(4), 1020-1026.

Köksal, K. (2018). Örgüt Kültürünün Örgütsel Adalet Algısına Etkisinde Etik İlkelere İlişkin Algıların Aracılık Rolü. *Uluslararası Yönetim İktisat ve İşletme Dergisi, 14*(2), 479-504.

Loi, R., Yang, J., & Diefendorff, J. M. (2009). Four-factor justice and daily job satisfaction: a multilevel investigation. *Journal of applied psychology, 94*(3), 770.

Mimaroğlu, H. (2008). Psikolojik sözleşmenin personelin tutum ve davranışlarına etkileri: Tıbbi satış temsilcileri üzerinde bir araştırma. *Basılmamış Doktora Tezi, Çukurova Üniversitesi Sosyal Bilimler Enstitüsü*.

Mohamed, S. A. (2014). The relationship between organizational justice and quality performance among healthcare workers: a pilot study. *The Scientific World Journal, 2014*.

Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of management Journal, 36*(3), 527-556.

Özden, D., Arslan, G. G., Ertuğrul, B., & Karakaya, S. (2019). The effect of nurses' ethical leadership and ethical climate perceptions on job satisfaction. *Nursing ethics, 26*(4), 1211-1225.

Polat, S. (2007). *Ortaöğretim öğretmenlerinin örgütsel adalet algıları, örgütsel güven düzeyleri ile örgütsel vatandaşlık davranışları arasındaki ilişki.* (PhD Unpublished). Kocaeli Üniversitesi, Retrieved from http://dspace.kocaeli.edu.tr:8080/xmlui/handle/11493/399

SB. (2019). *TC Sağlık Bakanlığı Sağlık İstatistikleri Yıllığı 2018.* . Ankara: Sağlık Bakanlığı, Sağlık Bilgi Sistemleri Genel Müdürlüğü.

Seashore, S. E., Lawler III, E. E., Mirvis, P. H., & Cammann, C. E. (1983). *Assessing organizational change: A guide to methods, measures, and practices*: John Wiley & Sons Inc.

Singh, P., & Loncar, N. (2010). Pay satisfaction, job satisfaction and turnover intent. *Relations industrielles/industrial relations, 65*(3), 470-490.

Staggs, V. S., & Dunton, N. (2012). Hospital and unit characteristics associated with nursing turnover include skill mix but not staffing level: an observational cross-sectional study. *International journal of nursing studies, 49*(9), 1138-1145.

Tummers, L. G., Groeneveld, S. M., & Lankhaar, M. (2013). Why do nurses intend to leave their organization? A large-scale analysis in long-term care. *Journal of advanced nursing, 69*(12), 2826-2838.

Tuna, M., Bircan, H., & Yeşiltaş, M. (2012). Etik liderlik ölçeği'nin geçerlilik ve güvenilirlik çalişmasi: antalya örneği. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi, 26*(2), 143-155.

Yin, J.-C. T., & Yang, K.-P. A. (2002). Nursing turnover in Taiwan: a meta-analysis of related factors. *International journal of nursing studies, 39*(6), 573-581.

Zhang, N., Li, M., Gong, Z., & Xu, D. (2019). Effects of ethical leadership on nurses' service behaviors. *Nursing ethics, 26*(6), 1861-1872.

Zhu, W. (2008). The effect of ethical leadership on follower moral identity: The mediating role of psychological empowerment. *Leadership Review, 8*(3), 62-73.

https://dergipark.org.tr/tr/pub/ijhmt Doi Number: https://doi.org/10.31201/ijhmt.789049

Int Journal Of Health Manag. And Tourism 2020, 5(2), 145-169

JHMT Editorial

Internatıonal Journal Of Health Management And Tourism

THE EFFECT OF BRAND MANAGEMENT PRACTICES ON PATİENT'S BRAND EQUITY PERCEPTION AND HOSPITAL PREFERENCE

Özgül Özkoç* , Emrah Cengiz**

* Altınbaş Üniversitesi, Sağlık Yönetimi, Dr. Öğretim Üyesi

ozgul.ozkoc@altinbas.edu.tr

ORCID Number: 0000-0001-5105-4007

**İstanbul Üniversitesi Üretim Yönetimi ve Pazarlama Anabilim Dalı, Prof. Dr.

ecengiz@istanbul.edu.tr

ORCID Number: 0000-0001-6524-7563

Received: 11.06 2020

Accepted: 31.08.2020

Abstract

Aim- It was aimed to examine the effect of brand management practices on patients' brand equity perception and hospital preference.

Methodology- Data were collected by using a convenience sampling method from 500 participants. Cronbach's alpha coefficient, factor analysis, and structural equation modeling were performed to analyze internal consistency, construct validity and hypothesis test.

Findings:

This study has shown that; "price" affects brand loyalty and brand preference; "distribution-promotion" affects perceived quality and brand awareness/ association; "physical evidence", and "people" affect all brand equity dimensions; "process" affects perceived quality and brand preference. All "brand equity dimensions" have an effect on brand preference. Brand management practices have also an indirect effect on brand preference except "price promotion" and "process".

Research limitations/Recommendations- The current study is limited by hospitals in İstanbul and Ankara. Further research could be done in different places and with more participants. Also, distribution-promotion structure could be examined separate structure by adding new variables.

Practical İmplications- The findings provide insight for hospital managers and marketing managers to improve their hospital's brand equity productively.

Originality- In the literature, some studies can be found on hospital brand or hospital preference. However, studies that were previously carried out reviewed partially of brand management practices or brand equity dimensions. This study looks holistic perspective. For this reason, this study aims to fill in the gap in the literature to provide holistic insight.

Keywords- Hospital Brand Equity, Brand Preference, Service Brand, Structural Equation Modeling.

1. Introduction

Healthcare services are a highly competitive business, due to the increase in the number of private hospitals and service diversity. Brand management is crucial for hospitals to maintain their credibility, reduce the patient's perceived risk, and maintains their competitiveness (Vijande, Lanza, Álvarez, & Martín, 2011). A successful brand strategy must build, protect and promote brand equities to gain the patient's trust and to create positive emotions to the hospital (Kemp, Ravi, & Becerra, 2014). Brand strategy should consider competitors' current and future brand (Mangini, 2002).

Brand management practices aim to build brand equity. Hospitals that have strong brand equity assure the patients by decreasing medical and fiscal risks which they perceived. The most important resources of brand equity are brand management practices, which include service marketing mix elements; product, price, distribution, promotion, physical evidence, people, and process.

2. Basic Concepts and Literature Review

2.1. Service Marketing Mix Elements

The Product affects brand experience and what the company says about the brand (Keller, 2012). In health sector, product is the patient who is satisfied and cured. The outcome of given services affects the patient's brand experience.

Price is the money to be paid for a product or service (Karafakıoğlu, 1998). Price and quality relationship was found stronger in studies related to high price product and weaker in consumer durables, services, and products which participants familiar with (Völckner & Hofmann, 2007). Some researchers found positive relationships between price and perceived quality; price and brand equity (Chattopadhyay et al., 2010; Yoo et al., 2000; Mervish&Salman, 2019). Hussey et al (2013). found an inconsistent relationship between health care cost and quality (Hussey, Wertheimer, & Mehrotra, 2013). Aditi at al (2019) found that service, price promotion, and brand equity together have a positive significant effect on customers preference (Aditi & Muda, 2019). Napira et al (2016) found a significant relationship between price and patient brand loyalty (Napirah, Rau, & Hadijah, 2016).

Distribution for hospitals related to availability and accessibility of services (Sreenivas, Srinivasarao, & Srinivasa Rao, 2013). Easy access to services, service environment, and hospital image are the most important factors for hospital preference (Tengilimioglu, 2001). In some studies, it was found that distribution- promotion has an effect on perceived quality

(Chattopadhyay et al., 2010) and brand loyalty (Yoo, Donthu , & Lee, 2000). Distribution has a significant effect on the organizational image and consumer-based brand equity (Siwa Wunu, Alhabsji, Notosubroto, & Kusumawati, 2018).

The Promotion gives information to consumers and persuades them about services of the brand. (Keller, 2012). Some studies show a direct effect between promotion and brand equity dimensions and/or brand preference, but some studies found an indirect relationships. For instance, Promotional expenditures have an effect on brand awareness, and brand association (Yoo et al., 2000). Perceived advertisement spends has an effect on perceived quality, brand awareness and brand image (Villarejo-Ramos & Sánchez-Franco, 2005). Push and pull promotions have a significant effect on the dealer brand equity (Efanny, Haryanto, Kahif, & Vidyanto, 2018). Distribution- promotion has an effect on perceived quality, and higher level promotion generates a higher level brand quality signal (Chattopadhyay et al., 2010). However, the study of Mehvish and Salman(2019) shows an indirect relationship with promotion and brand equity(Mehvish & Salman, 2019). Gholipour et al found that advertising costs have the effect on the brand association, but they have no effects on perceived quality and brand awareness (Soleimani & Sedaghat, 2016). Daosue and Wanarat (2019) found significant positive effects between advertising and brand awareness (Daosue & Wanarat, 2019).

