

# 대만 건강보험연구데이터(NHIRD)를 이용한 대만에서의 전통 동아시아 의학(Team)의 의료시장 점유율 분석

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## Analysis of the Medical Market Share of Traditional East Asian Medicine (TEAM) in Taiwan Using National Health Insurance Research Database (NHIRD)

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**Objectives** Since the health insurance coverage for traditional Korean medicine is very low, some physicians and researcher have suggested that government's institutional support is needed for korean medicine field. Therefore We examine the use of traditional medicine and western medicine in Taiwan, which operates a similar health insurance system to Korea.

**Methods** We selected several studies from Pubmed and NHIRD, that could be used to numerically evaluate the use of traditional medicine. We reviewed the current status of medical use in Taiwan and compare it with that of Korea.

**Results** Through a total of 87 studies, We found that 26.59%~31% of Taiwanese use Traditional medical institutions more than once a year, and the use of traditional medicine has been increasing since 2000. In adults than children, in women than men, the use rate of traditional medicine was high. Especially, herbal medicine was the most common intervention, accounting for 70% of traditional medical care.

**Conclusions** The core of low insurance coverage for traditional Korean medicine is in lack of coverage for herbal medicine. Taiwan's case shows that the unmet demand for traditional Korean medicine of the Korean population can exist widely. (**J Korean Med Rehabil 2018;28(1):133-144**)

**Key words** Traditional East Asia Medicine, Herbal Medicine, Acupuncture, Medical Market, Health Insurance Coverage

## 서론»»»»

2003년 한의약육성법 제정 이래, 2005년부터 한의약육성발전종합계획 등 한의약의 발전을 위한 여러 정책들이 추진되었다. 그러나 한의 진료에 대한 수요가 지속적으로

증가하였음에도 불구하고, 전체 요양기관 진료비를 기준으로 보았을 때 그 비중이 3.9~4.2%에 정해되어 있다는 지적이 있다<sup>1)</sup>. 특히 진료 대상이 근골격계 질환에 편중되어 있다는 문제점과 함께, 연간 300억 원 미만의 한약제 제생산 및 처방의 정체 상황 역시 개선되지 않고 있다는

것 또한 한의약 분야의 건강보험에서 고질적인 문제로 지적되고 있는 상황이다<sup>1,3)</sup>.

한의약이 지속적으로 겪고 있는 제도적 불균등 상황<sup>4)</sup>에도 불구하고 우리나라 국민들은 여전히 한의학에 대한 깊은 선호를 보이고 있다. 그러나 식민 통치를 경험한 국내의료제도 및 행정은 일본 메이지유신 기조를 따른 조선총독부의 서양의학 우대정책에 영향을 받아 서양의학이 주도하고 있다<sup>5)</sup>. 이런 악조건에도 불구하고 근래에 들어 국민들의 한의학 이용이 지속적으로 증가하고 있다는 것은 대단히 주목할만한 점이라고 볼 수 있다<sup>6)</sup>.

이와 관련하여 실제 의료현장에서 한의학과 경쟁관계<sup>7)</sup>에 있는 서양의학과 비교에서 두 의료에 대한 건강보험 보장성이 동일하다면 서양의학보다 한의진료를 선호할 수 있다는 점, 특히 한약 치료를 선호할 것이라는 것이 교통사고 상해의 사례를 통해 일부 확인되었다<sup>8,9)</sup>. 이러한 국민들의 한의학 선호는 한의학에 대한 공식적인 차별이 시작되던 일제시기부터 지속되어 왔다<sup>10)</sup>. 따라서 현재 한의약의 저활용 실태는 국가의 건강보험보장체계가 환자에게 서양의약에 대한 높은 보장성과, 한의약에 대한 낮은 보장성을 통해 의도적으로 서양의약을 이용하도록 왜곡한 결과물로 해석할 수 있는 한편, 이러한 정책의 근거에 뿌리 깊은 식민지적 시각이 현재까지도 우리 보건의료행정 안에 자리 잡고 있다는 것을 시사하고 있다<sup>11-13)</sup>.

이같은 문제점에 대한 해결책을 찾기 위하여 유사한 식민지 경험을 갖춘 국가의 전통의학 의료현황과 그 특징을 검토하는 것은 한국 한의약의 보장성 강화를 위한 중요한 기초조사로서의 역할로 볼 수 있을 것이다. 동아시아에서는 대만이 이 조건에 가장 부합하는 국가이다. 그러나 현재까지 대만의 전통동아시아의학(traditional east asian medicine, 이하 TEAM) 의료이용에 대한 체계적인 조사연구는 부족한 실정이다. 이에 저자들은 대만의 전민건강보험연구자료고(全民健康保險研究資料庫, National Health Insurance Research Database, NHIRD)의 자료 및 저자들이 발표한 대만의 TEAM 현황 관련 선행연구의 지견에 기반하여 대만에서의 TEAM 이용 현황을 분석하였다.

## 대상 및 방법»»»»

대만 전민건강보험연구자료고의 자료를 이용해 발표된

대만에서의 연구를 분석한 기존 연구<sup>15)</sup>에서 얻어진 일차 자료를 바탕으로, 본 연구의 목적에 맞게 명시적으로 확인 가능한 한의약 의료이용현황의 자료를 담고 있는 연구를 선정하였다.

연구의 분류는 일차적으로 대만내 TEAM 이용 관련연구로 한정하고, 일차적으로 TEAM 이용 인구의 전체적 특성을 분석한 연구와 특정 질환군에서의 특성을 분석한 연구로 분류하였다. 다음으로, TEAM의 이용/비이용을 검토한 연구 및 TEAM과 서양의약의 이용을 검토한 연구로 분류하고, 보고된 연구들의 대상 질환, 이용률, 기타 특성 등을 분석하였다. 그리고 이를 현재 국내의 건강보험 이용현황과 비교 분석하여, 국내의 한의약분야의 보장현황의 실태를 평가하였다.

## 결과»»»»

2017년 1월 17일까지 발표된 관련문헌 143건 중 직접 평가가 가능한 대만내 TEAM 이용과 비이용의 현황을 제시한 연구 87건이 선정되었다. 이들 연구는 대만에서의 한-양방 의료이용에 대한 포괄적인 검토 10건과 특정 질환군별로 검토한 77건으로 나누어 볼 수 있었다.

### 1. 대만의 보편적 TEAM 이용 관련 연구

포괄적인 연구 10건에 대한 연구의 내용은 다음과 같다(Table I).

이들 연구에서는 명확히 대만에서의 한약처방에 대한 포괄적인 보장<sup>28)</sup>을 통해 한약투약이 한의약분야의 주요 항목이 드러났다. 이는 한국에서 56종 단미엑스산제라는 제한적 품목에 비해 300여종 이상의 한약제제 품목이 건강보험적용이 되는 대만과의 차이를 보여준다.

