

Traditional Korean Herbal Medicines



Current status and research trends in the Republic of Korea

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Use of Traditional Korean Herbal medicine in Korea

Traditional Herbal Medicines used in Korea

What types of Traditional Herbal Medicines are used by KMDs in Korea?



Decoctions, Pills, and Powders

- Any composition can be used in combination
- No indication restrictions
 - **Insurance not applicable, insurance application pilot project underway**



Herbal Extractions

- Utilized as an existing combination
- Indications recognized by KFDA
 - **Insurance can be applied within the indication**
 - **Indications are based on ten kinds of traditional Korean medical classics**

東醫寶鑑, 方藥合編, 鄉藥集成方, 景岳全書, 醫學入門, 濟衆新編, 廣濟秘笈,

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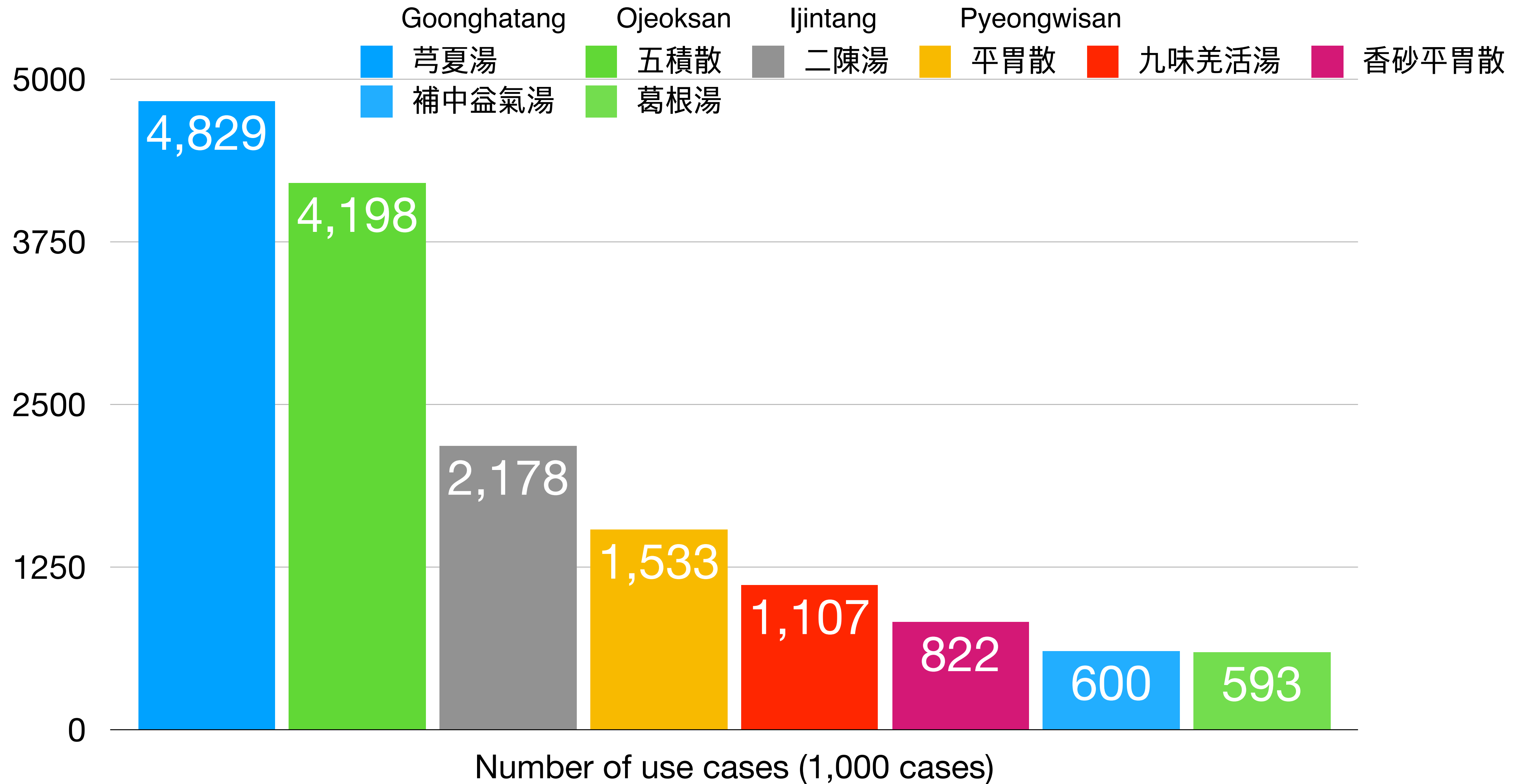
Herbal extractions Insurance Application Status

Notification of the salary list for herbal extractions and the upper limit amount (2020 revised ver.)

- A total of 56 standard prescriptions (647 products) are covered.

1. 加味逍遙散	9. 當歸六黃湯	17. 半夏厚朴湯	25. 參胡芍藥湯	33. 柴胡疏肝湯	41. 益胃升陽湯	49. 八物湯
2. 葛根湯 Galgeuntang	10. 大柴胡湯	18. 白朮湯	26. 三黃瀉心湯	34. 柴胡清肝湯	42. 人蔘敗毒散	50. 平胃散
3. 葛根解肌湯	11. 大青龍湯	19. 補中益氣湯	27. 生脈散	35. 安胎飲	43. 茵陳蒿湯	51. 杏蘇湯
4. 九味羌活湯	12. 大和中飲	20. 補虛湯	28. 小柴胡湯	36. 連翹敗毒散	44. 滋陰降火湯	52. 香砂平胃散
5. 芎蘇散	13. 大黃牡丹皮湯	21. 茯苓補心湯	29. 小青龍湯	37. 五淋散	45. 調胃承氣湯	53. 黃金芍藥湯
6. 芎夏湯	14. 桃仁承氣湯	22. 不換金正氣散	30. 升陽補胃湯	38. 五積散	46. 清上蠲痛湯	54. 黃連解毒湯
7. 內消散	15. 半夏白朮天麻湯	23. 參蘇飲	31. 柴梗半夏湯	39. 理中湯	47. 清暑益氣湯	55. 荊芥連翹湯
8. 當歸連翹飲	16. 半夏瀉心湯	24. 參朮健脾湯	32. 柴胡桂枝湯	40. 二陳湯	48. 清胃散	56. 回春涼隔散

Herbal Extractions (Insurance Coverage) Prescription Ranking (2017)



Top five groups of patients classified by age and major disease (2016)

(Unit: numbers)

- The most frequent area of application of traditional Korean medical treatment was musculoskeletal disorders in patients aged 20 years and above (M00-99).
- Among those under the age of 10, the most common area of application of traditional Korean medical treatment is respiratory diseases (J00-99).

Age	G00-G99	J00-J99	K00-K93	L00-L99	M00-M99	R00-R99	S00-T98	U00-U99
0~4	1,444	130,644	29,714	14,659	2,228	50,643	2,956	26,221
5~9	2,674	111,976	35,637	10,669	14,502	33,690	35,500	24,386
10~14	4,721	54,339	31,563	9,123	50,932	21,420	92,731	19,380
15~19	10,380	35,399	42,226	15,311	148,873	26,086	165,643	27,258
20~24	13,933	25,271	49,170	21,376	236,508	27,409	223,823	35,735
25~29	20,080	30,777	61,095	21,493	342,214	34,511	306,647	54,601
30~34	26,294	40,122	70,430	19,848	472,676	43,269	395,579	76,885
35~39	32,400	45,054	74,659	15,880	551,863	47,484	445,257	79,954
40~44	41,225	44,288	79,629	13,471	646,341	53,946	495,028	83,694
45~49	55,550	43,078	89,996	13,113	793,441	64,969	568,962	97,329
50~54	70,507	40,834	92,867	11,736	881,028	73,035	582,515	106,989
55~59	84,374	44,503	96,454	10,981	948,209	85,446	587,206	116,276
60~64	71,372	33,921	72,204	7,798	748,886	72,409	410,909	93,612
64~69	68,481	29,041	69,338	6,015	694,185	72,039	294,802	92,103
70~74	62,812	22,662	62,514	4,866	612,654	69,277	214,578	84,583
75~79	50,248	15,545	49,753	3,465	483,192	57,834	144,505	68,352
80~84	25,997	7,618	27,122	1,781	262,935	31,602	68,156	37,457
85~	10,523	3,149	11,566	763	117,960	13,130	26,956	16,750

The first place by age is marked in black.

KOMS

KOrean Medicine health service utilization and consumption Survey

- Survey to understand the current status of traditional Korean medicine use and major consumption of herbal medicines
- Representative survey statistics in the field of traditional Korean medicine
- [National approval statistics](#).
- History
 - 2008: Korean Medicine health service utilization survey
 - 2009: Korean Medicine consumption survey
 - 2011: Integrated into KOMS, designated national approval statistics
 - Since then, conducted once every 3 years (2014, 2017, 2020 [under analysis])
- Subjects
 - General citizens 5,000, Outpatient/Inpatient 1,010/904
 - Adult men and women over 19 years of age nationwide