Price promotion may be directed at consumers and retailers. Constant price promotion causes suspicion about brand quality (Bravo, Fraj, & Martinez, 2007). The results of studies in this field show that there is a negative effect between Price Promotion and perceived quality (Villarejo-Ramos & Sánchez-Franco, 2005; Chattopadhyay, Shivan, & Krishnan, 2010). There is a positive relationship between price promotion and brand awareness/association (Chattopadhyay, Shivan, & Krishnan, 2010) . The promotional campaign is the least important factor for choosing the hospital (Dharmesh, & Devendra, 2014). However, price promotion and its tools, including cash discounts, volume discounts, price warranties, free services, frequent purchasing discounts, and promotional gifts were found positively related to brand equity as well as its dimensions (Nazari, Mira, & Esmaiely, 2018).

For hospitals in addition to the above, physical evidence, human and process are important. *Physical Evidence* encompasses hospital building, in-hospital architecture, consistency of architecture, being enough space for patients, being a functionality of the physical elements involved in the environment. Other customers also provide an impression for what the customer

should expect (Bitner, 1990). *People* are the staff who delivered health services. Healthcare is personal because of the most human-centered services offered (DeGeeter, 2009). It was broadly accepted in the branding literature that the service staff has an important role in building successful and well-reputed service brands (Andriopoulos & Gotsi, 2000). *Process management* is to have the service available when the consumer needs it and to deliver it inconsistent quality (Tengilimoğlu,2000).

Prabowo and Srividadi (2019) found the process, people, and physical evidence have a strongly effect on brand equity (Prabowo & Sriwidadi, 2019). Hoon et al (2008) determine five factors to build brand equity through strong consumer relationships. These are trust, consumer satisfaction, engagement, brand loyalty, and brand awareness. According to the findings of their study, if the hospitals can manage their customer relationships well, they can create a successful image and positive brand equity (Hoon, Kang Sik, Dong Yul, Jong Ho, & Suk hou, 2008). The study of Mohamed and Hilal (2019) demonstrates that three service marketing mix elements and marketing communication elements have an effect on brand equity and have a positive effect on the consumer response (Hilal, 2019). Findings of Aghaei et al (2014) show that there is positive and direct relationship among seven service marketing mix elements and brand equity (Aghaei, Vahedi, Kahreh , & Pirooz, 2014). Patient trust and satisfaction are crucial for hospitals. According to the study of Tüfekçi and Asığbulmuş (2016) there are three most influential factors in hospital preference. Respectively; trust, physician, and satisfaction (Tüfekçi & Asığbulmuş, 2016).

2.2. Brand Equity and Brand Preference

Brand equity is a set of assets and liabilities and provides value to it's customers and organization by products or services (Aaker D. , 1991). Aaker conceptualized brand equity as perceived quality, brand loyalty, brand awareness, brand associations (Aaker D. , 1996). Brand Awareness is the possibility of brand name come to mind without making an effort (Field, Bergiel, Giesen , & Field, 2012). Brand associations are everything that connects the customer to the brand, including mental images, product features, brand personality, and symbols (Cottler & Pfoertsch, 2006). Perceived Quality is related to consumer's perception of a product's or services (Zeithaml, 1988). According to Aaker perceived quality, is differs from satisfaction and attitude. Consumers could be satisfied with his low expectation or could have a negative attitude because the product or service is overpriced (Aaker D. , 1991). Brand Loyalty shows

the possibility of a customer changes the brand with similar if the brand change product's price (Aaker D. , 1991).

Brand Preference is the prejudice of consumer when choosing a specific brand among alternatives (Vinh & Huy, 2016). Brand Equity influences consumer choices, purchase intentions, and brand preference (Chen & Chang, 2008).

In the branding literature, there are many studies on the relationship between brand equity and brand preference, purchase intention. As stated in these studies, the brand association is an effective component of brand equity (Tong & Hawley, 2009). There is strong relationship between brand equity and brand preference (Myers, 2003; Cobb-Walgren et al., 1995; Vinh & Huy, 2016) and brand loyalty and purchase intention, brand preference (Latha, 2016; Jung & Sung, 2008 Washburn & Plank, 2002). However there are a low correlation between "brand awareness, brand association" and purchase intention (Washburn & Plank, 2002). It was found that brand image, brand loyalty, and patient satisfaction provide an understanding of the patient's relationship with the hospital brand (Charanah & Njuguna, 2015).

Many of the studies mentioned above were carried out in the production sector. There is a little study about hospital brand equity and hospital preference. However, the study investigating the effect of brand management practices on hospital brand equity couldn't be found. This study aims to fill this gap.

3. Methodology:

3.1. Scale Development:

Three separate scales are used to measure brand management practices, brand equity and hospital preference. Brand management practices and the brand equity scales were taken from the study of Yoo et al (Yoo et al., 2000). They measured the reliability of the scale with cronbach's alpha coefficient, composit reliability and variance extracted. Their findings were; Price (rC = .88; VE = .72), Distribution intensity (rC = .87; VE = .70), Advertising spending (rC = .87; VE = .70), Price deals (rC = .80; VE = .58), Perceived quality (rC = .93; VE = .68), Brand loyalty (rC = .90; VE = .75), Brand associations with brand awareness (rC = .94; VE = .72) and Cronbach alpha coefficient is above 0.70 for all constructs, Because the study of Yoo et al didn't include service brand mix elements (Physical Evidence, People and Process), these dimensions were taken from scales which used in other studies (Kayaman & Arasli, 2007; W. G. Kim & Kim, 2004; Sreenivas et al., 2013).

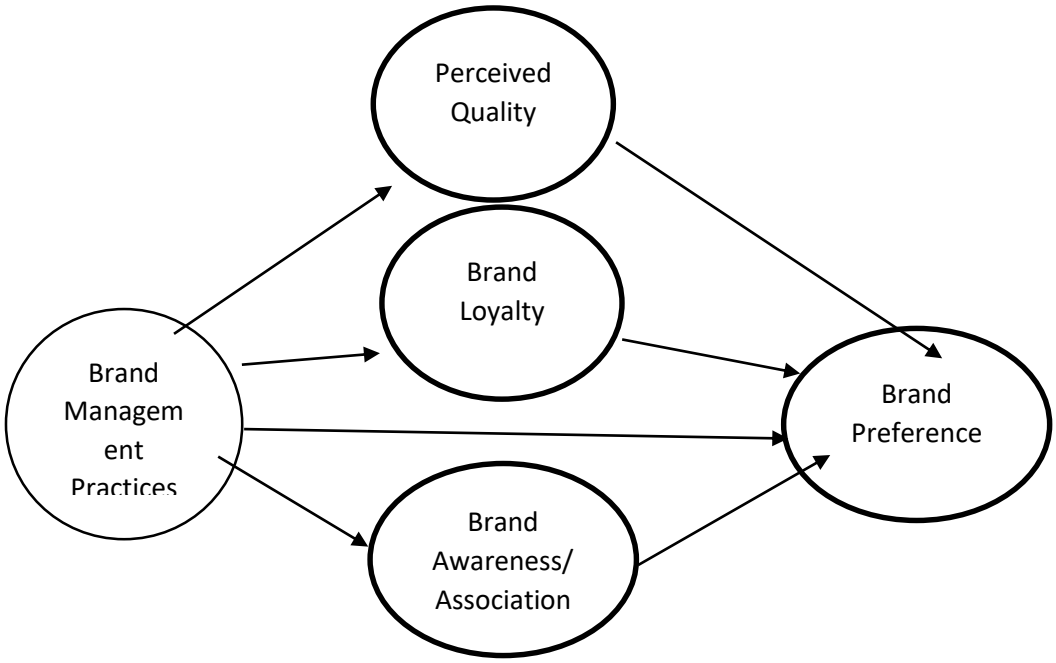
Brand Preference Scale was taken from the study of Vinh and Huy (2016) (Vinh & Huy, 2016). Validity and reliability results of their study were α = .766; CR = .767; AVE =.525

In this study, validity and reliability of scales were re-measured because of the changes. The five points Likert-type scale was used for data collecting.

3.2. Research Model:

According to the research model, all Brand Management Practices have an effect on Brand Equity and have both direct and an indirect effect on Brand Preference; Brand Equity have an effect on Brand Preference.

Figure-1 Research Model



3.3. Selection of The Hospital Type and Research Region

According to the data of Turkey Statistical Office, İstanbul had the highest proportion of the hospital at 15,9 percent. Ankara was following İstanbul at 3,5 percent (Turkey, 2015). Thus, these two provinces were selected as a research area. The research was done for private hospitals because the brand management practices are being carried out usually by private hospitals. Hospital size or other features of the hospital were not important for this study. At the end of the data collection, 123 different hospitals were evaluated by their patients.