### 2. 대만의 질환군별 TEAM 이용 현황

다음으로, 질환군별로 나누어 77건을 검토하였다. 이들 연구들은 TEAM의 임상적 활용현황과 한약에 따른 임상적 이점을 평가<sup>15)</sup>하기 위한 연구들이다(Table II).

**Table 1.** Studies on General Use of Traditional Medicine in Taiwan

Author	Year	Target population	Intervention	Key findings
Fang-Pey Chen et al <sup>18)</sup>	2006	All	Acupuncture	In 2002, 6.2% of health insurance contractors used acupuncture treatment. In 1996~2002, the population using acupuncture for 7 years accounted for 23%. Musculoskeletal diseases (ICD9-CM 710~739), injury and poisoning (ICD9-CM 800~999) accounted for 88% of the target diseases.
Fang-Pey Chen et al <sup>19)</sup>	2007	All	-	In 2001, 28.4% of health insurance contractors used TEAM clinic. By 1996~2001, 62.5% of health insurance contractors visited TEAM clinic at least once. The frequency of use was 12.3% under 10 years of age, but 52.3~66.0% by age group in the age of 11 years or older. The major treatment contents were herbal medicine 82.5%, acupuncture 11.0% and manual therapy 3.1%. The major diseases were respiratory 27%, musculoskeletal 16.6%, other symptoms and signs 14.3%, injury and poisoning 13.1%, digestive system 12.7%, etc.
Shu-Ching Hsieh et al <sup>20)</sup>	2008	All	Herbal medicine	In 2004, 28.1% of the population who visited a medical institution at least once used herbal medicine. The main prescription target disease for herbal medicine are respiratory diseases such as cold, sleep disorders, allergic rhinitis, menstrual-related disorders, etc.
Lee-Chin Chang et al <sup>21)</sup>	2008	All	-	From 1997 to 2003, the use of medical clinic through health insurance has increased. The use rate of TEAM was lower than that of western medicine. The use of herbal medicine was 68.4~70.8%, the use of manual therapy was 15.6~17.2% and the use of acupuncture was 9.2~13.0%.
Tu C-C et al <sup>22)</sup>	2011	All	-	In 1999, in a sample of 200,000 health insurance data, The population using Western medicine alone was 60%, the population using TEAM and Western medicine together was 29%, and the population using TEAM alone was 2%.
Shih C-C et al <sup>23)</sup>	2012	All	-	In 2001, among the aged 20~69 (Taiwan National Health Interview Survey subject), the use rate of TEAM by gender was 31.8% for women and 22.4% for men.
Hsing-Yu Chen et al <sup>24)</sup>	2012	Child	-	In 2006, TEAM use rate was 18.32% and non-use rate was 81.68% among 107377 children aged 0~12 years old. Factors that have a positive effect on the use of TEAM in children include age and the presence of allergic diseases such as atopic dermatitis, eczema and allergic rhinitis, respiratory diseases such as asthma, digestive diseases such as diarrhea, digestive disorders, constipation and musculoskeletal diseases.
Tzu-Ping Huang et al <sup>25)</sup>	2014	Child	-	In 2005 and 2010, the use of TEAM by children was 22% in 2005 and 22.5% in 2010. Diseases that increase the use of TEAM include menstrual disorders, musculoskeletal disorders, dyspepsia, and allergic rhinitis.
Pei-Rung Yang et al <sup>26)</sup>	2015	Elderly	-	Herbal medicine was prescribed from 98.7%~99.7% of allergic rhinitis, dyspepsia, and menstrual disorders patients from 2005 to 2009, 48.23% of the 97210 sample population over 65 years of age using medical institutions used TEAM. The major prescriptions were as follows: <i>Shujinghuoxuetang</i> , <i>Duhuojiushengtang</i> , <i>Pingweisan</i> , <i>Mazirenwan</i> , <i>Zhigancaokang</i> , <i>liuweidihuangwan</i> , <i>Zishengshengjiwan</i> , <i>Banxiaixixintang</i> , <i>Chuanxiongchailiaosan</i> , etc.
Yuh-Hsiang Yeh et al <sup>27)</sup>	2016	All	-	The major single herb prescriptions were as follows: <i>Salviae Radix</i> , <i>Rhizoma Corydalis</i> , <i>Fritillariae Rhizoma</i> , <i>Eucommiae Cortex</i> , <i>Rhei Rhizoma</i> , <i>Platanol Radix</i> , <i>Achyranthis Radix</i> , <i>Puerariae Radix</i> , <i>Panax Notoginseng</i> , <i>Scutellariae Radix</i> , etc. In 2000, 2005 and 2010, TEAM usage increased slightly from 26.59% in 2000 to 28.29% in 2005 and to 28.66% in 2010. In 2010, compared to 2000, use of TEAM was increased in all fields except infectious and parasitic diseases and respiratory diseases. The use of TEAM in neoplasms, congenital anomalies, pregnancy, labor and postpartum diseases was significantly increased to 41.9%~343.7%.

**Table II.** Current Status of Traditional Medicine Use by Disease Group in Taiwan

Disease group*	Disease	Key findings
Infectious and parasitic diseases (1.36%)	Hepatitis	In 2002, 1.9% of chronic hepatitis patients used TEAM <sup>29)</sup> In 2000~2010, 66.43% of newly diagnosed hepatitis C patients used TEAM <sup>30)</sup>
	Liver cancer	In 1996~2010, 16.65%~25.11% of liver cancer patients used TEAM <sup>31,32)</sup>
	Leukemia	In 2001~2010, 12.4% of child and 9.17% of adult leukemia patients used TEAM <sup>33)</sup> In 1997~2010, 9.25% patients with newly diagnosed acute myeloid leukemia and received radiotherapy and chemotherapy used TEAM <sup>34)</sup>
	Colon cancer	In 2004~2008, 19.81% of newly diagnosed colon cancer patients used TEAM <sup>35)</sup> In 2007, 26.9% of newly diagnosed colorectal cancer patients used TEAM <sup>36)</sup> In 2000~2011, 37.51% of newly diagnosed head and neck cancer patients used TEAM <sup>37)</sup>
Head and neck cancer	Head and neck cancer	In 2000~2011, 37.51% of newly diagnosed head and neck cancer patients used TEAM <sup>37)</sup>
	Pediatric cancer	In 2001~2011, 62.37% of newly diagnosed pediatric cancer patients used TEAM <sup>38)</sup>
	Breast cancer	In 1999~2008, 81.55% of newly diagnosed breast cancer patients used TEAM <sup>39)</sup> In 2007, 35.6% of breast cancer patients used TEAM <sup>40)</sup> In 2009, 37.33% of breast cancer patients used TEAM <sup>41)</sup>
Uterine fibroid	Uterine fibroid	In 2000~2003, 73.33% of newly diagnosed uterine fibroid patients used TEAM <sup>42)</sup> In 1996~2010, 25.84% of uterine fibroid patients used TEAM <sup>43)</sup> In 2002~2010, 87.08% of newly diagnosed uterine fibroid patients used TEAM <sup>44)</sup>
	Prostate cancer	In 1996~2008, 38.8% of prostate cancer patients used TEAM <sup>45)</sup> In 1998~2003, 64.5% of newly diagnosed prostate cancer patients used TEAM <sup>46)</sup> In 2003~2008, 52.6% of prostate cancer patients used TEAM <sup>47)</sup> In 2007, 22.4% of outpatients with prostate cancer received prescription of herbal medicine <sup>48)</sup>
	Lung cancer	In 1996~2010, Of the lung cancer patients, 31.17% of the operation patients and 26.32% of the non-operation patients used TEAM <sup>49)</sup>
	Hyperlipidemia	In 2003~2009, 82.95% of hyperlipidemia patients used TEAM <sup>50)</sup>
Endocrine, nutritional and metabolic diseases, and immunity disorders (3.59%)	Diabetes mellitus	In 2000~2011, 20.55% of type I diabetes mellitus patients used TEAM <sup>51)</sup> In 1998~2008, 77.91% of newly diagnosed type II diabetes mellitus adult patients used TEAM <sup>52)</sup>
	Insomnia and depression	In 2002~2010, 37% of patients diagnosed with insomnia used hypnotic drug and herbal medicine in combination <sup>53)</sup> In 2003, 42.73% of patients with major and mild depressive disorder who were prescribed antidepressant used TEAM <sup>54)</sup>
Mental disorders (3.10%)	Schizophrenia	In 2007~2011, 12.79% of patients with sleep disorder, 1.57% of patients with depressive disorder were prescribed herbal medicine <sup>55)</sup>
	Dementia	In 2004, 9.2% of schizophrenia patients used TEAM <sup>56)</sup>
	Migraine	In 1997~2008, 43.3~78.2% of newly diagnosed dementia patient used TEAM <sup>57-59)</sup>
	Vertigo	In 1998~2008, 89.26% of newly diagnosed migraine patients used TEAM <sup>60)</sup> In 1998~2007, 47.31% of newly diagnosed vertigo patients used TEAM <sup>61)</sup>
Diseases of the nervous system (4.19%)		

