The Influence of Health and Beauty Perception on Medical Tourism Intentions: A Learning Lesson from Korea for Hong Kong

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SECTION ONE: INTRODUCTION

Background

- Medical tourism – the process of leaving home for treatments and care abroad.
- The classification of medical tourism is broadened, such as cosmetics surgery, SPA, and alternative medicine.
- Costs of treatment are a powerful draw (See Chart 1).
- Worth up to US$100 billion and over 20 per cent growth a year.
- Asian countries, like Korea, India, Malaysia, Singapore and Thailand, are new destinations for medical tourism.

Health Care Cost Saving (Chart 1)

Cost comparison for selected surgeries

SURGERY	U.S.	INDIA	THAILAND	SINGAPORE
Heart bypass	$130,000	$10,000	$11,000	$18,500
Heart valve replacement	$160,000	$9,000	$10,000	$12,500
Angioplasty	$57,000	$11,000	$13,000	$13,000
Hip replacement	$43,000	$9,000	$12,000	$12,000
Hysterectomy	$20,000	$3,000	$4,500	$6,000
Knee replacement	$40,000	$8,500	$10,000	$13,000
Spinal fusion	$62,000	$5,500	$7,000	$9,000

SOURCE: American Medical Association

TRIBUNE GRAPHIC

- These new developments in medical tourism could be concerned with people's thinking and attitude toward health and beauty.
- **Health and beauty perception is reflected in medical tourism.**
- **Korea** is making many efforts to improve medical tourism industry through the support from Korean governments have emphasized provision of Korean traditional medicine, cosmetic surgery.

Research Gap and Objective

- Insufficient research about health and beauty perception in tourism research field.
- To analyze the effect of ***health and beauty perception*** on ***intention toward medical tourism***.
- To provide practical implication for developing medical tourism in Korea
- Make recommendations on medical tourism for Hong Kong.

SECTION TWO: Model and Hypotheses

Medical Tourism

- **Medical tourism** can be broadly defined as provision of medical care in collaboration with the tourism industry for improving one's health.
- Medical tourism can be understood as part of "health tourism".
- **Health tourism** was defined by the International Union of Tourist Organizations (IUTO), as "the provision of health facilities utilizing the natural resources of the country, in particular mineral water and climate"(IUTO, 1973).

- Medical Tourism is the tourism services based on healthcare and nursing, sickness and health, and recovery and rehabilitation. It is the act of traveling to obtain medical and beauty care.

- Figure 1 demonstrates that there are three categories of medical tourism: medical tour, health/wellness tour and beauty care tour.