3.4. Characteristics of Sample and Sample Size

There are various practical rules in the literature in determining the sample size for the structural equation model. One of them is the sample volume being at least 8 times of the number of variables in the model (Bayram, 2010). The other one is the preferable sample size being 20 times of the number of variables in the model, but it is sufficient to take 10 samples for each variable (Çapık, 2014). Since 47 variables used in this study, 470 samples were decided as the minimum sample size.

Total numbers of hospitals in Istanbul and Ankara were 198 and 82% of these hospitals were in Istanbul and 18% of them were in Ankara. Therefore, it was aimed at 82% (385) of the total sample being provided from Istanbul and 18% (85) of the total sample being provided from Ankara. Data has been collected by using a convenience sampling method from individuals who have received health services from private hospitals in Istanbul or Ankara.

500 valid questionnaires were obtained, 408 of them from Istanbul, and 92 of them from Ankara. 70.4 percent of the participants were female and 29.6 percent were male; 43.8 percent were 30-39 years old, 32.2 percent were 20-29 years old, 15.8 percent were 40-49 years old, 8.2 percent were 50 years old and above; 82,2 percent had a university degree or post graduated, 14,4 percent had a high degree and 3,4 had primary education;81.6 percent of the evaluated hospital in Istanbul and 18.4 percent were in Ankara.

4. Data Analysis:

4.1. Reliability and Validity Test;

4.1.1. Cronbach's Alpha Reliability Analysis; Reliability is a concept that demonstrates the consistency of all variables on a scale (Kurtuluş, 2010). Cronbach's alpha coefficient was measured for all scales. As a result of analysis, reliability coefficients were found to be over 0.80 in all dimensions except the "distribution". Therefore, two items decrease reliability were eliminated from the distribution dimension. After elimination, the reliability coefficient of "distribution" increased to 0.91.

4.1.2. Exploratory Factor Analyze: Since some changes and adaptations were made in the scales, Exploratory Factor Analysis was used in order to determine factor structures of these scales and to understand the level of explaining the factor structures of related variables. Factor

analysis is a parametric test based on the assumption of normality. The normal distribution, also known as “Gauss” or “Gauss-Laplace” distribution, is a continuous probability distribution defined by the mean and standard deviation (DemİR et al., 2016). Thus firstly normality was tested, after that sample size was tested with the Kaiser-Myer-Olkin (KMO) test. If the KMO test is 60 or above it means that the data is enough (Beavers et al., 2013). In addition, Bartlett's Sphericity Test was used to determine whether scale expressions were related and whether factor analysis was applicable. If the Bartlett test results significant ($p<0.05$), it means that the data appropriate for factor analysis.

As a result of analysis, KMO value found 0,862 for brand management practices scale; 0,894 for brand equity scale; 0.725 for brand preference scale and Bartlett's Sphericity Tests were p:0.000 (meaningful) for all three scales.

Exploratory Factor analysis was performed with the varimax technique. Variables which factor load less than 0.50 were deleted from the scale. Thus, one variable from “physical evidence”, one variable from “perceived quality” and one variable form “brand awareness/association” were deleted. Factor structures of brand management practices scale decreased from 7 to 6. Distribution and Promotion structures were gathered under a single factor and renamed as “Distribution-Promotion”. Other structures in Brand Equity and Brand Preference Scales remained the same.

4.1.3. Confirmatory Factor Analysis*;* This test was used to assess the variables of the constructs. In the Confirmatory Factor Analysis, fit indexes are checked. Marsh, Balla, and Mc Donald suggest that the ideal fit index should be independent relative to sample size, consistent and accurate in evaluating different models, supported by a predetermined range and easy to interpret (Garver & Mentzer, 1999). Chi-square test, CFI (comparative goodness-of-fit index), AGFI (Adjusted Goodness-of-Fit Index), NNFI (Non-Normed Fit Index), and RMSEA (Root Mean Square Error of Approximation) fit indices were examined by considering these criteria and other similar studies. Standardized regression coefficients were analyzed to improve the goodness of fit values. The standardized regression coefficient is expected to be close to 0.70. Therefore, the items with a standardized regression coefficient below 0,70, were removed from the scale and the analysis was repeated.

At the end of the repeated analysis, six items were removed from the brand management practices scale. After this improvement the fit statistics of the measurement model were as

follows; X^2/df:1,95, p:0,00, AGFI:0,85, TLI:0,94, CFI:0,95 and RMSEA:0,06. These values are admitted acceptable in literature.

In the Brand Equity scale, no deletion was performed because standardized regression coefficients were over 70 or close to 70, To improve fit index results, correction indexes were examined, and covariance was established among the values with the highest covariance. After this improvement the fit statistics of the measurement model were as follows; X^2/df:2,53, p:0,00, AGFI:0,88, TLI:0,95, CFI:0,97 and RMSEA:0,08

The validity and reliability analsis were repeated. The findings were given in Table

Table 1: Findings of Validity and Reliability Analysis after Exploratory and Confirmatory Factor Analysis

Scale Items	KMO	α	CR	AVE
B. Brand Management Practices	0,862			
B.1. Price B.1.1. The price of this hospital's service is high. B.1.2. The price of this hospital's service is low B.1.3. This hospital's service is expensive		0,88	0,87	0,69
B.2. Distribution-Promotion B.2.1. This hospital giving services with more branch as compared to its competing brands B.2.2. This hospital services are distributed through as many branches as possible. B.3.3. The promotional campaign of this hospital is seen quite often.		0,81	0,82	0,62
B4. Price Promotion B.4.1. This hospital offers price deals frequently. B.4.2. Too many times price deals for this hospital are presented B.4.3. Price deals for this hospital are emphasized more than seems reasonable.		0,87	0,85	0,66
B.5. Physical Evidence B.5.2. This hospital has modern equipment. B.5.3. Staff in this hospital clean dressed. B.5.4. Medical equipments in this hospital are operating. B.5.5. The interior decoration of this hospital is very good. B.5.6. Lightening and ventilation of this hospital is good.		0,91	0,90	0,62

B.5.7. This hospital is clean. B.5.8. This hospital is silent and restful.				
Scale Items	KMO	α	CR	AVE
B.6. People B.6.2. The employees of this hospital try to cheer patients up when they are down. B.6.3. This hospital staff are always enthusiastic to resolve patient complaints. B.6.4. This hospital staff are enthusiastic to consider things not requested by the customer or their accompanying persons		0,85	0,84	0,64
B.7. Process B.7.1. I received service at the time of an appointment in this hospital. B.7.2. Waiting times to receive service in this hospital were short. B.7.3. During the process I received healthcare from this hospital, I was told about my health status.		0,86	0,88	0,71
C. Brand Equity C.1. Perceived Quality C.1.1. This hospital is of high quality. C.1.2. The likely quality of this hospital is extremely high. C.1.3. I thought that this hospital could cure my illness. C.1.4. The reliability of this hospital is very high. C.1.6. The quality of this hospital appears very poor.	0,894	0,90	0,90	0,65
C.2. Brand Loyalty C.2.1. I am loyal to this hospital. C.2.2. This hospital would be my first preference C.2.3. I wouldn't apply to other hospitals if this hospital's bed and service capacity is available.		0,90	0,91	0,78
Scale Items	KMO	α	CR	AVE
C.3.Brand Awareness/ Association C.3.1. I can recognize this hospital among other competing hospitals. C.3.2. I am aware of this hospital. C.3.3. Some features of this hospital come to my mind quickly. C.3.4. I can quickly recall the symbol or logo of this hospital.		0,85	0,89	0,67
D. Brand Preference D.1. I feel this hospital is appealing to me.	0,725	0,88	0,90	0,76

D.2. I prefer this hospital to the other similar brand. D.3. If I need similar healthcare services, I would prefer this hospital again.				

Note: KMO= Kaiser-Meyer-Olkin; AVE = Average Variance Extracted;

CR=Composite Reliability

Results showed that KMO values were acceptable (more than 0,50); Cronbach's Alpha Reliability coefficients were highly reliable (above 0,80). Composite Reliability should be above 0,70 and AVE value should be above 0,50. It was seen from the table that these conditions were fulfilled and therefore these scales admitted valid and reliable.

4.2. Hypotheses Testing

Because Distribution and Promotion dimensions were united in one dimension after the Exploratory Factor Analysis, hypothesis numbers which were proposed initially reduced from 38 to 33. However, the hypothesis number codes were not changed to avoid confusion.

The structural equation model, the path analysis method was used to test the hypotheses. The structural equation model allows researchers to evaluate the measurement tool and measure the proposed theoretical relationships in a unified and holistic way.

The goodness of fit values was re-examined before testing the model. It was found as X^2/df:2,54, p:0,00, AGFI:0,83, TLI:0,92, CFI:0,93 and RMSEA:0,06. Since the values were within acceptable limits, hypotheses testing was initiated.

4.2.1. Testing The Direct Effect of Brand Management Practices and Brand Equity Dimensions on Brand Preference;

The test results were given in the table below. The table shows only accepted hypotheses.