**Table II.** Continued

Disease group*	Disease	Key findings
Diseases of the circulatory system (3.42%)	Hypertension	In 2003~2009, 79.89% of hypertension patients used TEAM <sup>(62)</sup> In 2006~2010, 49.74% of newly diagnosed hypertension patients used TEAM <sup>(63)</sup>
	Stroke	In 2000~2004, 9.27~12.85% of newly diagnosed stroke patients used acupuncture <sup>(64,65)</sup> In 2008, The acupuncture utilization rate of stroke patients increased to 17% <sup>(66)</sup> In 2000, 24% of stroke patients used TEAM, but in 2009, they increased to 32% <sup>(67)</sup> In 2000~2010, 77.30% of newly diagnosed ischemic stroke patients used TEAM <sup>(68)</sup>
	Atrial fibrillation Heart failure Ischemic heart disease	In 2000~2011, 15.35% of newly diagnosed atrial fibrillation patients used TEAM within 7 days <sup>(69)</sup> In 2001~2010, 78.50% of newly diagnosed heart failure patients used TEAM <sup>(70)</sup> In 2000~2010, 81.59% of newly diagnosed ischemic heart disease patients used TEAM <sup>(71)</sup>
Diseases of the respiratory system (7.53%)	Upper respiratory infection	In 2009, 9.92% of upper respiratory infection(including influenza) patients used TEAM <sup>(72)</sup>
	Rhinosinusitis Allergic rhinitis	In 2000~2011, 29% of newly diagnosed chronic rhinosinusitis patients used TEAM <sup>(73)</sup> In 2002, 2.4% of patients used western medicine, 1.4% of patients used TEAM to treat allergic rhinitis <sup>(74)</sup> In 2009~2010, 80.5% used only western medicine, 12.73% used only TEAM, 6.77% used western medicine and TEAM in combination to treat allergic rhinitis <sup>(75)</sup> In 2009, 80.2% used only western medicine, 12.93% used only TEAM, 6.82% used western medicine and TEAM in combination to treat allergic rhinitis <sup>(6)</sup>
Diseases of the digestive system (8.30%)	Asthma	In 2002~2010, 63.11% of newly diagnosed child allergic rhinitis patients used TEAM <sup>(77)</sup> In 1997~2008, 85.7% of newly diagnosed adult asthma patients used TEAM <sup>(78)</sup> In 1997~2009, Herbal medicine was prescribed at 35.28% of total visits in school age (6~18 years old) <sup>(79)</sup> In 2002~2010, 57.95% of child asthma patients used TEAM <sup>(80)</sup> In 2000~2011, Despite the gradual increase in asthma patients, the use of TEAM decreased from 38.58% to 29.26% <sup>(81)</sup> In 2005~2010, 18.7~23.2% of child asthma patients used TEAM <sup>(82)</sup>
	Constipation	In 2004, 2.45% of patients were treated with a single disease of constipation among the patients who received TEAM treatment <sup>(83)</sup>
	Peptic ulcer disease Inflammatory bowel disease	In 2001~2010, 15.5% of peptic ulcer disease patients used TEAM <sup>(84)</sup> In 2004, 37% of inflammatory bowel disease patients used TEAM <sup>(85)</sup>
	Psoriasis Urticaria Atopic dermatitis	In 2000~2010, 70.45% of newly diagnosed psoriasis patients used TEAM <sup>(86)</sup> In 1998~2008, 0.5% of patients were treated with a single disease of urticaria in the TEAM clinic <sup>(87)</sup> In 2007, 0.4% had experienced using TEAM for atopic dermatitis in children under 12 years <sup>(88,89)</sup>

Table II. Continued

Disease group*	Disease	Key findings
Diseases of the musculoskeletal system and connective tissue (17.05%)	Osteoarthritis	In 2002, 37163 (0.6% of the total TEAM users) osteoarthritis patients used TEAM <sup>(90)</sup>
	Osteoporosis	In 2003~2009, 72.6% of osteoporosis patients used TEAM <sup>(91)</sup>
	Rheumatoid arthritis	In 2001~2009, 27.28% of newly diagnosed rheumatoid arthritis patients used TEAM <sup>(92)</sup>
	Sjögren's syndrome	In 1997~2008, 91.23% of newly diagnosed Sjögren's syndrome patients used TEAM <sup>(93)</sup>
	Systemic lupus erythematosus	In 2000~2009, 40.14% of newly diagnosed systemic lupus erythematosus patients used TEAM <sup>(94)</sup>
Diseases of the genitourinary system (16.49%)	Menopausal syndrome	In 1997~2011, 14.28% of the patients visited the TEAM clinic for SLE treatment <sup>(95)</sup>
	Infertility	In 1997~2004, 64.9% of 45~55 year old women had experience using TEAM <sup>(96)</sup>
	Renal disease	In 2002, 75.1% of patients diagnosed with menopausal syndrome had experience using TEAM <sup>(97)</sup>
	Urolithiasis	In 2000~2011, 96.17% of patients diagnosed with infertility had experience using TEAM <sup>(98)</sup>
	Dysmenorrhea	In 2000~2005, 45.46% of newly diagnosed chronic renal disease patients used TEAM <sup>(99)</sup>
Injury and poisoning (26.82%)	Endometriosis	In 1997~2008, 62.61% of newly diagnosed urolithiasis patients used TEAM <sup>(100)</sup>
	Fracture	In 2003~2008, 53.4% of newly diagnosed primary dysmenorrhea patients used TEAM <sup>(101)</sup>
		In 1998~2008, 90.82% of newly diagnosed endometriosis patients used TEAM <sup>(102)</sup>
		In 2001~2010, 4.97% of newly diagnosed fracture patients used TEAM <sup>(103)</sup>
		In 2000~2008, 31.39% of the traumatic brain injury survivors received acupuncture treatment within 1 year after injury <sup>(104)</sup>