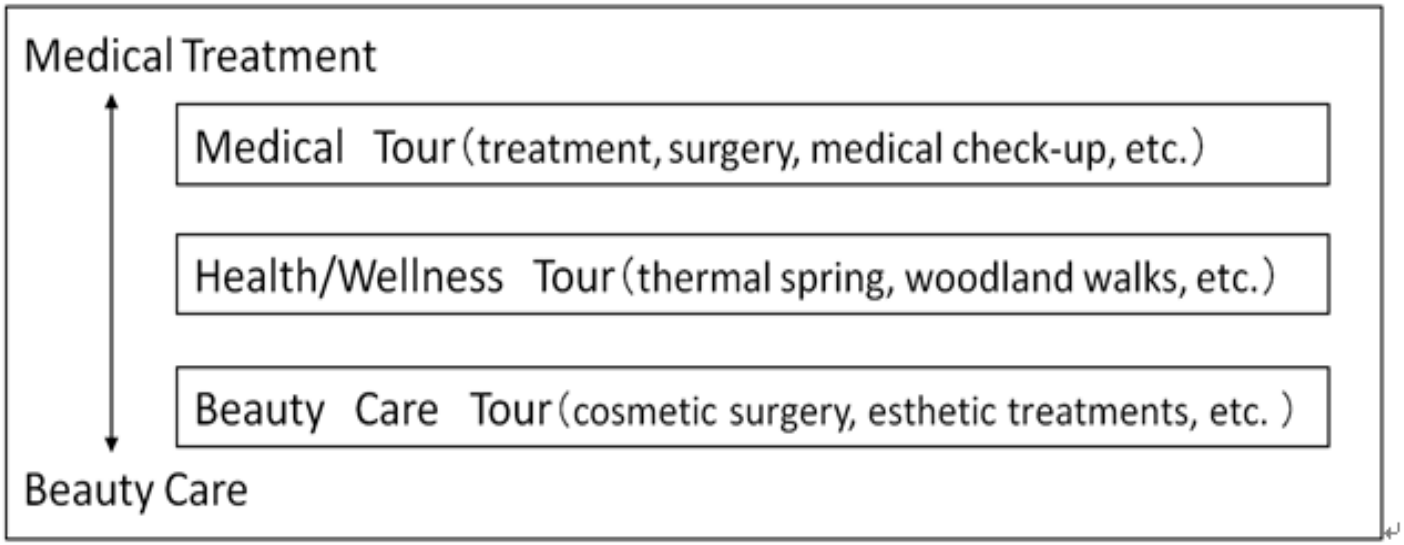

Figure 1 Categories of Medical Tourism

Health and Beauty Perception

- Health and beauty perception can be explained by the concept of "Health Belief".

- The **Health Belief Model (HBM)** is by far the most important and well established health theory in the public health domain.

- This model can help predict and understand the behavior and attitudes of people seeking medical care (Mikhail, 1981).

- Drawing on the original HBM (Becker, 1974) , a modified HBM (Figure 2) is established as a theoretical framework for this study. It consisted of four concepts:

- (a) perceived susceptibility, a person's subjective perception of the risk of acquiring an illness or disease;
- (b) perceived severity, a person's feelings on the seriousness of contracting an illness or disease;
- (c) perceived benefit, a person's feelings on the benfits to performing a recommended health action; and
- (d) perceived barrier, a person's feelings on the obstacles to performing a recommended health action

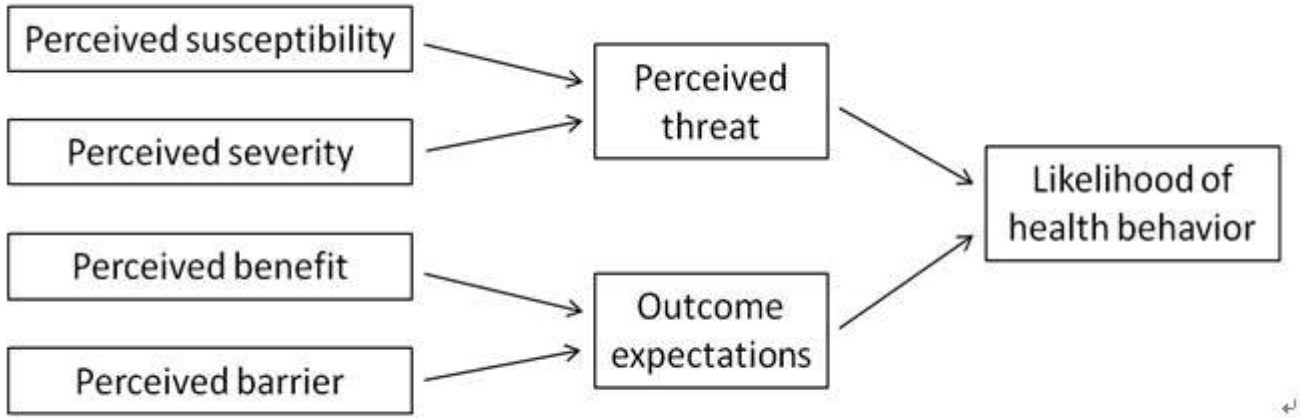

Figure 2 Health Belief Model

Proposed Hypotheses

- H1: Health and beauty perception has a positive significant impact on **medical tour intentions** in Korea.

- H2: Health and beauty perception has a positive significant impact on **beauty tour intentions** in Korea.

SECTION THREE: RESEARCH METHOLDOLGY

Research Design

- Data for this study were gathered from **Korean tertiary institution students** during June in 2014.
- The purpose of the study was explained briefly to tertiary institution students by interviewers. The returned questionnaires were coded into the SPSS 20.0. version.
- First, a **descriptive analysis** was conducted to examine demographic and medical tourism specific characteristics.
- Second, an **exploratory factor analysis** was conducted to establish validity of the measurement scale.
- Third, **multiple regression analyses** were conducted to examine the impact of health and beauty perception on medical tourism intensions.