Table: 2 Test Results for The Direct Effect of Brand Management Practices and Brand Equity Dimensions on Brand Preference;

HYPOTHESİS				Estimate	Standard Error	C.R. (t value)	P Value	Results
H2: Price has an effect on Brand Loyalty	Brand Loyalty	←	Price	-0,151	0,047	-3,201	0,001	**ACCEPTED***
H4: Price has an effect on Brand Preference	Brand Preference	←	Price	-0,088	0,033	-2,639	0,008	**ACCEPTED ***
H5: Distribution-Promotion has an effect on Perceived Quality	Perceived Quality	←	Distribution-Promotion	0,203	0,052	3,897	***	**ACCEPTED**
H7: Distribution-Promotion has an effect on brand awareness/ brand association	Brand Awareness/ Association	←	Distribution-Promotion	0,17	0,073	2,325	0,02	**ACCEPTED***
H17: Physical Evidence has an effect on Perceived Quality	Perceived Quality	←	Physical Evidence	0,66	0,066	10,029	***	**ACCEPTED**
H18: Physical Evidence has an effect on Brand Loyalty	Brand Loyalty	←	Physical Evidence	0,424	0,088	4,819	***	**ACCEPTED**
H19: Physical Evidence has an effect on Brand Awareness/ Association	Brand Awareness/ Association	←	Physical Evidence	0,631	0,082	7,691	***	**ACCEPTED**
HYPOTHESİS				Estimate	Standard Error	C.R. (t value)	P Value	Results

H21: People has an effect on Perceived Quality	Perceived Quality	←	People	0,109	0,044	2,49	0,013	**ACCEPTED***
H22: People has an effect on Brand Loyalty	Brand Loyalty	←	People	0,502	0,076	6,598	***	**ACCEPTED**
H23: People has an effect on Brand Awareness/ Association	Brand Awareness/ Association	←	People	0,131	0,065	2,035	0,042	**ACCEPTED***
H25: Process has an effect on Perceived Quality.	Perceived Quality	←	Process	0,147	0,047	3,106	0,002	**ACCEPTED***
H28: Process has an effect on Brand Preference	Brand_ Preference	←	Process	0,113	0,054	2,091	0,037	**ACCEPTED***
H29: Perceived Quality has an effect on Brand Preference	Brand_ Preference	←	Perceived Quality	0,321	0,071	4,499	***	**ACCEPTED**
H30: Brand Awareness/ Association has an effect on Brand Preference	Brand Preference	←	Brand Awarenes s/Associat ion	0,201	0,045	4,518	***	**ACCEPTED**
H31: Brand Loyalty has an effect on Brand Preference	Brand Preference	←	Brand Loyalty	0,46	0,04	11,394	***	**ACCEPTED**

ACCEPTED: p<0,001, ACCEPTED*: p<0,05 REJECTED: p>0,05

5 of the 24-hypotheses proposed that brand management practices have an effect on brand equity were accepted at p<0,001 significance level, 7of 24 hypothesis were accepted at p<0,05 significance level and 12 of 24 hypothesis were rejected (H1,H3,H6,H8, H13,H14,H15,H16,H20,H24,H26,H27).

All hypotheses proposed that brand equity dimensions have effect on hospital preference were accepted at $p<0.001$ significance level.

Standardized regression coefficients of the accepted hypotheses show that;

Price has a significant negative effect on brand loyalty and brand preference. The effect of price on brand loyalty (estimated value: -0,154) is stronger than the effect on brand preference (estimated value: 0.097). Price has no significant effect on perceived quality and brand awareness / association.

Distribution-Promotion has a significant positive effect on perceived quality and brand awareness / association. The effect on perceived quality (estimated value: 0,15) is stronger than the effect on brand awareness / association (estimated value: 0,106). Distribution-Promotion has no significant effect on brand loyalty and brand preference.

Price Promotion has no direct significant effect on any dimensions of brand equity and brand preference

Physical Evidence has a significant positive effect on all three dimensions of brand equity. The highest effect of physical evidence is on perceived quality (estimated value: 0.623), subsequent effects are on brand awareness / association (estimated value: 0.505) and on brand loyalty (estimated value: 0.297). Physical Evidence has no direct significant effect on brand preference.

People has a significant positive effect on all dimensions of brand equity. The highest effect of People is on brand loyalty (estimated value: 0,374), subsequent effects are on brand awareness/association (estimated value: 0,111) and perceived quality (estimated value: 0,109) People has no significant direct effect on brand preference.

Process has a significant positive effect on perceived quality and brand preference. The effect of process on perceived quality (estimated value: 0.14) is stronger than the effect on brand preference (estimated value: 0.086) Process has no significant effect on brand awareness/ association and brand loyalty.

All Brand Equity dimensions have a significant positive effect on brand preference. Brand Loyalty has highest effect on Brand Preference (estimated value: 0.496), it is followed by perceived quality (estimated value: 0.256) and brand awareness /association (estimated value: 0.19).

4.2.2. Test for Indirect Effect of Brand Management Practices on Brand Preference;

Indirect effect describes as the first variable acts on the third variable through the second variable, regardless of whether a direct path is drawn to the third variable or not (Maruyama, 1997). The mediator variable has two types as partial mediator and full mediator according to the effect type. Partial mediator means that, X has a direct effect on the Y output and also has an indirect effect through the M mediator(Shrout & Bolger, 2002). Full mediator means that, X has not direct effect on the Y output but it has indirect effect on Y output through the M mediator.

The results of the test for indirect effects of Brand Management Practices on Brand Preference, and the type of mediator are shown in the table below.

Table: 3 Indirect Effect of Brand Management Practices on Brand Preference;

HYPOTHESES				Direct Effect	p	Indirect Effect	p	Results
H32: Price has indirect effect on brand preference through brand equity dimensions.	Price	→	Brand Equity → Brand Preference	-0,970	**0,01**	-0,092	**0,007**	ACCEPTED (PM)
H33: Distibution-Promotion has indirect effect on brand preference through brand equity dimensions.	Distibution-Promotion	→	Brand Equity → Brand Preference	0,004	0,746	0,086	**0,038**	ACCEPTED (FM)
H35: Price Promotion has indirect effect on brand preference through brand equity dimensions.	Price Promotion	→	Brand Equity → Brand Preference	0,016	0,639	-0,001	0,993	**REJECTED**

H36: Physical Evidence has indirect effect on brand preference through brand equity dimensions.	Physical Evidence	→ Brand Equity	→ Brand Preference	0,013	0,928	0,403	**0,007**	ACCEPTED (FM)
H37: People has indirect effect on brand preference through brand equity dimensions.	People	→ Brand Equity	→ Brand Preference	0,071	0,190	0,234	**0,006**	ACCEPTED (FM)
H38: Process has indirect effect on brand preference through brand equity dimensions.	Process	→ Brand Equity	→ Brand Preference	0,086	**0,033**	0,085	0,089	**REJECTED**

PM: Partial Mediator

FM:Full Mediator

As can be seen from the table above, 4 of 6 hypotheses were accepted at p>0.05 significance level. 2 of 6 hypotheses were rejected.

Price has a direct and indirect effect on brand preference. Therefore, brand equity dimensions are the partial mediator for price.

Distribution-Promotion, physical evidence, and people have no effect on brand preference, but they have an indirect effect on brand preference, through brand equity dimensions as a full mediator.

Price Promotion and Process have no effect on Brand Preference. Hypotheses H35 and H38 were rejected.

5. Conclusion and Discussions:

Hospital brands are an important tool to provide patient's trust in the hospital. Therefore, positive brand equity perception of patients increases the hospital preference. This study analyzed the effect of brand management practices on brand equity and brand preference. Previous studies were mostly carried out in the production sector. This study focused on hospitals.

Brand Management Practices were the independent variables, "Brand Equity" and "Brand Preferences" were dependent variables of the study. In addition, "Brand Equity" has been designated as a mediator variable.

The structural equation model was used to test the hypothesis. Firstly, the direct effects were examined. 12 of the 24 hypotheses proposed that "brand management practices have a direct effect on brand equity and brand preference" were accepted and 12 hypotheses were rejected

3 of the 3-hypothesis proposed that Brand Equity dimensions have a direct effect on Brand Preference were accepted.

After examining direct effects, indirect effects of brand management practices on Brand Preference were tested. As a result of the test, 4 of 6 hypotheses were accepted and 2 hypotheses were rejected.

5.1. Brand Management Practices;

Price; This study found that price has a direct negative effect on "brand loyalty" and "brand preference" In other words, increasing in the prices of health services will reduce the "brand loyalty" and "brand preference" and vice versa. The effect of price on brand loyalty (estimated value: -0,154) is stronger than its effect on brand preference (estimated value: 0.097).

It wasn't found the relationships between price-perceived quality, and price-brand awareness/association.

Therefore, Hospital managers who want to improve their brand loyalty and brand preference could use price strategy, but using price strategy to improve perceived quality and brand awareness/association would be useless for hospitals. However, there are some studies in the literature showing the relationship between price and perceived quality (Chattopadhyay et al.,

2010; Yoo et al., 2000; Mehvish and Salman 2019; Aditi & Muda, 2019), but it must be noted that these studies didn't carry out in the hospital.