\*In parentheses, frequency of use of TEAM for Western medicine use by ICD-9 disease classification, Extracted from Yuh-Hsiang Yeh et al.<sup>(95)</sup>

## 고찰»»»»

본 연구를 통해, 현재 국내 건강보험의 한의약에 대한 낮은 보장성으로 인해 한의 의료 관련국민 수요가 충족되고 있지 못하고 있음을 확인하였다. 이는 잠정적으로 한약 투약에 대한 정부의 원칙적 비급여 정책이 실질적으로 국내 환자들의 서양의학의 이용만을 강제하는 등 강력한 왜곡을 만들어냈음을 시사하는 것이다.

국가건강보험체계에서 한의약의 저활용은 국내 건강보험 환자 진료비 실태조사<sup>2)</sup>를 통해 그 원인을 찾아 볼 수 있는데, 2015년 현재 한방병원의 건강보험 보장률은 21.0%, 한의원은 47.1%로 양방병원의 41.3~53.0% 및 양방의원의 66.0%에 비해 크게 낮아 서양의약 대비 한의약에 대한 불공정한 건강보험 보장에 기인하고 있음을 시사한다. 이러한 문제 해결을 위하여 제 3차 한의약육성발전종합계획은 다양한 한의약 건강보험 수가 개발 및 급여확대, 보험 급여 한약제제의 개선, 한의약 보장성 확대를 위한 장기적 추진체계 구축 등을 목표로 진행되고 있다<sup>3)</sup>. 그러나, 국내의 한 보고<sup>12)</sup>에 따르면, 국내 인구의 한의학에 대한 이용에 있어 “특히 요통 등 근골격계질환에 대해 한의학적 치료에 대해 서양의학과 중복경향이 강하다”고 언급하고 있는데, 이는 근골격계 질환의 치료법인 침구치료만이 사실상 유일하게 포괄적인 보장이 이루어지는데 따르는 것으로 역설적으로 한의약의 다른 분야에 대해서는 건강보험 보장이 전혀 이루어지지 않는다는 것을 보여준다. 이러한 사정 때문에 특정한 발전계획 등만을 바탕으로 한의약의 저활용이라는 문제를 완전히 해결할 수 있을지의 여부는 미지수이다.

2016년을 기준으로 현재, 건강보험이 적용되는 한의진료 내원일수는 1억 6백만일이며 5100만 인구가 한해 2일 정도는 한의의료기관을 이용하였다<sup>14)</sup>. 전체 의료기관 내원일의 10.36%를 차지하고 있음을 알 수 있으며, 상대적으로 보장률이 높은 의원급에서의 한의외래진료 내원일수는 서양의학의 15.9% 수준이다<sup>14)</sup>. 이러한 데이터는 한의사의 수가 서양 의사 수의 16.8% 수준이라는 점을 감안할 때, 철저한 제도적 소외에도 불구하고 한의학의 국민 건강에 대한 역할이 서양의학에 뒤지지 않음을 시사한다. 한국과 같이 일체의 식민지 통치를 받은 대만은 보건의료분야에서도 유사한, 혹은 더 철저한 식민지성의 상흔을 가지고 있다<sup>15)</sup>. 뿐만 아니라 국민건강보험제도 등 의료제도적



만성적 한의학 저활용 문제 해결책에서 참고할 수 있는 다양한 시사점을 주고 있다.