<https://www.koms.or.kr/main.do>

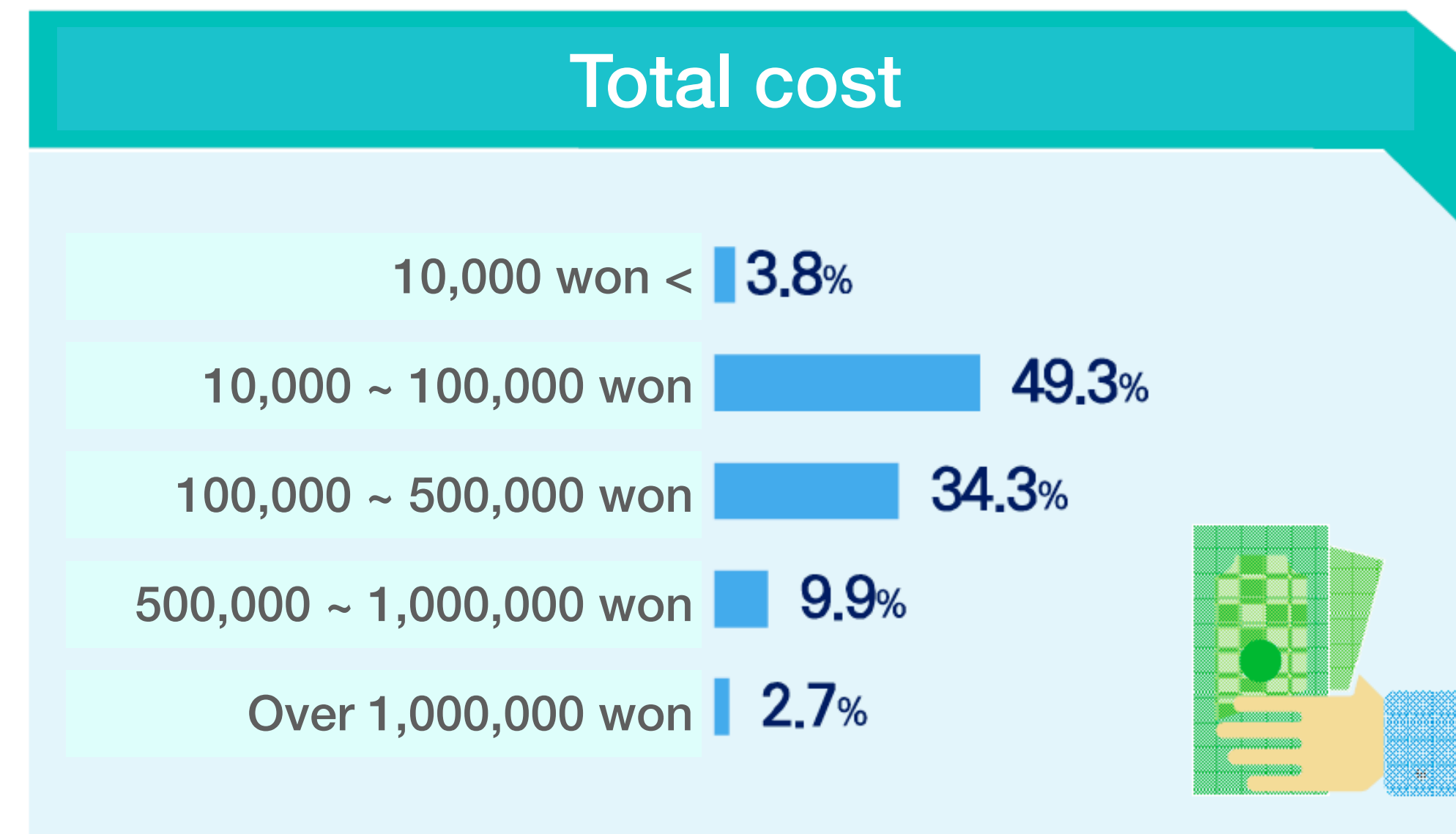
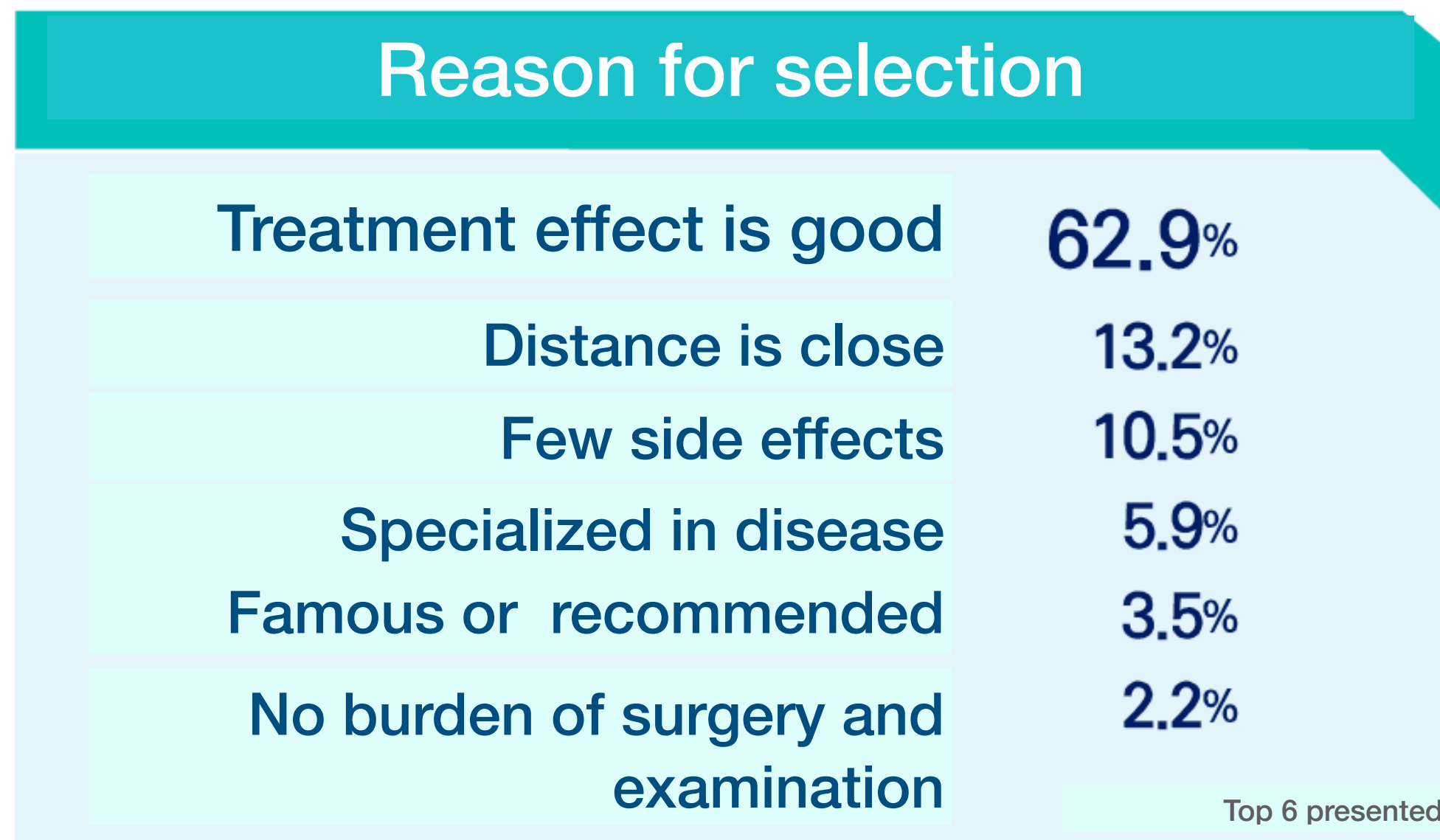
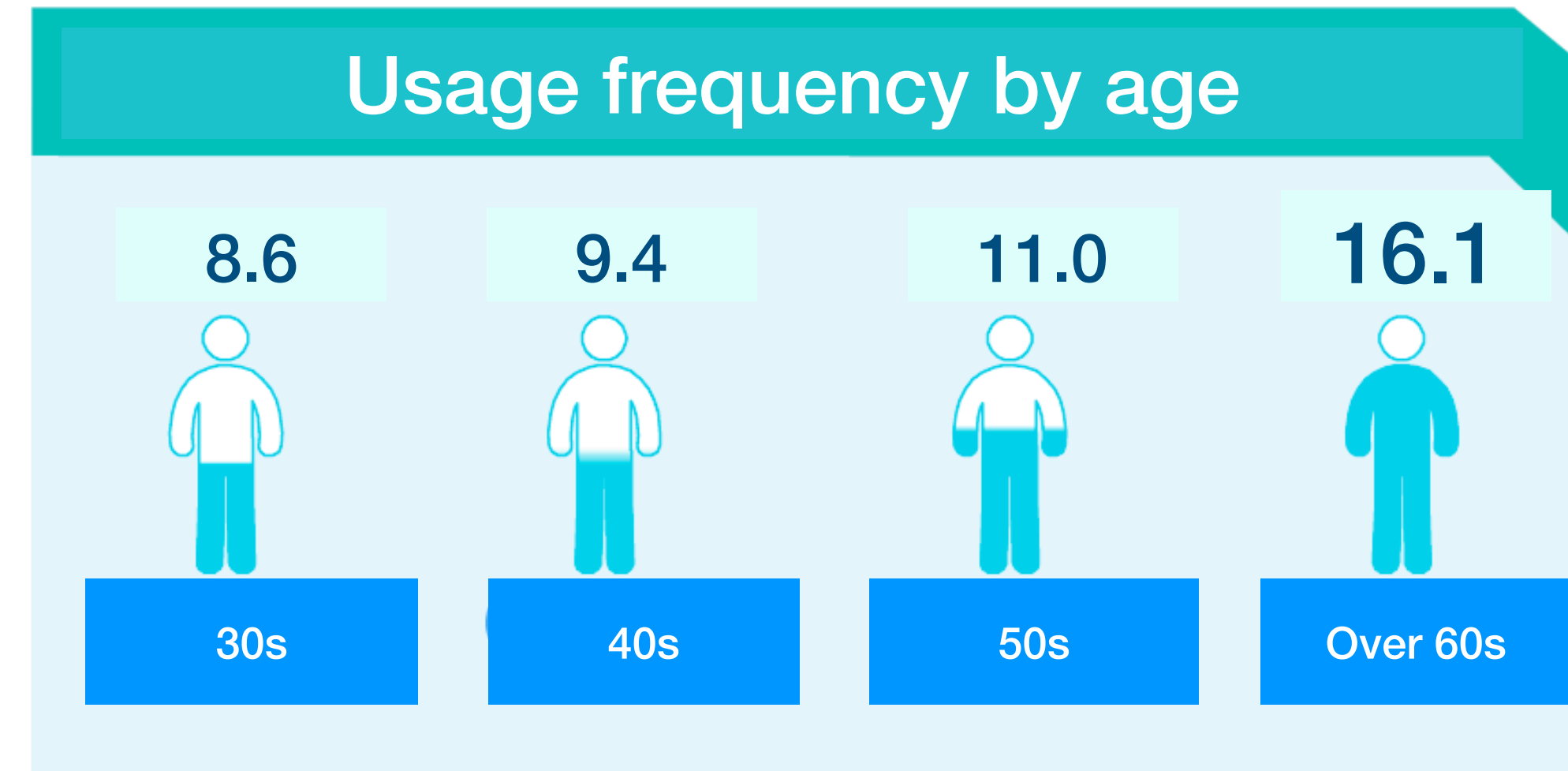
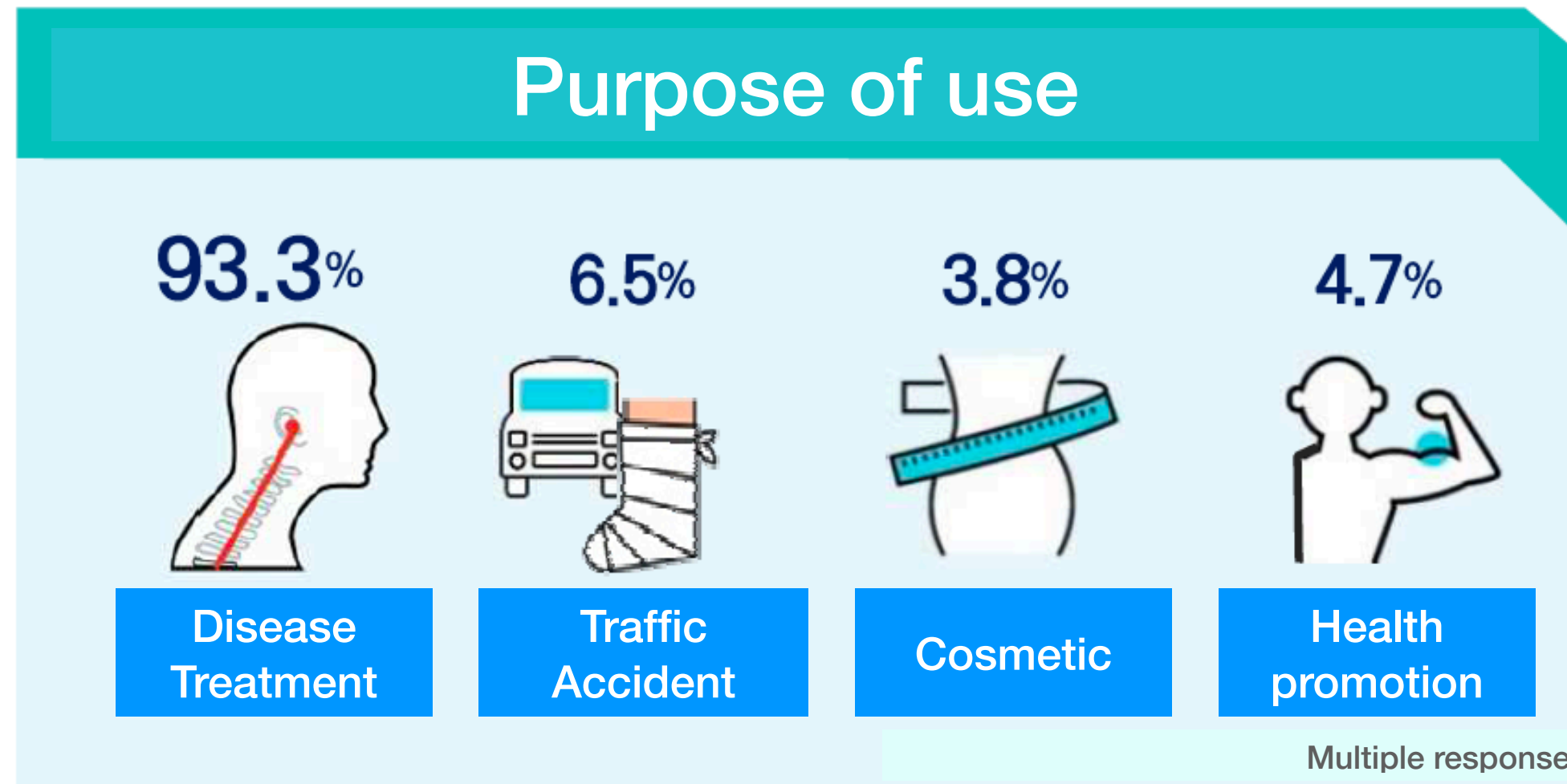
Lifetime experience of used of Korean medicine