*Distribution-Promotion***;** Distribution in hospitals is related to access to health services. Giving health services timely and with more branches is important for patients. Promotion in hospitals is subject to some restrictions. However, patients aware of the hospital's services through their promotions. The result of this study shows that distribution-promotion has a direct effect on perceived quality and brand awareness/association and indirect effect on brand preference. These findings are consistent with previous studies (Chattopadhyay et al., 2010;Yoo at al 2000;Villarejo-Ramos and Sánchez-Franco, 2005).

However, no significant relationship was found between distribution-promotion and brand loyalty. This result differs from the study of Yoo at al (2000).

Based on these results, it can be said that distribution-promotion strategy was an essential tool to create brand awareness and to improve perceived quality and brand preference.

*Price Promotion***;** Price Promotion has no effect on Brand Equity dimensions, neither direct nor indirect effect on Brand Preference. Therefore, Price Promotion is not a good strategy to create brand equity and to increase Brand Preference for the health sector. As like this study, Aaker stated that most sales promotions are easily copied so it is not a preferable way to build brand equity (Aaker D. , 1991). In a similar way, Dharmesh and Devendra (2014) found the promotional campaign is the least important factor for choosing the hospital. In contrast to these studies, Daosue and Wanarat (2019) found a significant positive relationship between sales promotions and brand awareness (Daosue & Wanarat, 2019)**.** However, it should be kept in mind that their research areas on not service sector or hospitals, but on food production.

Physical Evidence; Physical Evidence includes hospital lighting, ventilation, cleaning, equipment in working conditions, employee clothing, etc. A comfort and cozy physical environment for patients and their relatives has an effect positively the Brand Equity. According to the results, Physical evidence has a direct effect on brand equity dimensions and has an only indirect effect on brand preference.

Therefore, as a service marketing mix element, physical evidence could be used to create and elevate brand equity. High brand equity will increase brand preference.

People; According to the result, people has a direct effect on Brand Equity dimensions. People are very important for patient in the health sector. The patient trusts the hospital because of the characteristics of the person providing the service to him/her by his knowledge, interest, kindness, etc. Therefore, hospital managers should give close interest to their employee and motivate them. The brand management process requires the participation of everyone in the organization. So, top management and human resources management should motivate all employees to provide their participation. The effect of people on brand preference is found indirectly. In other words, a hospital employee creates brand equity, and high brand equity results in brand Preference.

Process; Patient is affected by many processes beginning from hospital admission to discharge, even after-discharge process. According to the results of this study, the proper functioning of the processes shapes the quality perception of the patient and effects the hospital preference. However, no significant effect was found on brand loyalty and brand awareness/ association. Therefore, hospital managers who want to increase perceived quality and preferability should give importance to their processes. But the process isn't a proper strategy to increase brand loyalty and to create Brand awareness/association

Findings related to physical evidence, People, and Process consistent with previous studies (Prabowo and Srividadi,2019; Mohamed and Hilal, 2019; Aghaei, Vahedi, Kahreh , & Pirooz, 2014).

5.2. Brand Equity Dimensions

All brand equity dimensions have an effect on brand preference. The most influential brand equity dimension on brand preference was found as brand loyalty, it was followed by perceived quality and brand awareness/association. These results show that high and good perception of hospital brand equity results in a high level of hospital preference.

As a result, hospitals should have strong brand equity to being preferable by patients. Therefore, brand managers should measure their hospital's brand equity and analyze their current situation periodically, as a result of this measurement, they should decide which brand equity subdimension needs to be improved more and which brand management practices should be select in light of this study. In this way effective and efficient use of marketing budget would be provided and return on investments would increase.

6. Recommendation for Future Research

The purpose of this study is to understand the effect of brand management practices in hospitals on dimensions of brand equity and brand preference. In this concept, there was little research, which was carried out in the hospitals, therefore similar researchers, for hospitals should be increased in a different region.

In this study distribution-promotion structure united after exploratory factor analysis. So, in the next studies, distribution-promotion structure should examine as two different structures by adding new variables and found their effects on brand equity and brand preference separately.

The final recommendation is, based on this holistic study, a similar study could be conducted by choosing only one or several subdimensions of brand management practices with more participants. The results of the next studies could be compared by the results of this study.

References

Aaker, D. (1991). *Managing Brand Equity*. USA: The Free Press.

Aaker, D. (1996). Measuring Brand Equity Across Products and Markets. *California Managment Review*, 102-120.

Aditi, B., Hafizah, & Muda, İ. (2019). The Effect of Services, Price Discount and Brand Equity on Consumer Purchase Decisions in Go-Jek a Technology Start-up Transport. *Academic Journal of Economic Studies*, 21-31.

Aghaei, M., Vahedi, E., Kahreh , M., & Pirooz, M. (2014). An examination of the relationship between Services Marketing Mix and Brand Equity Dimensions. *Procedia - Social and Behavioral Sciences*, 865-869.

Andriopoulos, C., & Gotsi, M. (2000). Benchmarking brand management in the creative industry. *Benchmarking: An International Journal, 7*, 360-372.

Bayram, N. (2010). *Introduction to Structural Equation Modeling and Amos Applications.* İstanbul: Ezgi Publishing House.

Beavers, A., Lounsbury, J., Richards, J., Huck, S., Skolits, G., & Esquivel, S. (2013). Practical Considerations for Using Exploratory Factor Analysis in Educational Research. *Practical Assessment, Research & Evaluation, 18*, 1-13.

Bitner, M. (1990). Evaluating Service Encounters The Effects of Physical Surroundings and Employee Responses. *Journal of Marketing, 54*, 69-82.

Bravo, G., Fraj, A., & Martinez, S. (2007). Family as a source of consumer-based brand equity. *Journal of Product & Brand Management, 16*, 188-199.

Charanah, J., & Njuguna, R. K. (2015). The Effects Of Promotional Mix Tools On Brand Equity Among Hospitals In Nairobi County. *International Journal of Sales, Retailing and Market, 4*, 45-51.

Chattopadhyay, T., Shivan, S., & Krishnan, M. (2010). Marketing Mix Elements Influencing Brand Equity and Brand Choice. *Vikalpa, 35*, 67-84.

Chen, C.-F., & Chang, Y.-Y. (2008). Airline brand equity, brand preference, and purchase intentions—The moderating effects of switching costs. *Journal of Air Transport Management, 14*, 40-42.

Christodoulides, G., Cadogan, J., & Veloutsou, C. (2015). Consumer-based brand equity measurement: lessons learned from an international study. *International Marketing Review, 32*, 307-328.

Cobb-Walgren, C., Ruble, C., & Donthu, N. (1995). Brand Equity, Brand Preference, and Purchase Intent. *Journal of Advertising, 24*, 25-40.

Cottler, P., & Pfoertsch, W. (2006). *B2B Brand Management.* Berlin: Springer.

Çapık, C. (2014). Use of Confirmatory Factor Analysis in Validity and Reliability Studies. *Journal of Anadolu Nursing and Health Science, 17*, 196-205.

Daosue, C., & Wanarat, S. (2019). The Effects Of Advertising and Sales Promotion On Brand Awareness For a Food Product Brans In Wholesale Shops, Bangok And Metropolitan Areas . *ABAC Journal*, 57-75.

DeGeeter, M. (2009, 12). *Changing perception: Hospital brand as a design Strategy*. Retrieved 10 September, 2017 Healthcare Design: https://www.healthcaredesignmagazine.com/architecture/changing-perception-hospital-brand-design-strategy/

Demir, E., Saatçioğlu, Ö., & İmrol, F. (2016). Investigation of Educational Research Published in International Journals in Terms of Normality Assumptionsi. *Curr Res Educ, 2*, 130-148.

Dharmesh,, M., & Devendra, S. (2014). Factors Affecting Patients' Decision. *Strategii Manageriale*, 5-10.

Efanny, V., Haryanto, J., Kahif, M., & Vidyanto, H. A. (2018). The relationship between marketing mix and retailer-perceived brand equity. *IMP Journal*, 192-208.

Field, R., Bergiel, B., Giesen , J., & Field, C. (2012). Branding: perceptual effects on consumer evaluations. *Competitiveness Review: An International Business Journal*, *22*, 251-260.

Graver, M., & Mentezer, J. (1999). Logistics Research Methods:Employing Structural Equation Modeling To Test for Construct Validity. *Journal of Business Logistics, 20*, 33-57.

Hilal, M. M. (2019). The Effects of Services Marketing Mix Elements on Brand Equity and Customer Response of Tourists Hotels in the East Coast of Sri Lanka. *International Journal of Innovative Technology and Exploring Engineering*, 249-259.

Hoon, K., Kang Sik, K., Dong Yul, K., Jong Ho, K., & Suk hou, K. (2008). Brand equity in hospital marketing. *Journal of Business Research* , 75-82.