Questionnaire

- The questionnaire consisted of four parts:
- a)demographic and medical tourism specific characteristics (7 items)
- b)health and beauty perception (14 items)
- c)intensions toward medical tourism (5 items).
- A 5-point Likert scale was used with 1 being the lowest(strongly disagree/not at all satisfied) and 5 the highest(strongly agree /extremely satisfied).
- Data are collected from around 400 tertiary students in Korea; however, only data of 209 tertiary students are valid for the study.

SECTION FOUR: RESULTS

Reliability and Validity of the Survey Instrument

- An exploratory factor analysis was conducted to determine the dimensions of **health and beauty perception**. The results are shown in **Table 1**.
- Scales for health and beauty perception had a Cronbach's coefficient above 0.70.
- Total distributed explanatory power of the dimensions was 79.910%.
- Each item's factor loading was greater than 0.50. Bartlett's test for each construct was statistically significant at the $p < 0.001$ level. The items used for each construct explained a substantial amount of the variance of their constructs.
- It was appropriate to proceed with the regression analysis that examined the relationships between **health and beauty perception** and **intensions** variables.

Table1. - Factor analysis for health and beauty perception factors

Dimensions	Items	Factor loading	Eigen-value	% of Variance	Cronbach's alpha
Anxiety	Barrier to daily life by disease	.884	5.975	42.677	.955
	Agony of disease	.859			
	Inconvenience to family by disease	.840			
	Worry about being in good shape	.836			
	Difficulty of recovery to health	.829			
	Worry about skin care	.783			
Korean medicine Benefit	Medical effects of Korean medicine	.894	1.711	12.222	.928
	Aesthetic effects of Korean medicine	.819			
Thermal springs Benefit	Aesthetic effects of thermal springs	.914	1.324	9.456	.827
	Medical effects of thermal springs	.907			
Barrier	Annoyingness of medical check-up	.905	1.163	8.307	.859
	Annoyingness of hospital procedure	.645			
Susceptibility	Worry about disease by bad habit	.862	1.015	7.248	.798
	Worry about disease by seeing sufferers	.767			
Total variance explained=79.910, KMO=.873, Bartlett's Test(df)=3.812e3(91)***					

***p<.001

- An exploratory factor analysis was conducted to determine the dimensions of **intensions** toward **medical tourism factors**.
- It would be seen on **Table 2**. Scales for intensions have a Cronbach's coefficient above 0.70.
- Total distributed explanatory power of intension factors was 83.958%. Each item's factor loading was greater than 0.70.
- Bartlett's test for each construct was statistically significant at the p< 0.001 level. The items used for each construct explained a substantial amount of the variance of their constructs.

Table 2. Factor analysis for intensions toward medical tourism factors

Dimensions	Items	Factor loading	Eigen-value	% of Variance	Cronbach's alpha
Medical tour	Intensions to medical check-up tour	.928	3.022	60.449	.852
	Intensions to medical treatment tour	.899			
	Intensions to Korean medicine tour	.801			
Beauty tour	Intensions to aesthetic care tour	.931	1.175	83.958	.780
	Intensions to Korean medicine tour for beauty	.781			
Total variance explained=83.958, KMO=.720, Bartlett's test(df)=1.201e3(10)***					

***p<.001

Test of Hypotheses

- **H1: Health and beauty perception has a positive significant impact on medical tour intentions in Korea**
- To test this hypothesis, **medical tour intentions** was regressed on Anxiety, Korean medicine benefit, Thermal springs benefit, Barrier and Susceptibility dimensions of health and beauty perception. The multiple regression results are shown in **Table 3**.
- The variance inflation factor (VIF) indicated less than 2, indicating no evidence of multicollinearity problems for any of the predictor variables.
- Three dimensions, **Thermal springs benefit**, **Barrier** and **Susceptibility** had a statistically significant effect on medical tour intentions in Korea.
- ***Hl was partially accepted.***

Table 3 Influence of Health/ beauty perception on medical tour intensions

predictor		dependent variable : medical tour intensions			
		unstandardized coefficients		standardized coefficients	t
		β	S.E.	Beta	
(constant)		.536	.126	-	4.242***
Korea	Anxiety	-.041	.118	-.026	-.350
	Korean medicine Benefit	.110	.068	.117	1.607
	Thermal springs Benefit	.201	.065	.209	3.100**
	Barrier	.123	.061	.139	2.004*
	Susceptibility	.126	.054	.155	2.325*