Unit(% , [number])

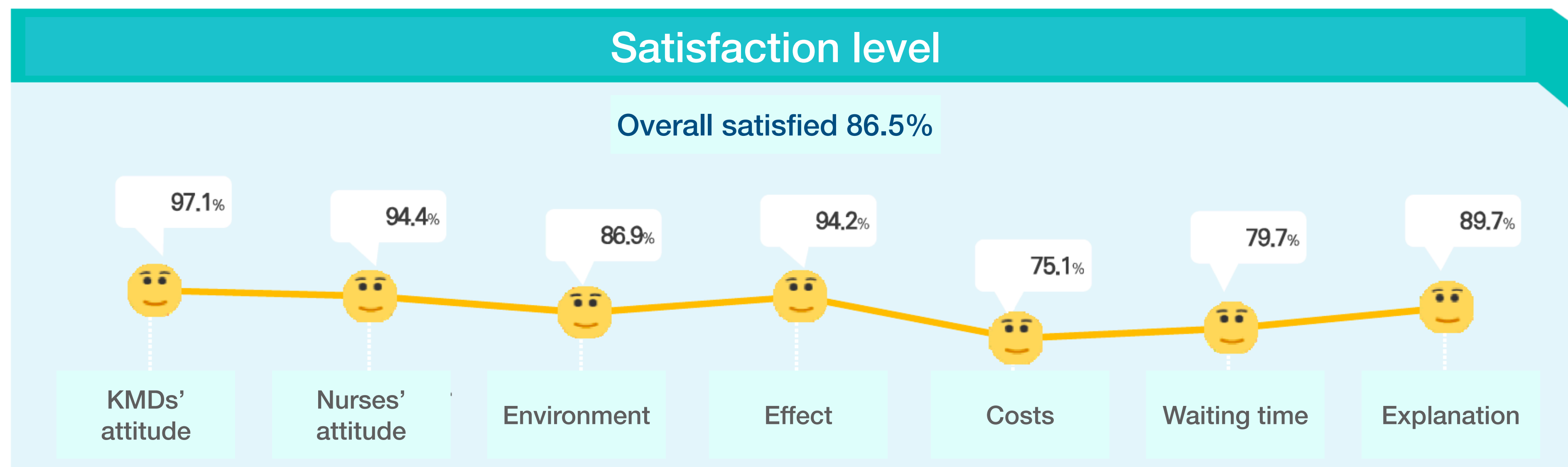
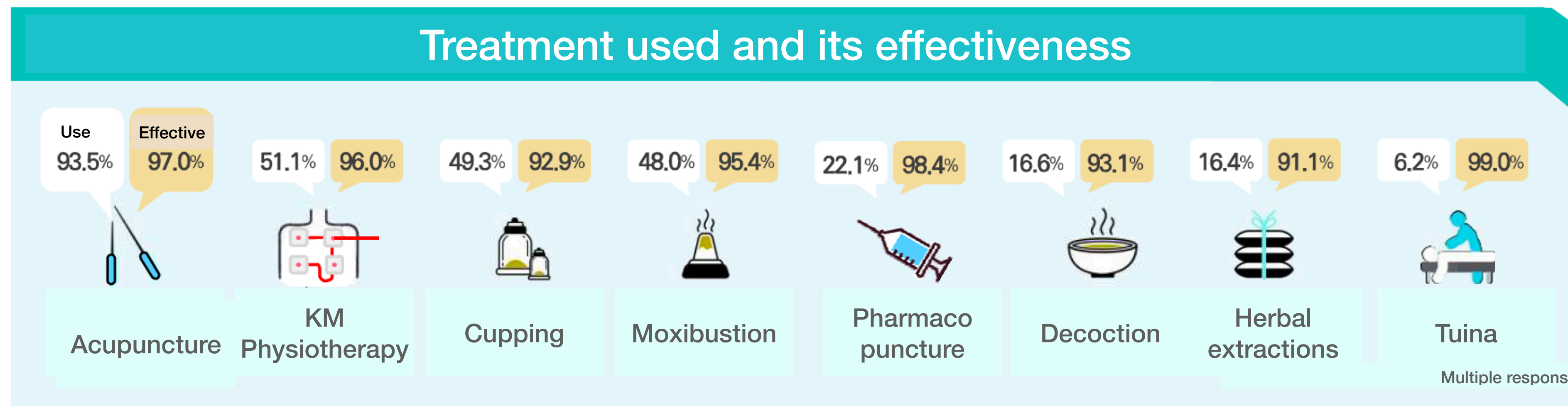
- 73.8% of general citizens have experience of receiving traditional Korean medicine treatment at least once in their lifetime.
- Male < Female
- The higher the age, the higher the experience rate.

Category		Experience	2017
Total		Yes	73.8
		No	26.2
		Total	100.0(5,000)
Gender	Male	Yes	68.4
		No	31.6
	Female	Yes	79.1
		No	20.9
Age	19~29	Yes	43.1
		No	56.9
	30s	Yes	63.4
		No	36.6
	40s	Yes	77.7
		No	22.3
	50s	Yes	86.1
		No	13.9
	Over 60s	Yes	90.6
		No	9.4

Experience of use of KM outpatient treatment for the past 1 year (2017)