Hussey, P., Wertheimer, S., & Mehrotra, A. (2013). The Association Between Health Care Quality and Cost . *Annals of Internal MEdicine*, 27-35. .

Jung, J., & Sung, E. (2008). Consumer-based brand equity Comparisons among Americans and South Koreans in the USA and South Koreans in Korea. *Journal of Fashion Marketing and Management, 12*, 24-35.

Karafakıoğlu, M. (1998). *Healthcare Marketing,* Dönence Pyblishing House, İstanbul

Karbalaei, M., Abdi, A., Malmir, R., Dehghanan, H., Pirnejad, S., & Jafari, S. (2013). Investigating of Brand Equity on Hospital Image. *Research Journal of Applied Sciences, Engineering and Technology, 6*, 3888-3894.

Kayaman, R., & Araslı, H. (2007). Customer based brand equity: evidence from the hotel industry. *Managing Service Quality: An International Journal, 17*, 92-109.

Keller, K. L. (2012). *Strategic Brand Management Building, Measuring and Managing Brand Equity, 4th Edition.* USA: Prentice Hall.

Kemp, E., Ravi, J., & Becerra, E. (2014). Healthcare branding: developing emotionally based consumer brand relationships. *Journal of Services Marketing, 28*, 126 - 137.

Kim, W., & Kim, H.-B. (2004). Measuring Customer based Restaurant Brand Equity. *Cornell Hotel and Restaurant Administration Quarterly, 45*, 115-131.

Kurtuluş, K. (2010). *Research Methods,* Türkmen Bookstand, İstanbul.

Latha, R. (2016). Service Based Brand Equity And Its Impact On Brand Preferences And Purchase Intention:A Study Of Customers Of Health Insurance In Thanjavur District. *International Jurnal Of Research In Commerce and Management, 7*, 47-53.

Mangini, M. K. (2002). Branding 101. *Marketing Health Services, 22*, 20-23.

Maruyama, G. (1997). *Basics Of Structual Equation Modeling.* USA: SAGE Publications.

Mehvish, U., & Sohnia, S. (2019). The Role of Price and Promotion in Creating Brand Equity Leading To Brand Love. *Lahore Journal of Business*, 1.

Myers, C. (2003). Managing Brand Equity: A Look at The İmpact of Attributes. *Journal of Product and Management, 12*, 39-51.

Napirah, M., Rau, M., & Hadijah. (2016). The Relationship Between Marketing Mix and Patient Loyalty. *Public Health of Indonesia*, 125-137.

Nazari, M., Mira, S., & Esmaiely, S. (2018). The Relationship between Price Promotion and Customer-Based Brand Equity Case Study: Travel Agencies of Tehran. *Muṭālı́āt-i Mudīriyyat-i Gardishgarī*, 57-82.

Prabowo, H., & Sriwidadi, T. (2019). The Effect of Marketing Mix toward Brand Equity at Higher Education Institutions: A Case Study in BINUS Online Learning Jakarta. *Pertenika Journals*, 1609 - 1616.

Shrout, P., & Bolger, N. (2002). Mediation in Experimental and Nonexperimental Studies:New Procedures and Recommendations. *Psychological Methods, 7*, 422-445.

Siwa Wunu, L., Alhabsji, T., Notosubroto, S., & Kusumawati, A. (2018). Effects Of Intensıve Dıstrıbutıon And Sales Promotıon On Corporate Image And Consumer-Based Brand Equıty: A Study On Suzukı Car Consumers Of Pt. Surya Batara Mahkota, East Nusa Tenggara, Indonesıa. *Russian Journal of Agricultural & Socio-Economic Sciences*, 172-184.

Soleimani, A., & Sedaghat, S. (2016). Advertising And Sales Promotion Effects On Brand Equity: A Case Study Of Iran Insurance Company. *Ng-Journal of Social Development,* , 204-217.

Sreenivas, T., Srinivasarao, B., & Srinivasa Rao, U. (2013). An Analysis On Marketing Mix in Hospitals. *International Journal of Advanced Research in Management and Social Sciences, 2*, 187-207.

Tengilimoğlu, D. (2000). Marketing Mix Elements in Health Care Marketing. *Ankara University, Journal of Health Science Faculty , 55*, 187-202.

Tengilimoğlu, D. (2001). Factors Affecting To Hospital Preference: A Case Study . *Gazi University Journal of İİBF , 1*, 85-98.

Tong, X., & Hawley, J. (2009). Measuring customer-based brand equity:empirical evidence from the sportswear market in China. *Journal of Product & Brand Management, 18*, 262-271.

Turkey Statistical Office. (2015), Turkey Statistical Office: Main Statistics, Retrieved 10 September, 2017 http://tuik.gov.tr/UstMenu.do?metod=temelist

Tüfekçi, N., & Asığbulmuş, H. (2016). The Factors Affecting Patient Satisfaction and Patient Preference: An Example of Isparta Province . *Journal of Current Researches on Health Sector, 6*, 71-92.

Vijande, M., Lanza, A., Álvarez, L., & Martín, A. (2011). The brand management system and service firm competitiveness. *Journal of Business Research, 66*, 148-157.

Villarejo Ramos, A. F., & Sanchez Franko, M. J. (2005). The impact of marketing communication and price promotion on brand equity. *Brand Management*, 431–444.

Vinh, T., & Huy, L. (2016). The Relationships among Brand Equity, Brand Preference and Purchase İntention: Empiricial Evidence from the Motorbyke Market in Vietnam. *International Journal of Economics and Finance, 8*, 75-84.

Vita, E., Jony, H., Muhammad, K., & Hanif Adinugroho, V. (2018). The relationship between marketing mix and retailer-perceived brand equity. *IMP Journal*, 192-208.

Völckner, F., & Hofmann, J. (2007). The price-perceived quality relationship:A meta-analytic review and assessment of its determinants. *Marketing Letters, 18*, 181-196.

Washburn, J., & Plank, R. (2002). Measuring Brand Equity: An Evaluation of a Consumer-Based Brand Equity Scale. *Journal of Marketing Theory and Practice, 10*, 46-62.

Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal Of Business Research*, *52*, 1-14.

Yoo, B., Donthu , N., & Lee, S. (2000). An Examination of Selected Marketing Mix Elements and Brand Equity. *Journal of the Academy of Marketing Science, 28*, 195-2011.

https://dergipark.org.tr/tr/pub/ijhmt Doi Number: https://doi.org/10.31201/ijhmt.789711

Int Journal Of Health Manag. And Tourism 2020, 5(2), 170-180

I JHMT Editorial

Internatıonal Journal Of Health Management And Tourism

THE ROLE OF PATIENT ACTIVATION AND PERSONAL FACTORS ON PATIENT-PHYSICIAN INTERACTION

Fedayi YAĞAR* , Mehveş TARIM**

* Research Assistant,Health Management Department,Kahramanmaraş Sütcü İmam University,Turkey

fedayiyagar@hotmail.com

ORCİD Number: 0000-0002-3436-6583

**Prof.Dr., Marmara University, Faculty of Health Sciences

mtarim@marmara.edu.tr

ORCID Number: 0000-0002-3726-9439

Received: 19.06.2020

Accepted: 31.08.2020

Research Article

Abstract: This study examines whether the patient-physician interaction level differs according to some personal factors of the patients. 244 patients who came to the university hospital between certain dates to be treated constitute the sample of the study. In the research, a moderately significant positive relationship was found between patient-physician interaction and patient activity and educational status. It was observed that there was a negative and low level relationship between age variable and patient-physician interaction. It has been determined that the individuals with health insurance have better interaction with physicians. No significant difference was found between gender and income status and patient-physician interaction. As a result, this study shows that patient-physician interaction perceptions in healthcare settings vary according to personal patient characteristics. We think that these differences provide important evidence in designing policies to improve health systems at the individual application level.

Key Words: Patient Physician Interaction, Patient Activation, Age, Education Level, Health Insurance

1. Introduction

Interaction between the patient and the physician has been classified in several studies (Szasz and Hollender, 1956; Emanuel and Emanuel, 1992; Roter and Hall, 2006). When we look at these classifications, we see that there are two terminal points. We can state the first point as the situation where the doctor is dominant. This point defines “Activity-Passivity Model” (Szasz and Hollender, 1956), “Paternalistic Model” (Emanuel and Emanuel, 1992) and “Paternal Communication” (Roter and Hall, 2006). These approaches focus on information asymmetry between the patient and the physician. The patient plays a more passive role in the decision making process (Budych et al., 2012; Yağar, 2019). On the other extreme point, patient is expected to have a more active role. This point is defined as "Mutual Participation Model" (Szasz and Hollender, 1956), "Interpretive Model" (Emanuel and Emanuel, 1992) and "Consumer Communication" (Roter and Hall, 2006). When we look at the present, it can be said that the patient-centered approach, expressed as the second point, is preferred.