## References»»»»

1. Year Book of Traditional Korean Medicine Publication Committee. 2015 Year Book of Traditional Korean Medicine. Daejeon:Korea Institute of Oriental Medicine, Seoul:The Association of Korean Medicine, Gyeongsan: National Development Institute of Korean Medicine, Busan: Busan National University School of Korean Medicine. 2016:239-45.
2. Lee OH, Lee JS, Lee HJ, Kim HR, Choi DS, Seo NG. 2015 National Health Insurance Service Medical expenses Survey. Wonju:National Health Insurance Service Research Institute. 2016:11-2.
3. Ministry of Health and Welfare. The Third Korean Medicine Development Plan 2016-2020. 1st ed. Sejong:Ministry of Health and Welfare. 2016.
4. Ku NP, Seol SS. Limits of Innovation in Korean Medicine Industry. Journal of Korea Technology Innovation Society. 2015 Dec;18(4):667-92.
5. Yeo IS, Park YJ, Lee KR, Park HW. A History of Medical License in Korea. Korean Journal of Medical History. 2002 Dec;11(2):137-53.
6. Park YS, Kim HS, Kim JS. Analysis of the Current Status of the Use of Disease-Specific Western Medicine and Korean Medicine. Seoul:Research Institute for Healthcare Policy. 2017:49-51.
7. Cho BH. Perspectives of Western Medicine and Korean Medicine Relations and Integrative Medicine. Institute of Health Policy & Management, Seoul National University [serial online] 2006 Apr 18[cited 2017 Jul 28]. Available from: URL: [http://www.snu-dhpm.ac.kr/pds/files/%BE%E7%C7%D1%B9%E6%B0%FC%B0%E8\(%B0%F8%C5%EB%C1%A1\).pdf](http://www.snu-dhpm.ac.kr/pds/files/%BE%E7%C7%D1%B9%E6%B0%FC%B0%E8(%B0%F8%C5%EB%C1%A1).pdf)
8. Im SH, Lee SH, Lee SM, Nam DW, Kim YS. A Qualitative Study on the Treatment Process Experiences of Patients with Whiplash Associated Disorder Treated with Traditional Korean Medicine - Based on the Grounded Theory Approach -. The Acupuncture. 2016 Dec;33(4): 73-92.
9. Do HJ, Shin YS, Kim CE, Song HS, Shin JK, Gang BG, Koh WI, Jeon SH, Cho YK, Kim ES. Clinical Analysis of 2,048 Musculoskeletal Patients Who Visited the Traffic Accident Clinic of a Korean Medicine Hospital. The Journal of Korea CHUNA Manual Medicine for Spine & Nerves. 2016 Jun;11(1):11-23.
10. Lee KM. A Study on the General Public Understanding and Utilization of Korean Traditional Medicine in Colonial Period. Korean J Med Hist. 2006 Dec;15(2): 227-36.
11. Park YJ. Japan's Oriental Medicine Policy in Colonial Korea. Korean J Med Hist. 2008 Jun;17(1):75-86.
12. Lee HJ. Comparative Study of the National Policies for Korean Oriental Medicine and Traditional Chinese Medicine. Korean J Oriental Physiology & Pathology. 2008 Oct;22(5):1132-9.
13. Eom SK. A study on the Problems and Improvement Proposals on Legal Definitions in Respect of Herbal Medicinal Preparations, Crude Drug Preparations and New Drugs from Natural Products. J Korean Medical Classics. 2014 Aug;27(4):181-98.
14. Healthcare Insurance Review & Assessment Service. Medical Expenditure Statistics Index 2016 [serial online] [cited 2017 Jul 28]. Available from: URL: [http://www.hira.or.kr/dummy.do?pgmid=HIRAA020045010000&cmsurl=/cms/medi\\_info/07/03/01/1353262\\_27398.html](http://www.hira.or.kr/dummy.do?pgmid=HIRAA020045010000&cmsurl=/cms/medi_info/07/03/01/1353262_27398.html)
15. Moon MK. A Comparative Study on Koi (Public Doctor) System and its Effect on Public Health in Colonial Taiwan and Korea. Korean J Med Hist. 2014 Aug;23(2): 157-202.
16. Kang CH. A Comparative study on the health insurance system of Korea and Taiwan. Social Science Research Review. 2011 Mar;27(1):351-74.
17. Jeung CW, Jo HG, Seol JU. Current Status of Clinical Study on Traditional East Asian Medicine Using Taiwan Health Insurance Claim Data. Journal of Korean Medicine Rehabilitation. 2017 Apr;27(2):67-75.
18. Chen FP, Kung YY, Chen TJ, Hwang SJ. Demographics and Patterns of Acupuncture Use in the Chinese Population: The Taiwan Experience. J Altern Complement Med. 2006 May;12(4):379-87.
19. Chen FP, Chen TJ, Kung YY, Chen YC, Chou LF, Chen FJ, Hwang SJ. Use frequency of traditional Chinese medicine in Taiwan. BMC Health Serv Res. 2007 Feb; 7(1):26.
20. Hsieh SC, Lai JN, Lee CF, Hu FC, Tseng WL, Wang JD. The prescribing of Chinese herbal products in Taiwan: a cross-sectional analysis of the national health insurance reimbursement database. Pharmacoepidemiol Drug Saf. 2008 Jun;17(6):609-19.
21. Chang LC, Huang N, Chou YJ, Lee CH, Kao FY, Huang YT. Utilization patterns of Chinese medicine and Western medicine under the National Health Insurance Program in Taiwan, a population-based study from 1997 to 2003. BMC Health Serv Res. 2008 Aug;8:170.
22. Tu CC, Li CS, Liu CM, Liu CC. Comparative Use of Biomedicine and Chinese Medicine in Taiwan: Using the NHI Research Database. J Altern Complement Med. 2011 Apr;17(4):339-46.
23. Shih CC, Liao CC, Su YC, Tsai CC, Lin JG. Gender



- Differences in Traditional Chinese Medicine Use among Adults in Taiwan. *PLoS ONE*. 2012 Apr;7(4):e32540-7.
24. Chen HY, Lin YH, Wu JC, Chen YC, Thien PF, Chen TJ, Yang SH, Chen JL, Lo SS. Characteristics of pediatric traditional Chinese medicine users in Taiwan: a nationwide cohort study. *Pediatrics*. 2012 Jun;129(6):e1485-92.
  25. Huang TP, Liu PH, Lien AS, Yang SL, Chang HH, Yen HR. A nationwide population-based study of traditional Chinese medicine usage in children in Taiwan. *Complement Ther Med*. 2014 Jun;22(3):500-10.
  26. Yang PR, Liang HF, Chu YH, Chen PC, Lin YY. Frequencies and prescription patterns of traditional Chinese medicine use among elderly patients in Taiwan: A population-based study. *J Ethnopharmacol*. 2015 Jul;169:328-34.
  27. Yeh YH, Chou YJ, Huang N, Pu C, Chou P. The trends of utilization in traditional Chinese medicine in Taiwan from 2000 to 2010. A population-based study. *Medicine (Baltimore)*. 2016 Jul;95(27):e4115.
  28. Won Kwang University Industry-Academia Collaboration, Research for preparing a rational improvement plan of Korean Herbal Medicine Extracts Standard Formula, Ministry of Food and Drug Safety. 2014.
  29. Chen FP, Kung YY, Chen YC, Jong MS, Chen TJ, Chen FJ, Hwang SJ. Frequency and pattern of Chinese herbal medicine prescriptions for chronic hepatitis in Taiwan. *J Ethnopharmacol*. 2008 Apr;117(1):84-91.
  30. Liu CY, Chu JY, Chiang JH, Yen HR, Hsu CH. Utilization and prescription patterns of traditional Chinese medicine for patients with hepatitis C in Taiwan: a population-based study. *BMC Complement Altern Med*. 2016 Oct;16(1):397.
  31. Liao YH, Lin CC, Li TC, Lin JG. Utilization pattern of traditional Chinese medicine for liver cancer patients in Taiwan. *BMC Complement Altern Med*. 2012 Sep;12:146.
  32. Liao YH, Lin CC, Lai HC, Chiang JH, Lin JG, Li TC. Adjunctive traditional Chinese medicine therapy improves survival of liver cancer patients. *Liver Int*. 2015 Dec;35(12):2595-602.
  33. Wang YJ, Liao CC, Chen HJ, Hsieh CL, Li TC. The Effectiveness of Traditional Chinese Medicine in Treating Patients with Leukemia. *Evid Based Complement Alternat Med*. 2016;2016:8394850.
  34. Fleischer T, Chang TT, Chiang JH, Sun MF, Yen HR. Improved Survival With Integration of Chinese Herbal Medicine Therapy in Patients With Acute Myeloid Leukemia: A Nationwide Population-Based Cohort Study. *Integr Cancer Ther*. 2017 Jun;16(2):156-64.
  35. Chao TH, Fu PK, Chang CH, Chang SN, Mao FC, Lin CH; Evidence-based Chinese Medicine Research Group. Prescription patterns of Chinese herbal products for post-surgery colon cancer patients in Taiwan. *J Ethnopharmacol* 2014 Aug;155(1):702-8.
  36. Tsai SJ, Ruan YX, Lee CC, Lee MS, Chiou WY, Lin HY, Hsu FC, Su YC, Hsu TW, Hung SK. Use of Chinese Medicine Among Colorectal Cancer Patients: A Nationwide Population-Based Study. *Afr J Tradit Complement Altern Med*. 2014 Jan;11(2):343-9.
  37. Lin HC, Lin CL, Huang WY, Shangkuan WC, Kang BH, Chu YH, Lee JC, Fan HC, Kao CH. The use of adjunctive traditional Chinese medicine therapy and survival outcome in patients with head and neck cancer: a nationwide population-based cohort study. *QJM*. 2015 Dec;108(12):959-65.
  38. Yen HR, Lai WY, Muo CH, Sun MF. Characteristics of Traditional Chinese Medicine Use in Pediatric Cancer Patients: A Nationwide, Retrospective, Taiwanese-Registry, Population-Based Study. *Integr Cancer Ther*. 2017 Jun;16(2):147-55.
  39. Lai JN, Wu CT, Wang JD. Prescription Pattern of Chinese Herbal Products for Breast Cancer in Taiwan: A Population-Based Study. *Evid Based Complement Alternat Med*. 2012 May;2012:891893.
  40. Lin YH, Chiu JH. Use of Chinese medicine by women with breast cancer: A nationwide cross-sectional study in Taiwan. *Complement Ther Med*. 2011 Jun;19(3):137-43.
  41. Tsai YT, Lai JN, Wu CT, Lin SK. Concurrent Use in Taiwan of Chinese Herbal Medicine Therapies among Hormone Users Aged 55 Years to 79 Years and Its Association with Breast Cancer Risk: A Population-Based Study. *Evid Based Complement Alternat Med*. 2014 May;2014:683570.
  42. Su SY, Muo CH, Morisky DE. Use of Chinese Medicine and Subsequent Surgery in Women with Uterine Fibroid: A Retrospective Cohort Study. *Evid Based Complement Alternat Med*. 2012 Oct;2012:617918.
  43. Su SY, Muo CH, Morisky DE. Use of Chinese medicine correlates negatively with the consumption of conventional medicine and medical cost in patients with uterine fibroids: a population-based retrospective cohort study in Taiwan. *BMC Complement Altern Med*. 2015 Apr;15:129.
  44. Yen HR, Chen YY, Huang TP, Chang TT, Tsao JY, Chen BC, Sun MF. Prescription patterns of Chinese herbal products for patients with uterine fibroid in Taiwan: A nationwide population-based study. *J Ethnopharmacol*. 2015 Aug;171(2):223-30.
  45. Lin YH, Chen KK, Chiu JH. Trends in Chinese medicine use among prostate cancer patients under national health insurance in Taiwan: 1996-2008. *Integr Cancer Ther*. 2011 Dec;10(4):317-27.
  46. Liu JM, Lin PH, Hsu RJ, Chang YH, Cheng KC, Pang