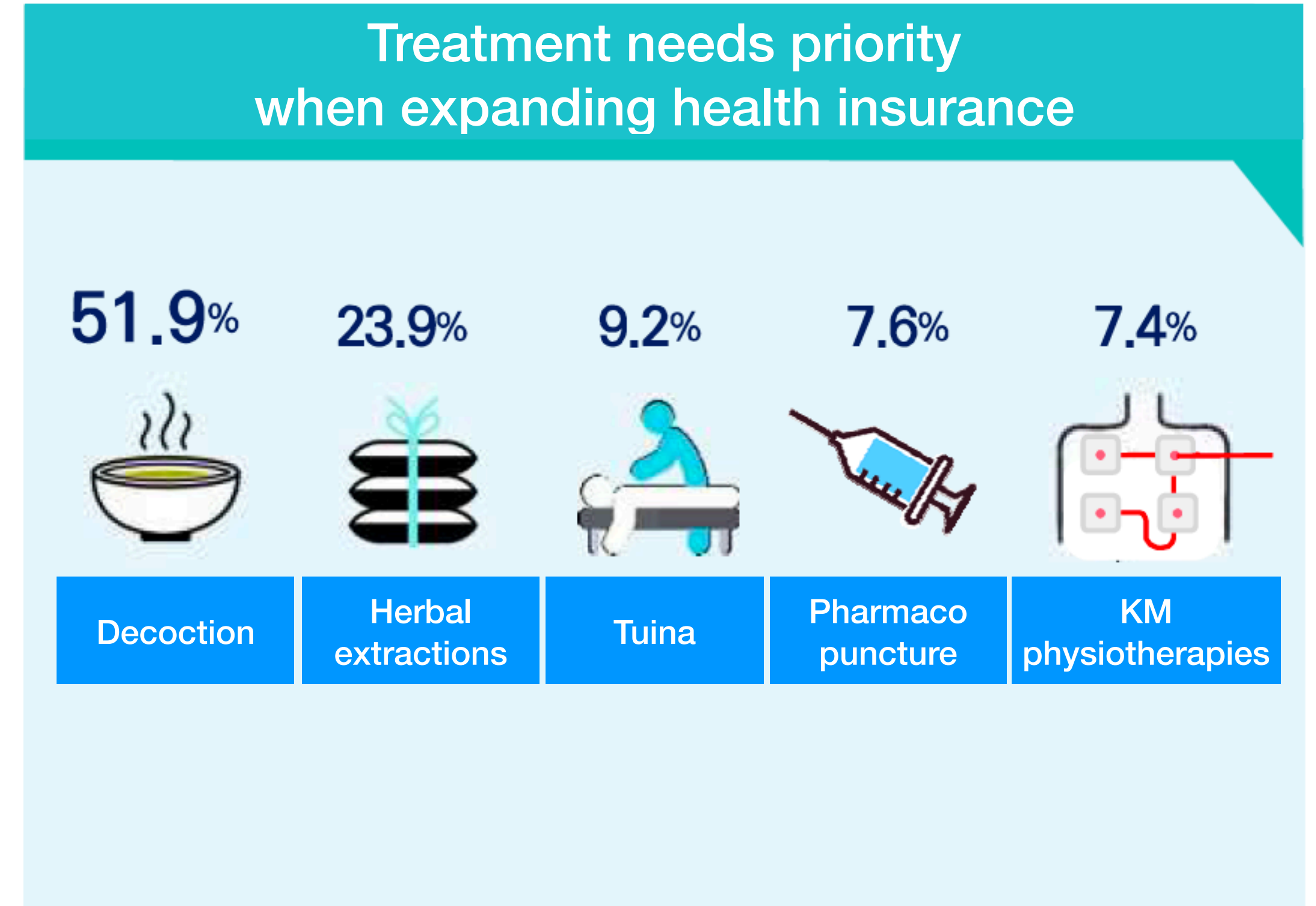
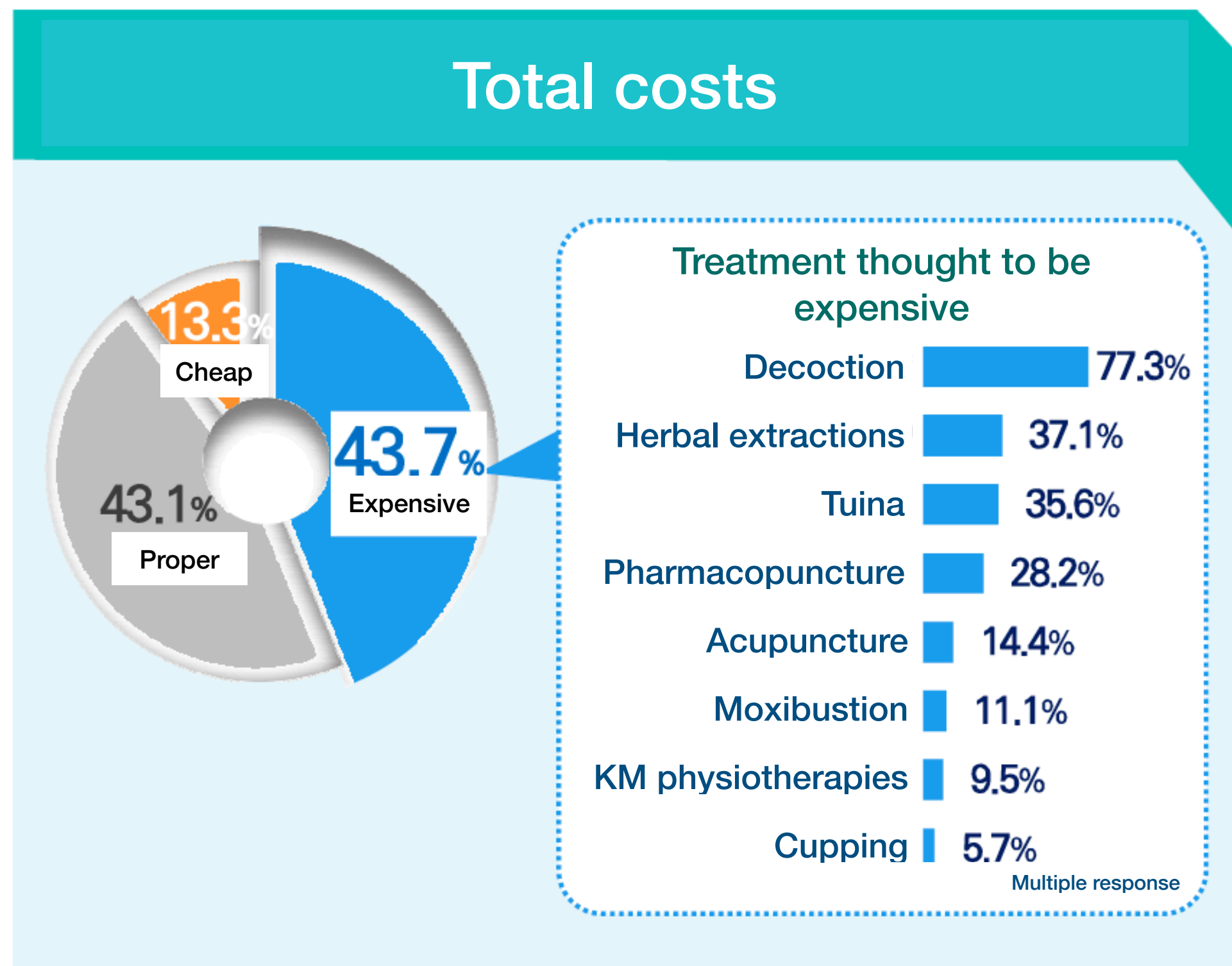


Experience of used of KM outpatient treatment for the past 1 year (2017)



Is decoction expensive?

The Korean population said “We hope it gets cheaper!!”.



Start of decoction insurance application pilot project

In November 2020, insurance coverage for three diseases began

- Pay once per year for one disease per patient (once in 10 days).

Disease	ICD code
Bell's palsy	G510
Sequelae of stroke (over 65 years)	I69
Menstrual pain	N944 N955 N946

Using common/disease-specific standard prescriptions

- The standard prescription was selected based on the evidence-based KM Standard CPGs for Bell's palsy, stroke, and menstrual pain.

	N
Total	178
Common (use regardless of disease)	71
Bell's palsy	99
Sequelae of stroke	124
Menstrual pain	104

KM Standard Clinical Practice Guidelines

History of KM Standard CPGs

- 2008~2013: CPGs for “Hwa-byung” and “Musculoskeletal Diseases” published by the R&D of the Ministry of Health and Welfare
- 2013~2015: CPGs for “Bell’s palsy”, “Lumbar disc herniation”, “Atopic dermatitis”, “Shoulder pain”, “Ankle sprain”, “Obesity”, “Depression” published by the Korean Institute of Oriental Medicine (KIOM)
- 2016~present: The Korean Medical Standard Clinical Practice Guidelines Project Group is developing treatment guidelines for over 30 diseases

KM Standard Clinical Practice Guidelines

How to develop guidelines



KM Standard Clinical Practice Guidelines

Evidence levels

Grade	Definition
High	The effect estimate is certain to be close to the actual effect.
Moderate	Confidence in the estimate of the effect is moderate. Estimates of the effect appear to be close to the actual effect, but may differ significantly.
Low	Confidence in the estimate of the effect is limited. The actual effect may differ significantly from the estimated effect.
Very low	Confidence in the estimate of the effect is low. The actual effect will differ significantly from the estimate of the effect.
Classical Text-based, CTB	Although there is evidence recorded in classical texts such as traditional medicine books, evidence studies using modern research methodology have not been conducted yet.

KM Standard Clinical Practice Guidelines

Recommendation grade

Grade	Definition	Expression
A	Recommended when the benefit is clear and its use is high in the clinical field.	Recommended
B	Recommended when the benefit is reliable and the clinical benefit is apparent even if the use is high or moderate in the treatment field, or even if the evidence related to the evidence of the recommendation is insufficient.	Should be considered
C	Recommended when the benefit is not reliable, but the use is high or moderate in the treatment field.	May be considered
D	Recommended when the benefit is unreliable and can have dangerous consequences.	Not recommended
GPP	Recommended based on the consensus of a group of experts based on the bibliographic evidence or clinical use.	Recommended based on the expert group consensus

KM Standard Clinical Practice Guidelines

Development status

	Diseases
<p>Completed (n=15)</p>	<p>Lumbar diseases, Lumbar disc herniation,, Knee joint pain, Cervical diseases, Ankle sprain, Shoulder pain, Hwa-byung, Bell’s palsy, COVID-19, Influenza (H1N11), Infertility, Smoking cessation, Obesity, Depression, Atopic dermatitis</p>
<p>Developing (n=25)</p>	<p>Functional dyspepsia, Chronic fatigue syndrome, Common cold, Allergic rhinitis, Breast cancer, Cancer-related symptoms, Sleep disorder, Anxiety disorder, Autism spectrum disorder, TMJ disorder, Chronic low back pain syndrome, Degenerative lumbar spinal stenosis, Traffic accident injury syndrome, Post-lumbar spine surgery, Post-knee replacement surgery, Post-rotator cuff surgery, Parkinson’s disease, Stroke, Hypertension, Migraine, Dizziness and vertigo, Dementia, Menstrual pain, Menopausal disorder and syndrome, Cold sensation on hands and feet</p>
<p>Planned (n=11)</p>	<p>Osteoporosis, Gout, Type 2 diabetes, Irritable Bowel Syndrome, Gastric cancer, Tension-type headache, Scoliosis, Carpal tunnel syndrome Diseases of four constitutions, Growth disorder, Eight principle pattern identification</p>

Using common/disease-specific standard prescriptions

- By assigning codes for standard prescriptions and each herb, the state of use in the country is managed by the government.
- It is possible to add or subtract the standard prescription according to the diagnosis of KMDs within 453 kinds of herbs with assigned codes.