The interaction between the patient and the physician has three main purposes. These; creating a good interpersonal relationship, strengthening the exchange of information and involving patients in the decision making process (Berry, 2007). Particularly, it is very important to ensure the participation of patients in the process. Studies show that patients participating in the process are more satisfied (Jalil et al., 2017; Chen et al., 2008; Boissy et al., 2016) and feel more loyalty (Berry et al., 2008; Kuteyi et al., 2010; Razzaghi and Afshar, 2016). Likewise, it is known that patients who think that they participate in the decisions about their treatment have positive results in their health outcomes (such as reduction of pain felt or control of hemoglobin A1c) (Maly et al., 2004; Hojat et al., 2011; Birkhaur et al., 2017). The investigated studies make it clear why the interaction between the patient and the physician should be good. In this study, it is aimed to examine some variables (personal characteristics and activity levels of patients) that may be related to the level of interaction in order to improve the process.

2. Method

2.1. Study Population and Sampling

It is a cross-sectional study. Necessary permissions were obtained for the implementation of the study (27/11/2019-E.49354). The population of the study consists of the patients who came to the university hospital in Kahramanmaraş on 23.12.2019-08.01.2020 for treatment and stated that they have a chronic illness. KSU Training and Research Hospital has been serving since 30.10.2000. In 2013, it moved to its new building in KSÜ Avşar Campus, where 5 polyclinics, 9 dormitory blocks, conference hall and administrative building are located (KSU, 30.08.2020). The total number of beds in the hospital is 516. In terms of health personnel, a total of 690 people are working, including 242 nurses, 238 physicians, 207 other health personnel and 3 midwives (Kahramanmaraş Governorship, 30.08.2020).

The sample of the study consisted of 244 patients who agreed to participate in the study and stated that they were over 18 years old. The fact that the patients answered the questionnaire in the hospital environment can be expressed as an important matter in the study. This situation can affect the objective evaluation. However, evaluations of the patients were taken immediately after receiving the service. With this approach, it was thought that the true opinions of the patients could be revealed better. Likewise, in order to reduce the impact of the hospital environment, the evaluations of patients waiting mostly in the hospital garden were taken into account.

2.2. Data Collection Instruments

The scale used in the study consists of three parts. In the first part, there are questions in which the descriptive characteristics of the patients are determined. In this section, patients were asked about their ages, genders, educational levels, health insurance and income status. In the second part, "Patient Activation Measure (PAM)" developed by Hibbard et al. (2004) was used to determine the activity levels of the patients. The Turkish validity and reliability of the 13-question scale (statements were evaluated between 1 = strongly disagree and 4 = strongly agree) was made by Koşar and Besen (2019). In our study, the reliability coefficient of the scale (Cronbach Alpha) was found to be 0.864. In the third section, "Patient-Physician

Interaction Scale (PPI)" developed by Maly et al. (2004) was used to determine the interaction of patients with their physicians. The Turkish validity and reliability of the 10-question scale ((statements were evaluated between 1 = not sure at all and 5 = very sure) was made by Akbolat et al. (2016). In our study, the reliability coefficient of the scale (Cronbach Alpha) was found to be 0.882.

2.3. Data Analysis

SPSS 22.0 version was used to analyse the data. Non-parametric tests were used in the study since the data on patient-physician interaction did not show a normal distribution. "Mann-Whitney U Test" and "Spearman Correlation Test" were used to evaluate the data.

3. Results

Data on the descriptive characteristics of the participants are shown in Table 1. It was observed that approximately 59% of the patients were women, most of them had health insurance (83.6%) and the most university graduates (41.8%) participated in the study. In addition, it was determined that the average age of the participants was 41,09±17,18 and the average income was 2761,00-1947,58 TL (Turkish Lira).

Table 1. Descriptive Characteristics of the Participants

Participants	n	%	Participants	n	%
Gender			**Education Level**		
Female	143	58,6	Illiterate	2	0,8
Male	101	41,4	Literate	14	5,7
Health Insurance			Primary school	17	7,0
Yes	204	83,6	Middle School	27	11,1
No	39	16,0	High school	63	25,8
			University	102	41,8
			Master and PhD	19	7,8
Regular Sports			**Smoking**		
Yes	93	40,9	Yes	84	35,0
No	139	59,1	No	156	65,0

PPI levels of patients with health insurance (p=0,000; P<0,05), regular sports (p=0,000; P<0,05) and non-smoking patients (p=0,000; P<0,05) were found to be better (Table 2). On the other hand, it was observed that the interaction between the patient and the physician did not differ according to the gender variable.

Table 2. Examining the Relationship between Gender, Smoking, Sports, Health Assurance and PPI

		PPI		
		Mean Rank	U	P
Gender	Female (n=143)	119,49	6814,000	0,785
	Male (n=101)	121,97		
Health Insurance	Yes (n=200)	127,26	2449,000	0,000*
	No (n=39)	87,79		
Regular Sports	Yes (n=93)	151,54	3204,500	0,000*
	No (n=139)	93,05		
Smoking	Yes (n=84)	89,11	3915,500	0,000*
	No (n=156)	137,40		
P < 0,05				

Table 3 shows that there is a moderately significant positive relationship between patient-physician interaction and patient activity (r = 0.579; p <0.01) and educational level (r = 0.418; p <0.01). Likewise, there was a negative and low-level relationship between age variable and PPI (r = -0,156; p <0.05).

Table 3. Examining the Relationship between PAM, Income Status, Education Level, Age and PPI

		PAM	Income Status	Education Level	Age
PPI	Pearson "r"	0,579**	0,097	0,418**	-0,156*
	p	0,000	0,221	0,000	0,017
	N	240	161	240	233
**p<0,01; *p<0,05					

4. Discussion

This study examined the relationship between the patient's personal characteristics and activity levels and the patient-physician interaction level. The findings reveal that the level of interaction between the patient and the physician differs according to patient perceptions.

Individuals who think that they have the knowledge, skills and confidence in healthcare are expected to take more actions that improve their health. This shows that individuals have high levels of activity (Mosen et al., 2007). This level is desired especially in chronic diseases. Researches on the subject show that it positively affects both health outcomes (Parchman et al., 2010; Kim et al., 2016) and patient-physician relations (Alexander et al., 2012; Alegria et

al., 2009). In our research, a result supporting the literature was found. A positive correlation was found between patient activity and PPI ($r = 0.579$; $p < 0.01$).

It is known that elderly patients with high level of relationship with the physician are more stable in the treatment process (Maly et al., 2004). On the other hand, studies show that the communication of individuals with the physician decreases as they get older (Belcher et al., 2006; Liang et al., 2013). In our study, it was found that there is a low level of significant relationship between the age variable and PPI ($r = -0.166$; $p < 0.05$). Although the level of relationship we obtained is low, it seems to support the literature.

In our study, it was determined that the individuals with health insurance were higher in relation to the physician, while the income status and gender variables were not related to PPI. Research conducted by DeVoe et al. (2009) supports our conclusion about health insurance. In this study, it was emphasized that the interaction of individuals without insurance with physicians is not good. In the same study, the gender variable was also taken into consideration and it was stated that men communicate better than women. In the study conducted by Jensen et al. (2010), the income status variable was taken into consideration and it was stated that PPI levels of high income individuals are better.

In a study conducted in 31 countries by Aelbrecht et al. (2019) on approximately fifty thousand participants, it was emphasized that the level of PPI increases as the level of education increases. Likewise, in a study conducted by Lu and Zhang (2019), it was observed that individuals with high education level participated more in the decision making process with the physician. In our research, a similar result was found and a positive significant relationship was found between the education level and PPI.

In summary, we observed that young individuals, individuals with higher education levels, individuals with health insurance and individuals with high patient activity levels interact better with physicians. From the perspective of the patient, with the short-term trainings to be given, both the patients' level of activity can be increased and the elderly individuals can be better interacted. Researches provide evidence that education can play an important role at this point (Worrall et al., 1998; Guzman and Dino, 2020; Williams et al., 2005; Remmers et

al., 2009). On the other hand, the role of physicians in this interaction should not be forgotten. In this process, physicians should pay attention to the patient's opinions, try to communicate better and be able to empathize.

This study includes the patients who come to Kahramanmaraş Sütçü İmam University Training and Research Hospital for treatment between certain dates. Therefore, the results of the study reflect the views of the patients who applied to the hospital, and it is unlikely that these findings will be generalized to all patients. However, it can be said that the results obtained can provide important clues in revealing the relationship between variables. Finally, some suggestions have been made for future research. First, a larger sample can be studied to increase the generalization of the results. Second, a model can be created that takes into account the different personal characteristics of the patients. Third, studies that take patient and physician evaluations into account can be conducted to provide a more holistic perspective.