- ST, Lin SK. Complementary traditional Chinese medicine therapy improves survival in patients with metastatic prostate cancer. *Medicine (Baltimore)*. 2016 Aug;95(31):e4475.
47. Lin YH, Chen KK, Chiu JH. Use of Chinese medicine among prostate cancer patients in Taiwan: A retrospective longitudinal cohort study. *Int J Urol*. 2011 May;18(5):383-6.
  48. Lin YH, Chen KK, Chiu JH. Coprescription of Chinese Herbal Medicine and Western Medications among Prostate Cancer Patients: A Population-Based Study in Taiwan. *Evid Based Complement Alternat Med*. 2012 Jul;2012(12):147015.
  49. Liao YH, Lin JG, Lin CC, Li TC. Distributions of Usage and the Costs of Conventional Medicine and Traditional Chinese Medicine for Lung Cancer Patients in Taiwan. *Evid Based Complement Alternat Med*. 2013 Jul;2013:984876.
  50. Chu SM, Shih YT, Yang YH, Chen PC, Chu YH. Use of traditional Chinese medicine in patients with hyperlipidemia: A population-based study in Taiwan. *J Ethnopharmacol*. 2015 Jun;168:129-35.
  51. Lien AS, Jiang YD, Mou CH, Sun MF, Gau BS, Yen HR. Integrative traditional Chinese medicine therapy reduces the risk of diabetic ketoacidosis in patients with type 1 diabetes mellitus. *J Ethnopharmacol*. 2016 Sep;191:324-30.
  52. Huang CY, Tsai YT, Lai JN, Hsu FL. Prescription pattern of chinese herbal products for diabetes mellitus in taiwan: a population-based study. *Evid Based Complement Alternat Med*. 2013 Jun;2013:201329.
  53. Lee KH, Tsai YT, Lai JN, Lin SK. Concurrent Use of Hypnotic Drugs and Chinese Herbal Medicine Therapies among Taiwanese Adults with Insomnia Symptoms: A Population-Based Study. *Evid Based Complement Alternat Med*. 2013 Sep;2013:987862.
  54. Pan YJ, Cheng IC, Yeh LL, Cho YM, Feng J. Utilization of traditional Chinese medicine in patients treated for depression: A population-based study in Taiwan. *Complement Ther Med*. 2013 Jun;21(3):215-23.
  55. Chen YL, Lee CY, Huang KH, Kuan YH, Chen M. Prescription patterns of Chinese herbal products for patients with sleep disorder and major depressive disorder in Taiwan. *J Ethnopharmacol*. 2015 Aug;171:307-16.
  56. Lin HC, Yang WCV, Lee HC. Traditional Chinese medicine usage among schizophrenia patients. *Complement Ther Med*. 2008 Dec;16(6):336-42.
  57. Lin SK, Tsai YT, Lo PC, Lai JN. Traditional Chinese medicine therapy decreases the pneumonia risk in patients with dementia. *Medicine(Baltimore)*. 2016 Sep;95(37):e4917.
  58. Lin SK, Tsai YT, Lai JN, Wu CT. Demographic and medication characteristics of traditional Chinese medicine users among dementia patients in Taiwan: A nationwide database study. *J Ethnopharmacol*. 2015 Feb;161:108-15.
  59. Lin SK, Yan SH, Lai JN, Tsai TH. Patterns of Chinese medicine use in prescriptions for treating Alzheimer's disease in Taiwan. *Chin Med*. 2016 Mar 28;11:12.
  60. Chang YY, Tsai YT, Lai JN, Yeh CH, Lin SK. The traditional Chinese medicine prescription patterns for migraine patients in Taiwan - A population-based study. *J Ethnopharmacol*. 2014 Feb;151(3):1209-17.
  61. Tsai TY, Li CY, Livneh H, Lin IH, Lu MC, Yeh CC. Decreased risk of stroke in patients receiving Traditional Chinese Medicine for vertigo: a population-based cohort study. *J Ethnopharmacol*. 2016 May;184:138-43.
  62. Yang PR, Shih WT, Chu YH, Chen PC, Wu CY. Frequency and co-prescription pattern of Chinese herbal products for hypertension in Taiwan: a Cohort study. *BMC Complement Altern Med*. 2015 Jun;15:163.
  63. Tsai DS, Chang YS, Li TC, Peng WH. Prescription pattern of Chinese herbal products for hypertension in Taiwan: A population-based study. *J Ethnopharmacol*. 2014 Sep;155(3):1534-40.
  64. Chuang SF, Shih CC, Yeh CC, Lane HL, Tsai CC, Chen TL, Lin JG, Chen T, Liao CC. Decreased risk of acute myocardial infarction in stroke patients receiving acupuncture treatment: a nationwide matched retrospective cohort study. *BMC Complement Altern Med*. 2015 Sep 9;15:318.
  65. Weng SW, Liao CC, Yeh CC, Chen TL, Lane HL, Lin JG, Shin CC. Risk of epilepsy in stroke patients receiving acupuncture treatment: a nationwide retrospective matched-cohort study. *BMJ Open* 2016 Jul;6(7):e010539.
  66. Weng SW, Chen TL, Yeh CC, Liao CC, Lane HL, Lin JG, Shin CC. An investigation of the use of acupuncture in stroke patients in Taiwan: a national cohort study. *BMC Complement Altern Med*. 2016 Aug 26;16(1):321.
  67. Liao CC, Lin JG, Tsai CC, Lane HL, Su TC, Wang HH, Sung FC, Chen TL, Shih CC. An Investigation of the Use of Traditional Chinese Medicine in Stroke Patients in Taiwan. *Evid Based Complement Alternat Med*. 2012;2012:387164.
  68. Hung IL, Hung YC, Wang LY, Hsu SF, Chen HJ, Tseng YJ, Kuo CE, Hu WL, Li TC. Chinese Herbal Products For Ischemic Stroke. *Am J Chin Med*. 2015;43(7):1365-79.
  69. Hung YC, Cheng YC, Muo CH, Chiu HE, Liu CT, Hu WL. Adjuvant Chinese Herbal Products for Preventing Ischemic Stroke in Patients with Atrial Fibrillation. *PLoS ONE*. 2016 Jul;11(7):e0159333.
  70. Tsai MY, Hu WL, Lin CC, Lee YC, Chen SY, Hung YC, Chen YH. Prescription pattern of Chinese herbal products for heart failure in Taiwan: A population-based