Prescription	Prescription Code	Herb Code	Name of Herbs	Dose (g)
131. 竹葉石膏湯	H00110131	3104H1AHM	淡竹葉	3.75
	H00210131	3265H1AHM	石膏	15
	H00310131	3400H1AHM	人蔘	7.5
		3152H1AHM	麥門冬	5.63
		3182H1AHM	半夏	3.75
		3007H1AHM	甘草	2.63
		3016H1AHM	粳米	3.75
		3260H1AHM	生薑	3.75

Traditional Korean Herbal Medicine Research Status

CRIS

Clinical Research Information Service

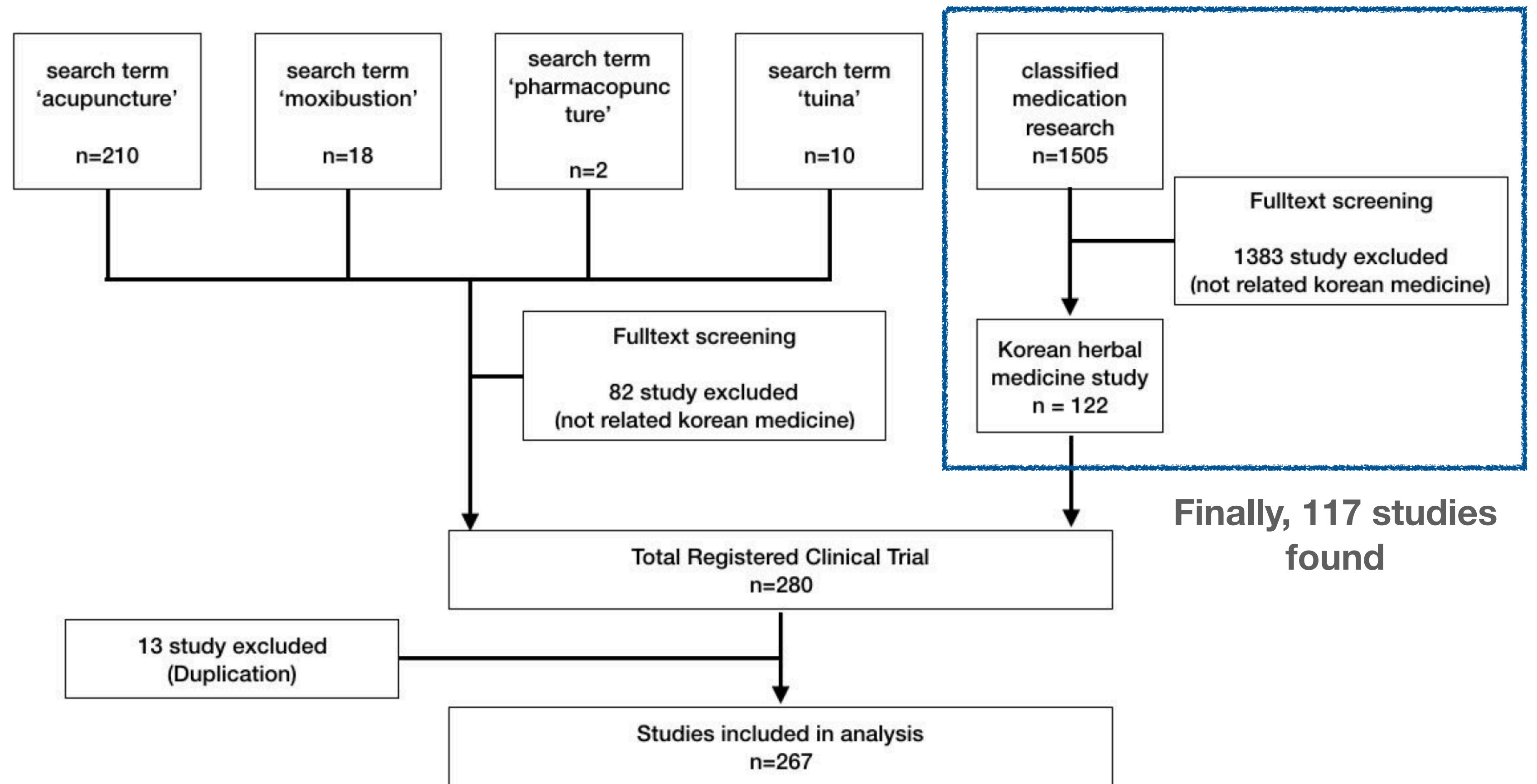
- The K-CDC has operated CRIS since February 2010 and participates in the WHO ICTRP as a primary registry.
- As of February 2021, CRIS registration is compulsory for clinical trial that have received funding from the Korean government.
- All information on clinical trials related to Traditional Korean Herbal Medicine in Korea can be searched on CRIS.



<https://cris.nih.go.kr/cris/index.jsp>

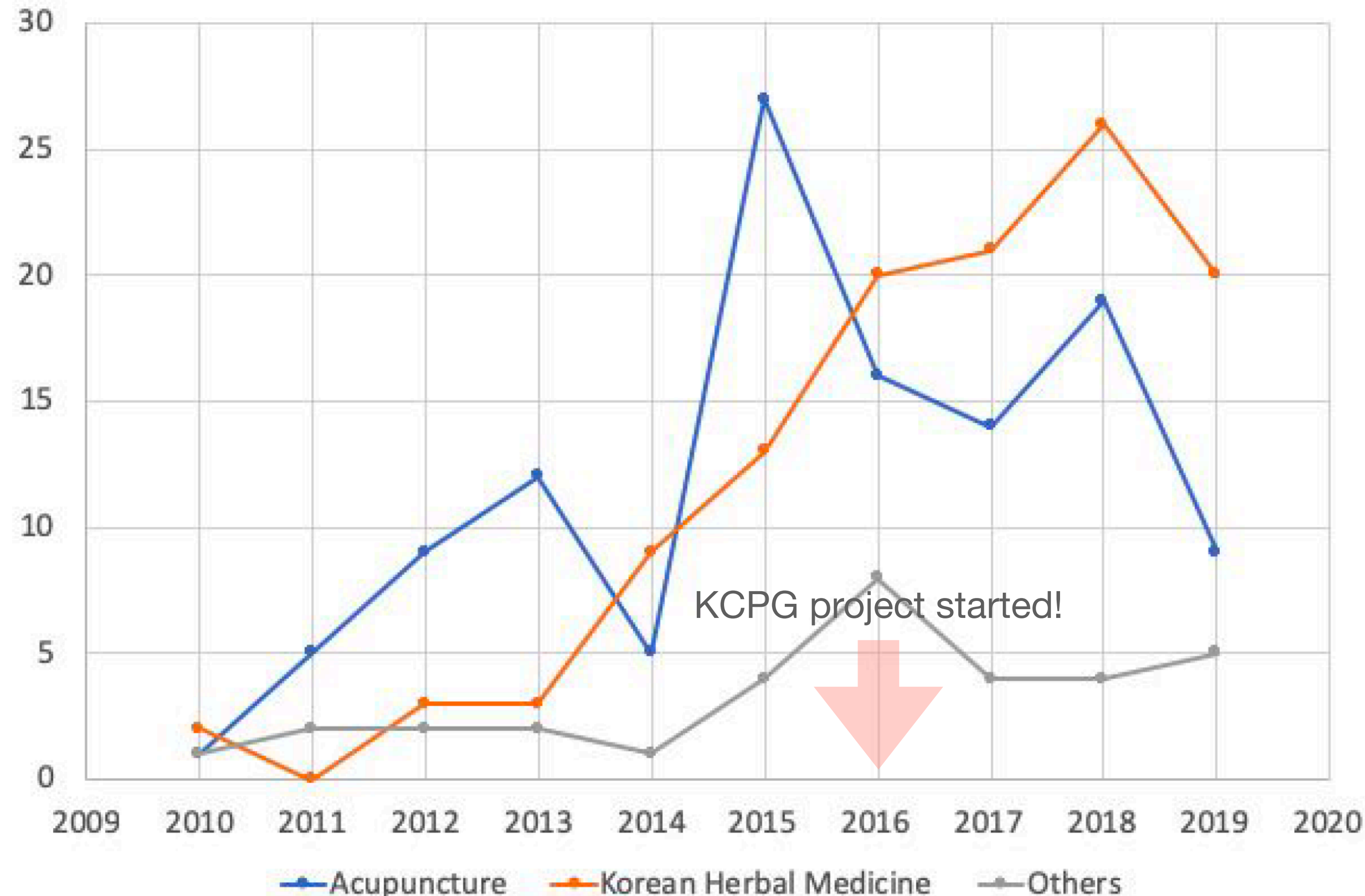
Flow Chart of Review

- Search the current status of registered research until January 2, 2020
- By using the search function by classification, 1,505 studies classified as “medicine intervention” were reviewed and only studies related to Traditional Korean Herbal Medicine were selected.



Trends of KM studies

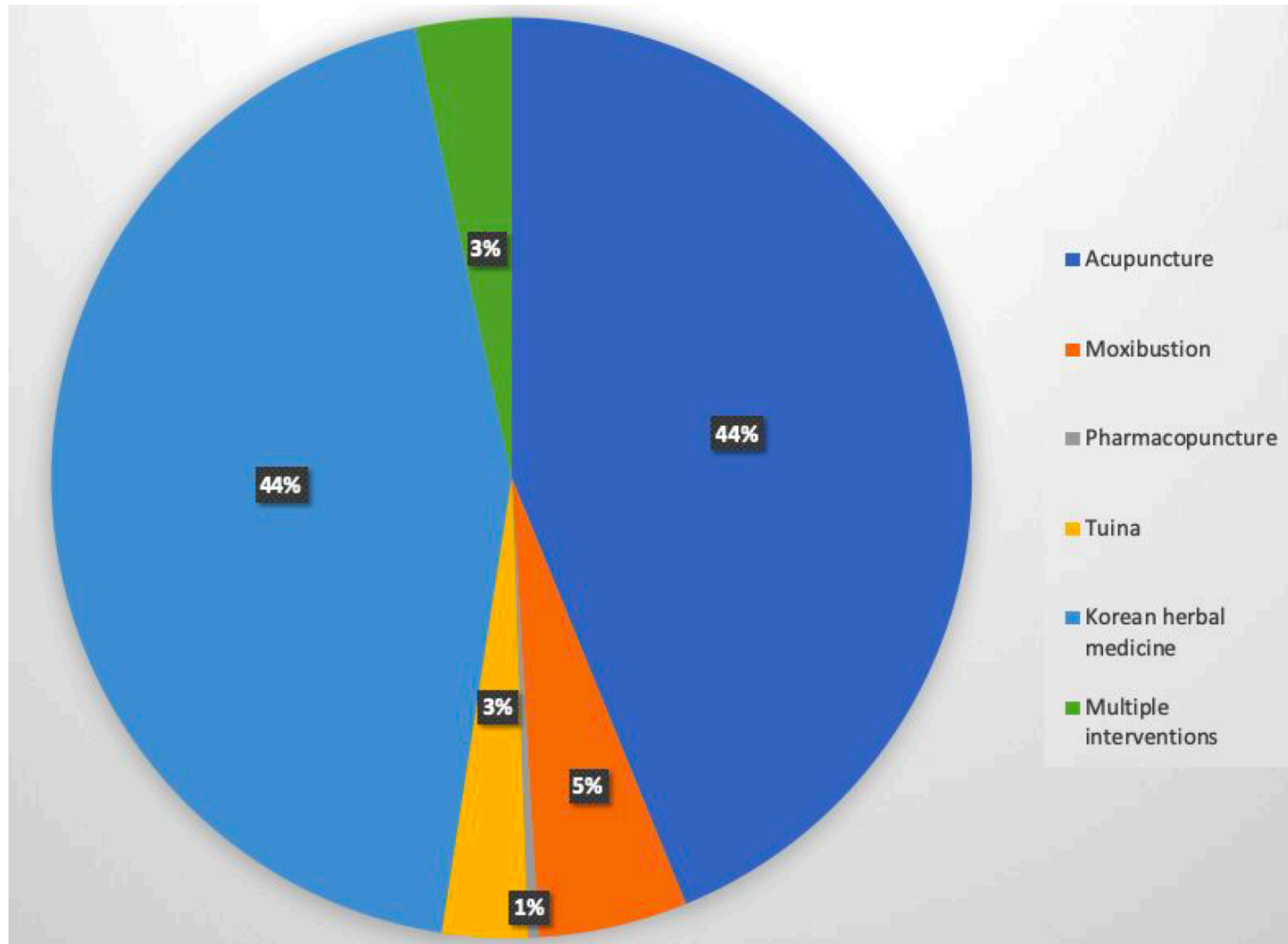
Research is constantly increasing!