References

Aelbrecht, K., Hanssens, L., Detollenaere, J., Willems, S., Deveugele, M. and Pype, P. (2019). Determinants of physician–patient communication: The role of language, education and ethnicity. *Patient Education and Counseling*, 102(4), 776-781. https://doi.org/10.1016/j.pec.2018.11.006

Akbolat, M. (2016). Sağlık okuryazarlığı hasta-hekim ilişkisini etkiler mi?: Sakarya ilinde bir araştırma. *TAF Preventive Medicine Bulletin*, 15(4), 354-362. https://www.doi.org/10.5455/pmb.1-1455008901

Alegría, M., Sribney, W., Perez, D., Laderman, M. and Keefe, K. (2009). The role of patient activation on patient–provider communication and quality of care for US and foreign born Latino patients. *Journal of General Internal Medicine*, 24(3), 534-541. https://www.doi.org/10.1007/s11606-009-1074-x

Alexander, J. A., Hearld, L. R., Mittler, J. N. and Harvey, J. (2012). Patient–physician role relationships and patient activation among individuals with chronic illness. *Health Services Research*, 47(3), 1201-1223. doi:10.1111/j.1475-6773.2011.01354.x

Belcher, V. N., Fried, T. R., Agostini, J. V. and Tinetti, M. E. (2006). Views of older adults on patient participation in medication-related decision making. *Journal of General Internal Medicine*, 21(4), 298-303. doi:10.1111/j.1525-1497.2006.00329.x

Berry, L. L., Parish, J. T., Janakiraman, R., Ogburn-Russell, L., Couchman, G. R., Rayburn, W. L. and Grisel, J. (2008). Patients' commitment to their primary physician and why it matters. *The Annals of Family Medicine*, 6(1), 6-13. doi:10.1370/afm.757

Berry, D. (2007). *Health communication: Theory and practice*. Typeset by Refine Catch Ltd, Bungay.

Birkhäuer, J., Gaab, J., Kossowsky, J., Hasler, S., Krummenacher, P., Werner, C. and Gerger, H. (2017). Trust in the health care professional and health outcome: a meta-analysis. *Plos One*, 12(2), 1-13. doi:10.1371/journal.pone.0170988

Boissy, A., Windover, A. K., Bokar, D., Karafa, M., Neuendorf, K., Frankel, R. M. and Rothberg, M. B. (2016). Communication skills training for physicians improves patient satisfaction. *Journal of General Internal Medicine*, 31(7), 755-761. doi:10.1007/s11606-016-3597-2

Budych, K., Helms, T. M. and Schultz, C. (2012). How do patients with rare diseases experience the medical encounter? Exploring role behavior and its impact on patient–physician interaction. *Health Policy*, 105(2-3), 154-164. doi:10.1016/j.healthpol.2012.02.018

Chen, J. Y., Tao, M. L., Tisnado, D., Malin, J., Ko, C., Timmer, M. and Kahn, K. L. (2008). Impact of physician–patient discussions on patient satisfaction. *Medical Care*, 46(11), 1157-1162. doi:10.1097/MLR.0b013e31817924bc

DeVoe, J. E., Wallace, L. S. and Fryer, G. E. (2009). Measuring patients' perceptions of communication with healthcare providers: do differences in demographic and socioeconomic

characteristics matter?. *Health Expectations*, 12(1), 70-80. doi:10.1111/j.1369-7625.2008.00516.x

Emanuel, E. J. and Emanuel, L. L. (1992). Four models of the physician-patient relationship. *JAMA*, 267(16), 2221-2226. doi:10.1001/jama.1992.03480160079038

Guzman, A.B. and Dino, M.J.S. (2020). Examining the role of Filipino elderly attitudes toward computer and internet on their behavioral intention for telehealth participation, *Educational Gerontology*, 46(3), 140-149. doi:10.1080/03601277.2020.1715589

Hibbard, J.H., Mahoney, E.R., Stockard, J., Tusler, M. (2005). Development and testing of a short form of the patient activation measure. *Health Services Research*, 40(6), 1918-30. doi:10.1111/j.1475-6773.2005.00438.x

Hojat, M., Louis, D. Z., Markham, F. W., Wender, R., Rabinowitz, C. and Gonnella, J. S. (2011). Physicians' empathy and clinical outcomes for diabetic patients. *Academic Medicine*, 86(3), 359-364. doi:10.1097/ACM.0b013e3182086fe1

Jalil, A., Zakar, R., Zakar, M. Z. and Fischer, F. (2017). Patient satisfaction with doctor-patient interactions: a mixed methods study among diabetes mellitus patients in Pakistan. *BMC Health Services Research*, 17(1), 1-13. doi:10.1186/s12913-017-2094-6

Jensen, J. D., King, A. J., Guntzviller, L. M. and Davis, L. A. (2010). Patient–provider communication and low-income adults: Age, race, literacy, and optimism predict communication satisfaction. *Patient Education and Counseling*, 79(1), 30-35. doi:10.1016/j.pec.2009.09.041

Kahramanmaraş Governorship. (2020). Distribution of health institutions, bed availability and number of health personnel. www.kahramanmaras.gov.tr/saglik, (Date of access: 30.08.2020).

Kosar, C. and Besen, D.B. (2019). Adaptation of a patient activatıon measure (PAM) into Turkish: reliability and validity test. *African Health Sciences*, 19(1), 1811-20. doi:10.4314/ahs. v19i1.58

KSU. (2020). Presentation of the institution. hastane.ksu.edu.tr/Default.aspx?SId=18876, (Access Date: 30.08.2020)

Kuteyi, E. A., Bello, I. S., Olaleye, T. M., Ayeni, I. O. and Amedi, M. I. (2010). Determinants of patient satisfaction with physician interaction: a cross-sectional survey at the Obafemi Awolowo University Health Centre, Ile-Ife, Nigeria. *South African Family Practice*, 52(6), 557-562. doi:10.1080/20786204.2010.10874047

Liang, C. Y., Wang, K. Y., Hwang, S. J., Lin, K. C. and Pan, H. H. (2013). Factors affecting the physician–patient relationship of older veterans with inadequate health literacy: an observational study. *Br. J. Gen. Pract.*, 63(610), 354-360. doi:10.3399/bjgp13X667222

Lu, X. and Zhang, R. (2019). Impact of physician-patient communication in online health communities on patient compliance: cross-sectional questionnaire study. *Journal of Medical Internet Research*, 21(5), 1-18. doi:10.2196/12891

Maly, R. C. (1998). Perceived efficacy in patient-physician interactions (PEPPI): validation of an instrument in older persons. *Journal of the American Geriatrics Society*, 46(7), 889-894. doi:10.1111/j.1532-5415.1998.tb02725.x

Maly, R. C., Leake, B. and Silliman, R. A. (2004). Breast cancer treatment in older women: impact of the patient-physician interaction. *Journal of the American Geriatrics Society*, 52(7), 1138-1145. doi:10.1111/j.1532-5415.2004.52312.x

Mosen, D. M., Schmittdiel, J., Hibbard, J., Sobel, D., Remmers, C. and Bellows, J. (2007). Is patient activation associated with outcomes of care for adults with chronic conditions?. The *Journal of Ambulatory Care Management*, 30(1), 21-29. doi:10.1097/00004479-200701000-00005

Parchman, M. L., Zeber, J. E. and Palmer, R. F. (2010). Participatory decision making, patient activation, medication adherence, and intermediate clinical outcomes in type 2 diabetes: a STARNet study. *The Annals of Family Medicine*, 8(5), 410-417. doi:10.1370/afm.1161

Razzaghi, M. R. and Afshar, L. (2016). A conceptual model of physician-patient relationships: a qualitative study. *Journal of Medical Ethics and History of Medicine*, 9(14), 1-7.

Remmers, C., Hibbard, J., Mosen, D. M., Wagenfield, M., Hoye, R. E. and Jones, C. (2009). Is patient activation associated with future health outcomes and healthcare utilization among patients with diabetes?. *The Journal of Ambulatory Care Management*, 32(4), 320-327. doi:10.1097/JAC.0b013e3181ba6e77

Roter, D.L. and Hall, J.A. (2006). *Doctors Talking with Patients / Patients Talking with Doctors Improving Communication In Medical Visits*. Second Edition. Greenwood Publishing, Connecticut.

Szasz, T. S. and Hollender, M. H. (1956). A contribution to the philosophy of medicine: the basic models of the doctor-patient relationship. *AMA Archives of Internal Med*icine, 97(5), 585-592. doi:10.1001/archinte.1956.00250230079008

Williams, G. C., McGregor, H., Zeldman, A., Freedman, Z. R., Deci, E. L. and Elder, D. (2005). Promoting glycemic control through diabetes self-management: evaluating a patient activation intervention. *Patient Education and Counseling*, 56(1), 28-34. doi:10.1016/j.pec.2003.11.008

Worrall, L., Hickson, L., Barnett, H. and Yiu, E. (1998). An evaluation of the keep on talking program for maintaining communication skills into old age. *Educational Gerontology*, 24(2), 129-140. doi:10.1080/0360127980240203

Yağar, F. 2019. What are the factors affecting the interaction between the patient and the physician?. *International Journal of Health Management and Tourism*, 4(2), 129-139. doi:10.31201/20ijhmt.595677