- study. *Int J Cardiol.* 2017 Feb 1;228:90-6.
71. Hung YC, Tseng YJ, Hu WL, Chen HJ, Li TC, Tsai PY, Chen HP, Huang MH, Su FY. Demographic and Prescribing Patterns of Chinese Herbal Products for Individualized Therapy for Ischemic Heart Disease in Taiwan: Population-Based Study. *PLoS ONE.* 2015 Aug 31;10(8):e0137058.
  72. Yua JS, Hob CH, Hsua YC, Wang JJ, Hsieh CL. Traditional Chinese medicine treatments for upper respiratory tract infections/common colds in Taiwan. *Eur J Integr Med.* 2014 Oct;6(5):538-44.
  73. Yen HR, Sun MF, Lin CL, Sung FC, Wang CC, Liang KL. Adjunctive traditional Chinese medicine therapy for patients with chronic rhinosinusitis: a population-based study. *International Forum of Allergy & Rhinology.* 2015 Mar;5(3):240-6.
  74. Kung YY, Chen YC, Hwang SJ, Chen TJ, Chen FP. The prescriptions frequencies and patterns of Chinese herbal medicine for allergic rhinitis in Taiwan. *Allergy.* 2006 Nov;61(11):1316-8.
  75. Huang SK, Ho YL, Chang YS. Prescriptions of traditional Chinese medicine, western medicine, and integrated Chinese-Western medicine for allergic rhinitis under the National Health Insurance in Taiwan. *J Ethnopharmacol.* 2015 Sep;173:212-6.
  76. Huang SK, Lai CS, Chang YS, Ho YL. Utilization Pattern and Drug Use of Traditional Chinese Medicine, Western Medicine, and Integrated Chinese-Western Medicine Treatments for Allergic Rhinitis Under the National Health Insurance Program in Taiwan. *J Altern Complement Med.* 2016 Oct;22(10):832-40.
  77. Yen HR, Liang KL, Huang TP, Fan JY, Chang TT, Sun MF. Characteristics of traditional Chinese medicine use for children with allergic rhinitis: A nationwide population-based study. *Int J Pediatr Otorhinolaryngol.* 2015 Apr;79(4):591-7.
  78. Wang HM, Lin SK, Yeh CH, Lai JN. Prescription pattern of Chinese herbal products for adult-onset asthma in Taiwan: a population-based study. *Ann Allergy Asthma Immunol.* 2014 May;112(5):465-70.
  79. Chen HY, Lin YH, Thien PF, Chang SC, Chen YC, Lo SS, Yang SH, Chen JL. Identifying Core Herbal Treatments for Children with Asthma: Implication from a Chinese Herbal Medicine Database in Taiwan. *Evid Based Complement Alternat Med.* 2013;2013:125943.
  80. Huang TP, Liu PH, Lien AS, Yang SL, Chang HH, Yen HR. Characteristics of traditional Chinese medicine use in children with asthma: a nationwide population-based study. *Allergy.* 2013 Dec;68(12):1610-3.
  81. Ma YC, Lin CC, Yang SY, Chen HJ, Li TC, Lin JG. Time Trend Analysis of the Prevalence and Incidence of Diagnosed Asthma and Traditional Chinese Medicine Use among Adults in Taiwan from 2000 to 2011: A Population-Based Study. *PLoS ONE.* 2015 Oct;10(10):e0140318.
  82. Lin SI, Tsai TH, Chou YJ, Huang N. Characteristics Associated with Utilization of Asthma-Related Traditional Chinese Medicine Services among Asthma Children in Taiwan: A Nationwide Cohort Study. *Evid Based Complement Alternat Med.* 2015 Apr;2015:108961.
  83. Jong MS, Hwang SJ, Chen YC, Chen TJ, Chen FJ, Chen FP. Prescriptions of Chinese herbal medicine for constipation under the national health insurance in Taiwan. *J Chin Med Assoc.* 2010 Jul;73(7):375-83.
  84. Huang CY, Lai WY, Sun MF, Lin CC, Chen BC, Lin HJ, Chang CM, Yang CH, Huang KC, Yen HR. Prescription patterns of traditional Chinese medicine for peptic ulcer disease in Taiwan: A nationwide population-based study. *J Ethnopharmacol.* 2015 Dec;176:311-20.
  85. Chen YC, Chen FP, Chen TJ, Chou LF, Hwang SJ. Patterns of Traditional Chinese Medicine Use in Patients with Inflammatory Bowel Disease: a Population Study in Taiwan. *Hepatogastroenterology.* 2008 Mar-Apr;55(82-83):467-70.
  86. Weng SW, Chen BC, Wang YC, Liu CK, Sun MF, Chang CM, Lin JG, Yen HR. Traditional Chinese Medicine Use among Patients with Psoriasis in Taiwan: A Nationwide Population-Based Study. *Evid Based Complement Alternat Med.* 2016;2016:3164105.
  87. Lin YH, Chen YC, Hu S, Chen HY, Chen JL, Yang SH. Identifying core herbal treatments for urticaria using Taiwan's nationwide prescription database. *J Ethnopharmacol.* 2013 Jul 9;148(2):556-62.
  88. Chen HY, Lin YH, Wu JC, Hu S, Yang SH, Chen JL, Chen YC, Lo SS. Use of traditional Chinese medicine reduces exposure to corticosteroid among atopic dermatitis children: A 1-year follow-up cohort study. *J Ethnopharmacol.* 2015 Jan 15;159:189-96.
  89. Chen YC, Lin YH, Hu S, Chen HY. Characteristics of traditional Chinese medicine users and prescription analysis for pediatric atopic dermatitis: a population based study. *BMC Complement Altern Med* 2016 Jun 8;16:173.
  90. Chen FP, Chang CM, Hwang SJ, Chen YC, Chen FJ. Chinese herbal prescriptions for osteoarthritis in Taiwan: analysis of national health insurance dataset. *BMC Complement Altern Med.* 2014 Mar 7;14:91.
  91. Shih WT, Yang YH, Chen PC. Prescription Patterns of Chinese Herbal Products for Osteoporosis in Taiwan: A Population-Based Study. *Evid Based Complement Alternat Med.* 2012;2012:752837.
  92. Huang MC, Pai FT, Lin CC, Chang CM, Chang HH, Lee YC, Sun MF, Yen HR. Characteristics of traditional Chinese medicine use in patients with rheumatoid ar-