- As of 2013, the number of studies related to Traditional Korean Herbal Medicine has been increasing significantly.

Type of interventions in KM studies

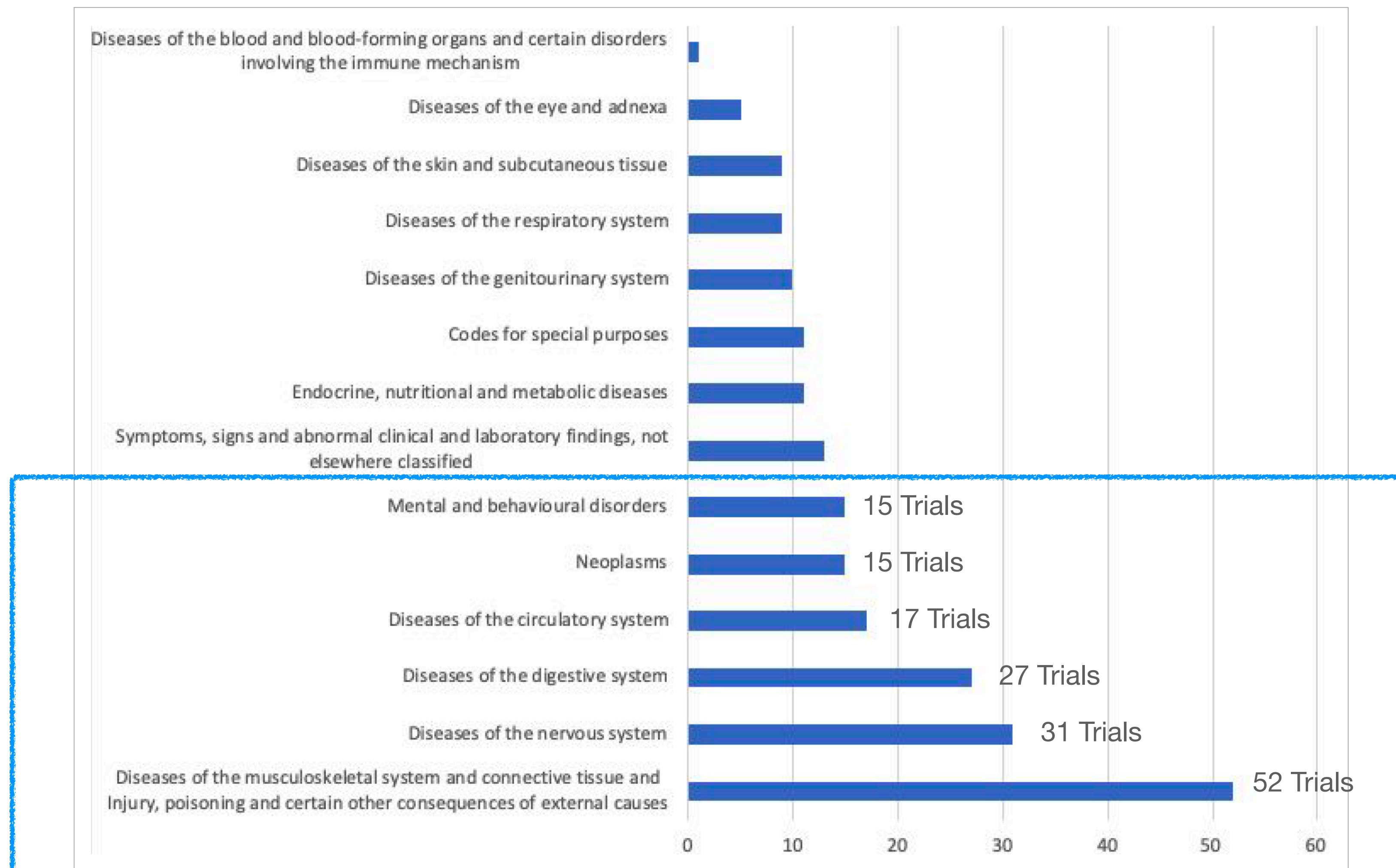
The rate of research related to herbal medicine and acupuncture was remarkably high!



- Herbal medicine: 117
- Acupuncture: 117
- Moxibustion: 14
- Pharmacopuncture: 1
- Tuina: 8
- Multiple interventions: 10

Therapeutic areas of studies

Most studies are related to musculoskeletal, nervous system, and digestive diseases.



TOP 5!

Gyejigachulbutang in patients with degenerative knee osteoarthritis

Representative study of the musculoskeletal system

- Gyejigachulbutang (GUI-ZHI-JIA-SHU-FU-TANG, GCB) is an herbal formula widely prescribed in traditional East Asian medicine practice for arthritis and muscle pain.

TABLE 2: Composition and dose of GCB.

Name of herb	Dry weight (g)
Cinnamomi Cortex (桂皮)	4.0
Paeoniae Radix (芍藥)	4.0
Atractylodes Lancea Rhizome (蒼朮)	4.0
Zizyphi Fructus (大棗)	4.0
Glycyrrhizae Radix (甘草)	2.0
Zingiberis Rhizoma (生薑)	1.0
Aconiti Radix Processa (附子)	0.5
GCB, Gyejigachulbutang	7.5 g/day

Gyejigachulbutang in patients with degenerative knee osteoarthritis

Representative study of the musculoskeletal system

- Eighty patients with KOA were randomly assigned to the GCB group or the placebo group in a 1:1 ratio in two Korean medicine hospitals.
- Patients took GCB or placebo three times a day for 4 weeks.

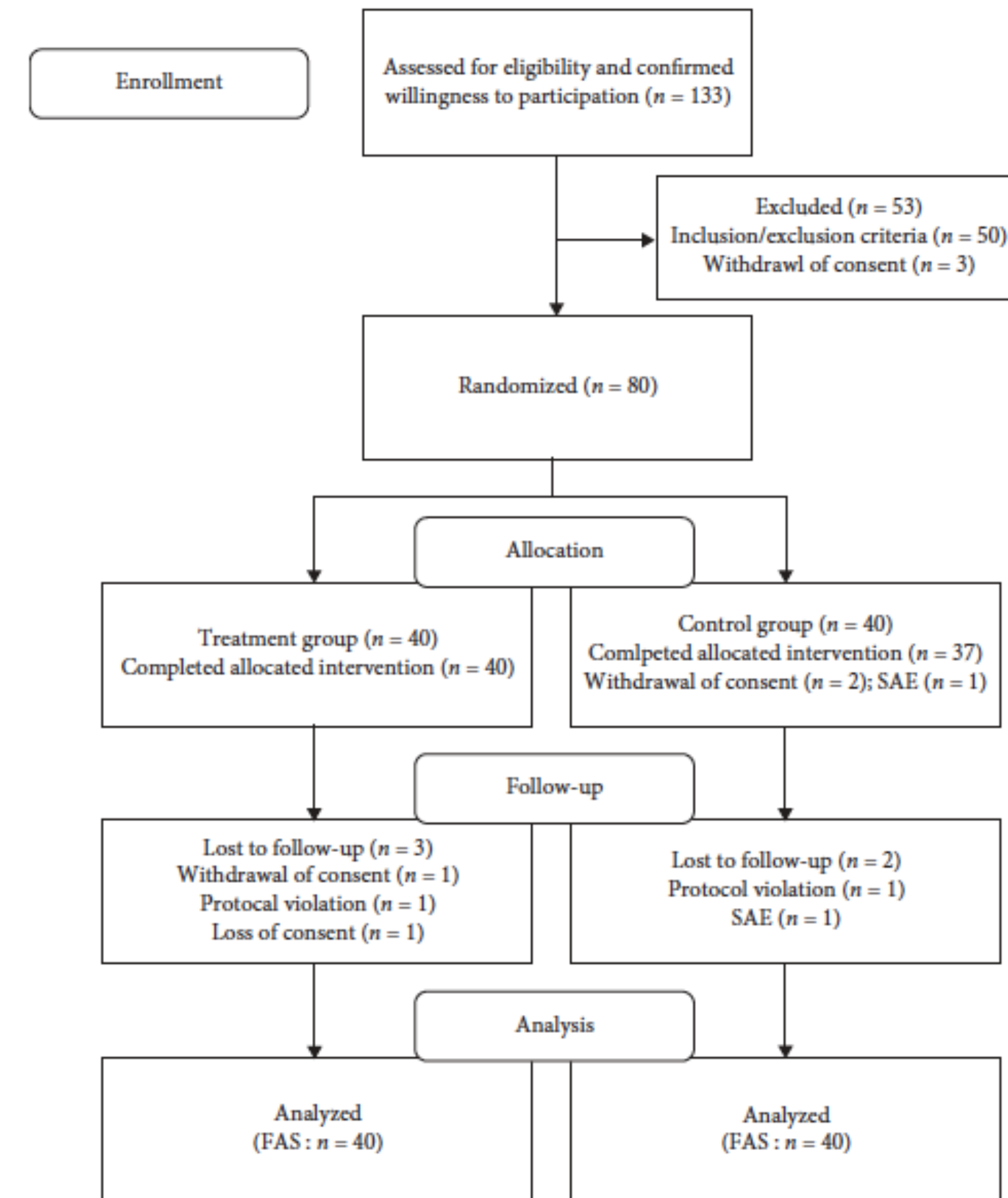


FIGURE 1: Patient flowchart.