R^2=.103 adjusted R^2=.081 F=4.664***

- **H2: Health and beauty perception has a positive significant impact on beauty tour intentions in Korea and Japan.**
- To test this hypothesis, **beauty tour intensions** were regressed on Anxiety, Korean medicine benefit, Thermal springs benefit, Barrier and Susceptibility dimensions of health and beauty perception. The results of multiple regression analysis are shown in **Table 4.**
- The variance inflation factor (VIF) indicated less than 2, indicating no evidence of multicollinearity problems for any of the predictor variables.
- Three dimensions, **Anxiety, Korean medicine benefit**, and **Thermal springs benefit** had a statistically significant effect on intentions toward beauty tour in Korea.
- ***H2 was partially accepted.***

Table 4 Influence of Health/ beauty perception on beauty tour intensions

predictor		dependent variable : beauty tour intensions			
		unstandardized coefficients		standardized coefficients	t
		β	S.E.	Beta	
(constant)		-.100	.118	-	-.847
Korea	Anxiety	.223	.110	.152	2.025*
	Korean medicine Benefit	.217	.064	.248	3.399**
	Thermal springs Benefit	.156	.060	.175	2.583*
	Barrier	.086	.057	.105	1.513
	Susceptibility	.092	.050	.123	1.833

R^2=.096 · · · · · adjusted R^2=.074 · · · · F=4.315***

SECTION FIVE: CONCLUSION

- This paper examined the effect of health and beauty perception on intentions toward medical tourism in Korea
- First, health and beauty perception factors were grouped into five dimensions, including a)Anxiety, b)Korean medicine benefit, c)Thermal springs benefit, d)Barrier and e)Susceptibility in this study.
- Second, health and beauty perception has a positive significant impact on intensions toward **medical tour** in Korea.
- *Hl was partially supported*. In particular, three factors of '**Thermal springs benefit**', '**Barrier**' and '**Susceptibility**' respectably shows a positive significant influence in Korea.
- '**Barrier**' - The physical and psychological cost has to be considered in Korea. E.g. hospital procedure

- Third, health and beauty perception has a positive significant impact on intensions toward **beauty tour** in Korea.

- *H2 was partially supported*. In particular, H2 test results indicated that **'Anxiety', 'Korean medicine benefit' and 'Thermal springs benefit'** have a significant effect in Korea.

- **'Anxiety'** has a positive significant impact on intentions toward beauty tour. Korean is considering various factors of health and beauty perception (e.g. good shape). Medical tourism holds great potential in tourism industry.

- The findings of this study may suggest practical implications to improve medical tourism. **Travel agencies** may develop specialized packages, including a broad choice of rehabilitation and leisure activities, which can be integrated with the healthcare options.

Further Study in Hong Kong

- Hong Kong takes the lead in healthiest population, which has one of the highest life expectancy at birth; 78 for men and 84 for women.
- The Asian hub for cancer treatment
- One of the world's most innovative new centres that combines traditional Chinese methods with modern treatments
- Industry Excellence (quality and cutting-edge procedures), Transportation Hub (best-connected cities in the world), Multiculturalism (English-speaking doctors)
- Renowned for the high standard but relatively low cost of treatments

Hong Kong Medical Tourism

- Hong Kong has tried to position itself as a medical services destination since 2007. E.g. mainland birth tourism.
- Mainly increase in Medical Tourists from Mainland China
- Demand better service and care than state-run hospitals and afford to pay an premium for healthcare services
- "Zero Quota" policy - all public and private hospitals will not accept any bookings by non-local pregnant women for delivery in Hong Kong from January 1, 2013 onwards.

Health and Beauty Perception Factor Comparison between Korea and Hong Kong

	Korea	Hong Kong
Same	Anxiety	Anxiety
Different	Korean medicine benefit	Chinese & Western medicine benefit
Different	Thermal springs benefit	Woodland walk benefit
Same	Barrier	Barrier
Same	Susceptibility	Susceptibility

Thank you!

Q & A Session