- thritis in Taiwan: A nationwide population-based study. *J Ethnopharmacol.* 2015 Dec 24;176:9-16.
93. Yu MC, Lin SK, Lai JN, Wei JC, Cheng CY. The traditional Chinese medicine prescription patterns of Sjögren's patients in Taiwan: A population-based study. *J Ethnopharmacol.* 2014 Aug 8;155(1):435-42.
  94. Ma YC, Lin CC, Li CI, Chiang JH, Li TC, Lin JG. Traditional Chinese medicine therapy improves the survival of systemic lupus erythematosus patients. *Semin Arthritis Rheum.* 2016 Apr;45(5):596-603.
  95. Chang CM, Wu PC, Chiang JH, Wei YH, Chen FP, Chen TJ, Pan TL, Yen HR, Chang HH. Integrative therapy decreases the risk of lupus nephritis in patients with systemic lupus erythematosus: A population-based retrospective cohort study. *J Ethnopharmacol.* 2017 Jan 20;196:201-12.
  96. Yang YH, Chen PC, Wang JD, Lee CH, Lai JN. Prescription pattern of traditional Chinese medicine for climacteric women in Taiwan. *Climacteric.* 2009 Dec; 12(6):541-7.
  97. Chen HY, Lin YH, Wu JC, Chen YC, Yang SH, Chen JL, Chen TJ. Prescription patterns of Chinese herbal products for menopausal syndrome: Analysis of a nationwide prescription database. *J Ethnopharmacol.* 2011 Oct 11;137(3):1261-6.
  98. Hung YC, Kao CW, Lin CC, Liao YN, Wu BY, Hung IL, Hu WL. Chinese Herbal Products for Female Infertility in Taiwan A Population-Based Cohort Study. *Medicine (Baltimore).* 2016 Mar;95(11):e3075.
  99. Lin MY, Chiu YW, Chang JS, Lin HL, Lee CT, Chiu GF, Kuo MC, Wu MT, Chen HC, Hwang SJ. Association of prescribed Chinese herbal medicine use with risk of end-stage renal disease in patients with chronic kidney disease. *Kidney Int.* 2015 Dec;88(6):1365-73.
  100. Lin PH, Lin SK, Hsu RJ, Cheng KC, Liu JM. The Use and the Prescription Pattern of Traditional Chinese Medicine Among Urolithiasis Patients in Taiwan: A Population-Based Study. *J Altern Complement Med.* 2016 Jan;22(1):88-95.
  101. Pan JC, Tsai YT, Lai JN, Fang RC, Yeh CH. The traditional Chinese medicine prescription pattern of patients with primary dysmenorrhea in Taiwan: a large-scale cross sectional survey. *J Ethnopharmacol.* 2014 Mar; 152(2):314-9.
  102. Fang RC, Tsai YT, Lai JN, Yeh CH, Wu CT. The Traditional Chinese Medicine Prescription Pattern of Endometriosis Patients in Taiwan: A Population-Based Study. *Evid Based Complement Alternat Med.* 2012; 2012:591391.
  103. Liao HH, Yeh CC, Lin CC, Chen BC, Yeh MH, Chang KM, Sun MF, Yen HR. Prescription patterns of Chinese herbal products for patients with fractures in Taiwan: A nationwide population-based study. *J Ethnopharmacol.* 2015 Sep 15;173:11-9.
  104. Shih CC, Lee HH, Chen TL, Tsai CC, Lane HL, Chiu WT, Liao CC. Reduced Use of Emergency Care and Hospitalization in Patients with Traumatic Brain Injury Receiving Acupuncture Treatment. *Evid Based Complement Alternat Med.* 2013;2013:262039.
  105. Yeh YH, Chou YJ, Huang N, Pu C, Chou P. The trends of utilization in traditional Chinese medicine in Taiwan from 2000 to 2010. A population-based study. *Medicine (Baltimore).* 2016 Jul;95(27):e4115.
  106. Yoon GJ, Kim DS, Kwon SH, Ahn BR, Kang AR, Yang JH. Current status and Implications of the Establishment of Relationship between Traditional Chinese Medicine and Western Medicine in China and Taiwan : Focusing on Human Resource Development and Health Insurance Protection. Sejong;Korea Institute for International Economic Policy, Sejong;Korea Institute for Health and Social Affairs, 2016.
  107. Tu Youyou. Artemisinin-A Gift from Traditional Chinese Medicine to the World. Nobel Lecture [serial online] 2015 Dec 7 [cited 2017 Jul 25]. Available from: URL: [https://www.nobelprize.org/nobel\\_prizes/medicine/laureates/2015/tu-lecture.pdf](https://www.nobelprize.org/nobel_prizes/medicine/laureates/2015/tu-lecture.pdf)
  108. Li Keqiang. Opening Ceremony of 9th Global Conference on Health Promotion [serial online] 2016 Nov 23 [cited 2017 Jul 25]. Available from: URL: [http://www.chinadaily.com.cn/china/2016-11/23/content\\_27465089\\_2.htm](http://www.chinadaily.com.cn/china/2016-11/23/content_27465089_2.htm)
  109. World Health Organization. Visit by the President of the People's Republic of China to WHO [serial online] 2017 Jan [cited 2017 Jul 25]. Available from: URL: <http://www.who.int/features/2017/visit-president-china/en/>
  110. Watanabe K, Matsuura K, Gao P, Hottenbacher L, Tokunaga H, Nishimura K, Imazu Y, Reissenweber H, Witt CM. Traditional Japanese Kampo Medicine: Clinical Research between Modernity and Traditional Medicine—The State of Research and Methodological Suggestions for the Future. *Evid Based Complement Alternat Med.* 2011;2011:513842.