Gyejigachulbutang in patients with degenerative knee osteoarthritis

Representative study of the musculoskeletal system

- There was no significant difference between the GCB and placebo groups in terms of the compared indicators.

TABLE 4: Treatment effect as measured at baseline, week 2, week 4, and week 8 (N= 80).

Characteristic	Baseline [†]	Week 2 [†]	Mean difference [†]	p value ^b	Week 4 [†]	Mean difference [†]	p value ^b	Week 8 [†]	Mean difference [†]	p value ^b
VAS										
GCB	57.95 (52.16, 63.74)	52.55 (46.04, 59.06)	-5.40 (-7.92, -2.88)	<0.0001*	54.03 (47.33, 60.72)	-3.93 (-7.21, -0.64)	0.0196*	47.17 (40.00, 55.33)	-10.78 (-19.67, -1.90)	0.0174*
Placebo	60.30 (54.35, 66.25)	52.76 (45.74, 59.78)	-7.54 (-12.92, -2.17)	0.0061*	61.47 (53.79, 69.05)	1.12 (-6.15, 8.39)	0.7615	50.17 (43.91, 56.43)	-10.13 (-17.92, -2.33)	0.0109*
p value ^a	0.5688	0.7002			0.1881			0.6368		
K-WOMAC										
GCB	44.23 (37.89, 50.56)	41.30 (35.79, 46.81)	-2.93 (-5.02, -0.83)	0.0064*	41.40 (35.02, 47.78)	-2.83 (-4.80, 0.85)	0.0054*	40.61 (33.35, 47.87)	-3.61 (-8.86, 1.63)	0.1768
Placebo	46.73 (41.57, 51.88)	43.76 (38.71, 48.81)	-2.97 (-6.62, 0.69)	0.1114	43.76 (37.67, 49.82)	-2.96 (-8.46, 2.54)	0.2914	37.78 (31.46, 44.10)	-8.95 (-14.61, -3.29)	0.0020*
p value ^a	0.5375	0.7571			0.8599			0.2103		
EQ-5D										
GCB	0.73 (0.69, 0.77)	0.72 (0.68, 0.76)	0 (-0.02, 0.01)	0.5930	0.73 (0.68, 0.77)	0 (-0.02, 0.01)	0.7971	0.75 (0.72, 0.79)	0.03 (-0.01, 0.06)	0.0955
Placebo	0.71 (0.67, 0.75)	0.72 (0.69, 0.75)	0.02 (-0.02, 0.06)	0.3946	0.74 (0.71, 0.77)	0.04 (-0.01, 0.08)	0.1596	0.76 (0.73, 0.8)	0.06 (0, 0.11)	0.0337*
p value ^a	0.4594	0.6055			0.3395			0.5466		

[†]Data expressed as 95% confidence interval. ^ap value was calculated from analysis of covariance with baseline score as a covariate. ^bp value was calculated from the paired t-test. *Significant difference. GCB, Gyejigachulbutang; VAS, visual analogue scale; K-WOMAC, Korean Western Ontario and McMaster Universities Osteoarthritis Index; EQ-5D, European Quality of life Five Dimensions questionnaire.

Gyejigachulbutang in patients with degenerative knee osteoarthritis

Representative study of the musculoskeletal system

- There was no significant difference between the GCB and placebo groups in terms of the compared indicators.
- However, in subgroup analysis, GCB was effective for subjects with a BMI lower than 25 kg/m².

TABLE 5: Analysis of participants with BMI 25 or more and BMI less than 25 (N=80).

VAS	BMI 25 or more (n=43)			BMI less than 25 (n=37)		
	GCB group [†]	Placebo group [†]	p value [‡]	GCB group [†]	Placebo group [†]	p value [‡]
Baseline	56.52 (49.44, 63.60)	55.45 (47.08, 63.82)		59.88 (49.29, 70.47)	65.15 (56.49, 73.81)	
Week 2	54.26 (45.55, 62.97)	52.57 (42.39, 62.75)	0.8675	50.24 (39.40, 61.07)	52.95 (43.22, 62.67)	0.7951
Difference	-2.26 (-5.89, 1.06)	-2.88 (-6.13, 0.36)		-9.45 (-13.38, -5.92)	-12.20 (-15.03, 9.38)	
p value ^a	0.1808	0.0812		<0.0001*	<0.0001*	
Week 4	57.22 (48.35, 66.09)	56.40 (44.95, 67.86)		49.71 (38.74, 60.67)	66.44 (57.07, 75.80)	
Difference	0.70 (-3.61, 5.00)	0.95 (-4.24, 6.14)	0.9434	-10.18 (-15.06, -5.30)	1.29 (-1.64, 4.21)	0.0239*
p value ^a	0.7496	0.7166		<0.0001*	0.3857	
Week 8	48.33 (37.90, 58.77)	47.90 (38.04, 57.75)		45.59 (32.46, 58.72)	52.45 (44.44, 60.46)	
Difference	-8.19 (-14.01, -2.37)	-7.55 (-13.20, -1.90)	0.9353	-14.29 (-18.80, -9.79)	-12.70 (-16.73, -8.68)	0.5772
p value ^a	0.0062*	0.0093*		<0.0001*	<0.0001*	

[†]Data expressed as 95% confidence interval. [‡]The mean difference was analyzed through analysis of covariance with the baseline score as covariant. ^ap value was calculated from the paired t-test, *Significant difference. VAS, visual analogue scale. GCB, Gyejigachulbutang.

Samryungbaekchul-san and diarrhea-predominant IBS

Representative study of the gastrointestinal system

- Samryungbaekchul-san (SRS) is widely used to treat diarrhea-predominant irritable bowel syndrome (D-IBS) in East Asian countries.

Table 2. Ingredients of the herbal formula Samryungbaekchul-san.

Scientific Name	Plant Part Used	Dry Weight for Extraction (Gram/Pack)
Atractylodis Rhizoma Alba	Root	1.00
Poria Sclerotium	Dried core	1.33
Dioscoreae Rhizoma	Root	1.00
Glycyrrhizae Radix et Rhizoma	Root	0.50
Coicis Semen	Seed	2.67
Nelumbinis Semen	Seed	1.33
Platycodonis Radix	Root	0.83
Dolichoris Semen	Seed	1.33
Amomi Fructus	Fruit	0.67
Ginseng Radix	Root	1.00

Samryungbaekchul-san and diarrhea-predominant IBS

Representative study of the gastrointestinal system

- A pilot double-blind, four-arm, parallel-group, randomized controlled trial (RCT), including 80 patients diagnosed with D-IBS according to the Rome III criteria.
- The patients were randomly assigned to four treatment groups and were administered drugs for 8 weeks after a 2-week preparatory period.

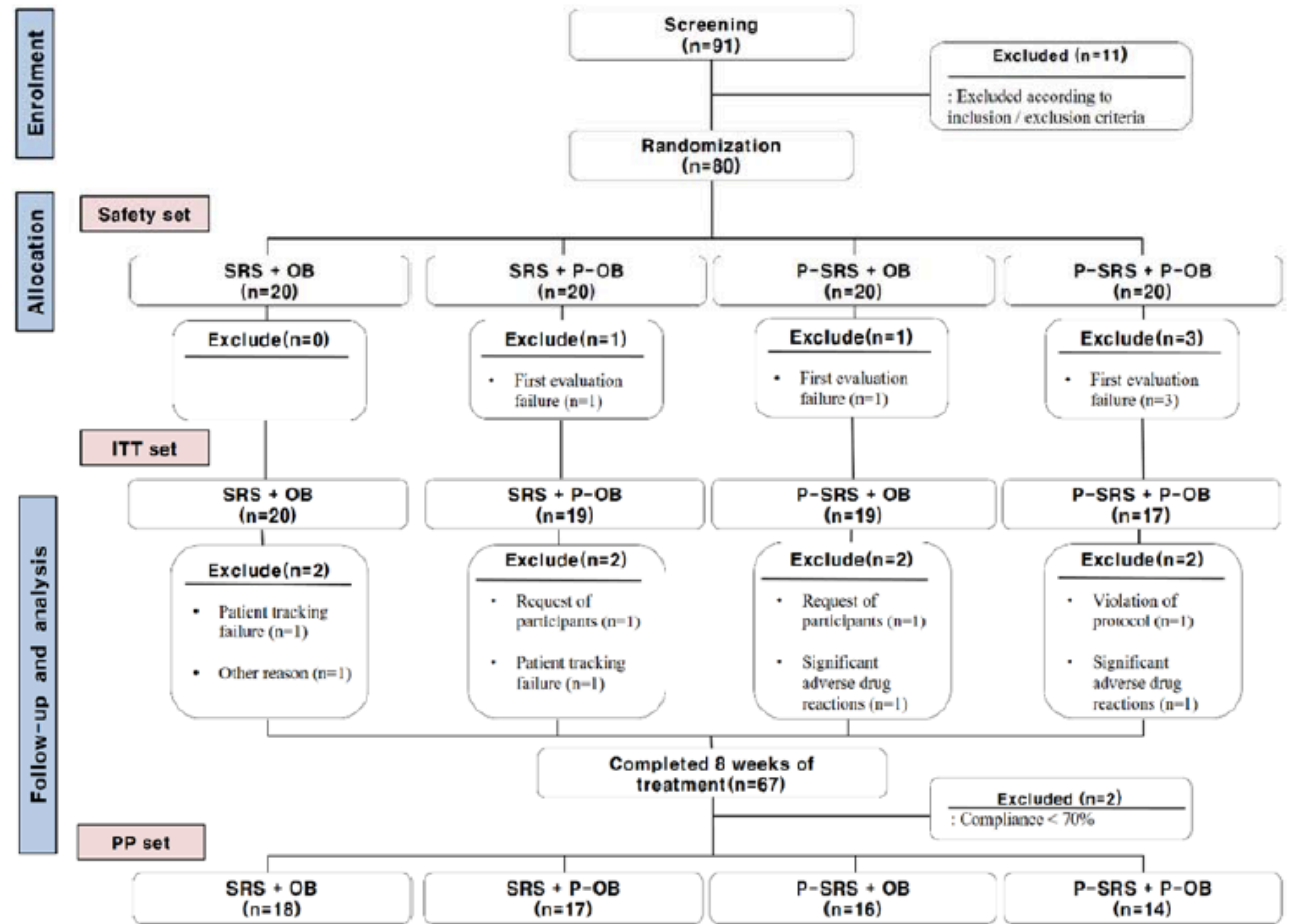


Figure 3. Flow chart of the study. SRS = Samryungbaekchul-san; P = placebo; OB = otilonium bromide; ITT = intent-to-treat; PP = per-protocol.

Samryungbaekchul-san and diarrhea-predominant IBS

Representative study of the gastrointestinal system

- The primary outcome was evaluated by using a global D-IBS symptom improvement score; no statistically significant difference was observed between the groups.
- However, multiple logistic regression analysis of primary outcome scores shows that SRS significantly improved D-IBS symptoms ($p < 0.05$).

Table 5. Multiple logistic regression analysis of risk factors for symptom relief (ITT analysis).

Variables	OR (95% CI)	<i>p</i> -Value
Intercept Group (Placebo)		0.746
SRS + OB	4.84 (0.85–27.74)	0.077
OB	1.15 (0.20–6.64)	0.880
SRS	5.47 (1.01–29.53)	0.049
Sex (Male)	0.21 (0.05–0.82)	0.025
Other Disease (Yes)	0.26 (0.06–1.11)	0.068

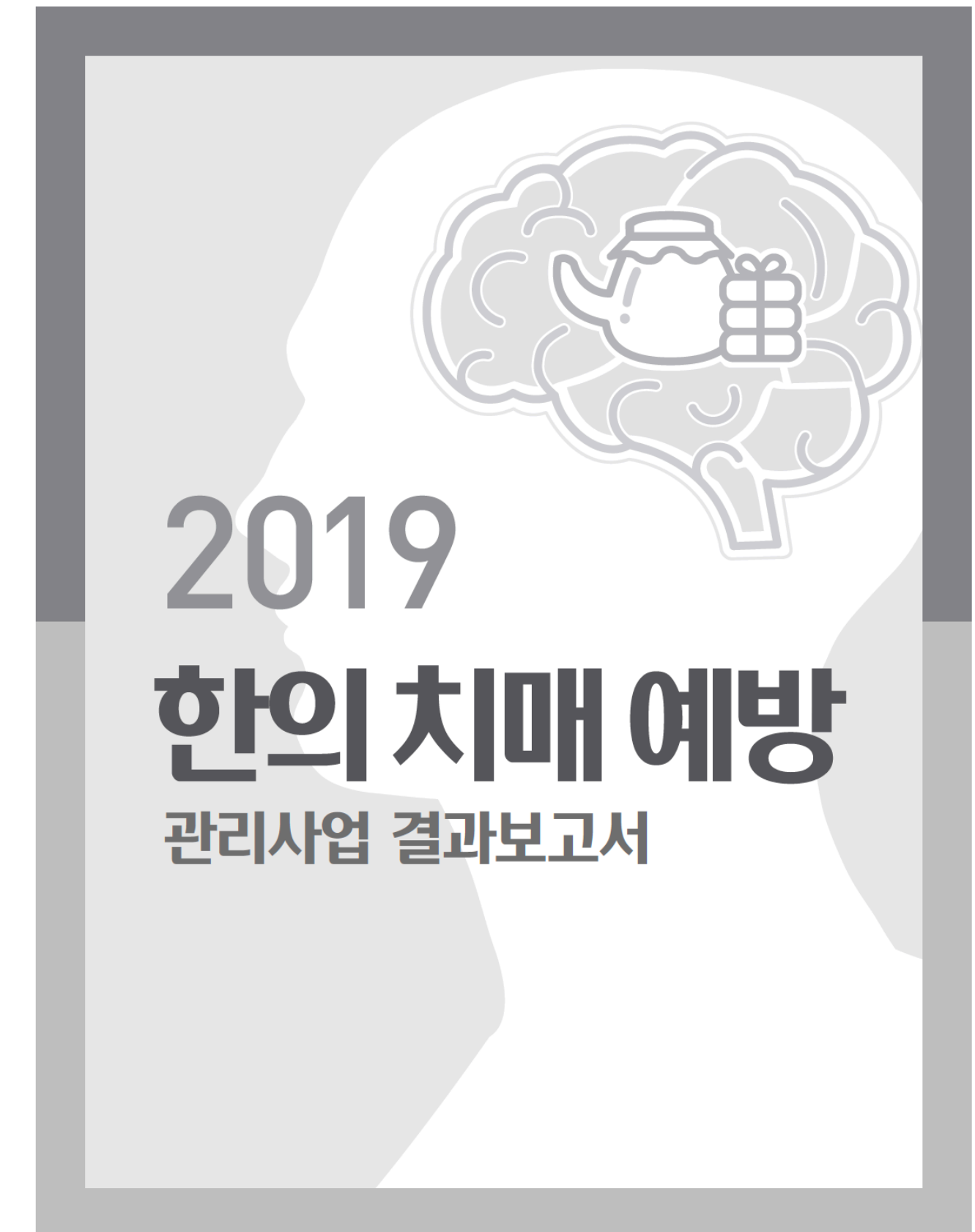
ITT = intent-to-treat; OR = odds ratio; CI = confidence interval; SRS = Samryungbaekchul-san; OB = otilonium bromide.

Utilization of Traditional Korean Herbal medicine in clinical field

Herbal medicine treatment to prevent dementia in patients with MCI

Overview of the dementia prevention project in Busan

- It is being implemented as a project to improve and alleviate symptoms of mild cognitive impairment and to secure the health of the elderly population.
- Began in 2016 and continuing.



Herbal medicine treatment to prevent dementia in patients with MCI

Overview of the dementia prevention project in Busan

- Method: In KM clinics designated for dementia prevention management, KMDs conducted treatment for 6 months.
- Subjects: Those who have been diagnosed with mild cognitive impairment among the elderly population aged 60 and living in Busan Metropolitan City
- Screening tools: KDSQ C/H, MoCA, sGDS (for depression)
- Outcome measures: MMSE, MoCA
- Interventions: Pharmacological (herbal extractions according to pattern identification), non-pharmacological (acupuncture treatments)
- In 2019, it runs from March 2019 to November 2019

부산광역시와 부산시한의사회가 함께하는

* 한의치매예방 *

2021 지원사업 참여자 모집



한의치매예방 참여자 모집

모집기간 2021. 01 ~ 모집완료까지	모집인원 250명
신청자격 1961년 1월 1일 이전 출생자 (주 2회 내원가능하고, 치매약을 복용하지 않는 사람)	참여혜택 6개월 약침 및 한약무료지원 (단, 침구 치료비 본인 부담)

부산시한의사회 051-466-5966 또는 아래의 지역구 치매안심센터로 신청

강서구 051-970-2600	동구 051-440-6441	사상구 051-310-4854	연제구 051-665-5461
금정구 051-519-5678	동래구 051-550-6703	사하구 051-220-5651	영도구 051-419-4935
기장군 051-709-2945	부산진구 051-605-6107	서구 051-240-4912	중구 051-600-4758
남구 051-607-3787	북구 051-309-5278	수영구 051-610-4901	해운대구 051-749-7575

부산광역시 부산광역시한의사회 부산시16개구군치매안심센터

Herbal medicine treatment to prevent dementia in patients with MCI

Interventions

- Traditional Korean Herbal Medicine according to pattern identification

Pattern Identification	Prescription	Contents
Qi deficiency	Bojungikgi-tang 補中益氣湯	Panax ginseng C. A. Meyer 2g, Atractylodes japonica Koidzumi ex Kitamura 2g, Astragalus mongholicus Bunge 2g, Angelica acutiloba Kitagawa 1.5g, Zizypus jujuba Miller var. inermis Rehder 1.0g, Bupleurum falcatum Linne 1.0g, Glycyrrhiza uralensis Fisher 0.75g, Zingiber officinale Roscoe 0.25g, Cimicifuga dahurica Maximowicz 0.5g, Citrus reticulata Blanco 1.0g
Blood deficiency	Dangguijakyak-san 當歸芍藥散	Angelica acutiloba Kitagawa 1.5g, Cnidium officinale Makino 1.5g, Paeonia lactiflora Pallas 3.0g, Wolfiporia cocos Ryvarden et Gilbertson 2.0g, Atractylodes japonica Koidzumi ex Kitamura 2.0g, Alisma orientale Juzepczuk 2.0g
Dual deficiency of Qi and Blood	Gami-guibi-tang 加味歸脾湯	Panax ginseng C. A. Meyer 1.5g, Atractylodes japonica Koidzumi ex Kitamura 1.5g, Wolfiporia cocos Ryvarden et Gilbertson 1.5g, Astragalus mongholicus Bunge 1.0g, Angelica acutiloba Kitagawa 1.0g, Polygala tenuifolia Willdenow 0.75g, Bupleurum falcatum Linne 1.5g, Gardenia jasminoides Ellis 1.0g, Glycyrrhiza uralensis Fisher 0.5g, Saussurea lappa Clarke 0.5g, Zizypus jujuba Miller var. inermis Rehder 0.75g, Zingiber officinale Roscoe 0.25g, Zizyphus jujuba Miller var. spinosa Hu ex H. F. Chou 1.5g, Euphoria longana Lamarck 1.5g
Yin deficiency	Yukmijihwang-tang 六味地黃湯	Rehmannia glutinosa Liboschitz 2.5g, Cornus officinalis Siebold et Zuccarini 1.5g, Dioscorea batatas Decaisne 1.5g, Alisma orientale Juzepczuk 1.5g, Wolfiporia cocos Ryvarden et Gilbertson 1.5g, Paeonia suffruticosa Andrews 1.5g
Yang deficiency	Palmijihwang-tang 八味地黃湯	Cinnamomum cassia Blume 0.5g, Aconitum japonicum Thunberg 0.5g, Rehmannia glutinosa Liboschitz 2.5g, Cornus officinalis Siebold et Zuccarini 1.5g, Dioscorea batatas Decaisne 1.5g, Alisma orientale Juzepczuk 1.5g, Wolfiporia cocos Ryvarden et Gilbertson 1.5g, Paeonia suffruticosa Andrews 1.5g
Blood stasis	Gyejibokryeong-hwan 桂枝茯苓丸	Cinnamomum cassia Blume 2.0g, Wolfiporia cocos Ryvarden et Gilbertson 2.0g, Paeonia suffruticosa Andrews 2.0g, Prunus persica Batsch var. davidiana Maximowicz 2.0g, Paeonia lactiflora Pallas 2.0g

Herbal medicine treatment to prevent dementia in patients with MCI

Interventions

- Acupuncture therapies: twice a week.
 - Head: EX-HN1
 - Arm: PC6, HT7, PC8 / Leg: ST36 (left and right, alternately)

Herbal medicine treatment to prevent dementia in patients with MCI

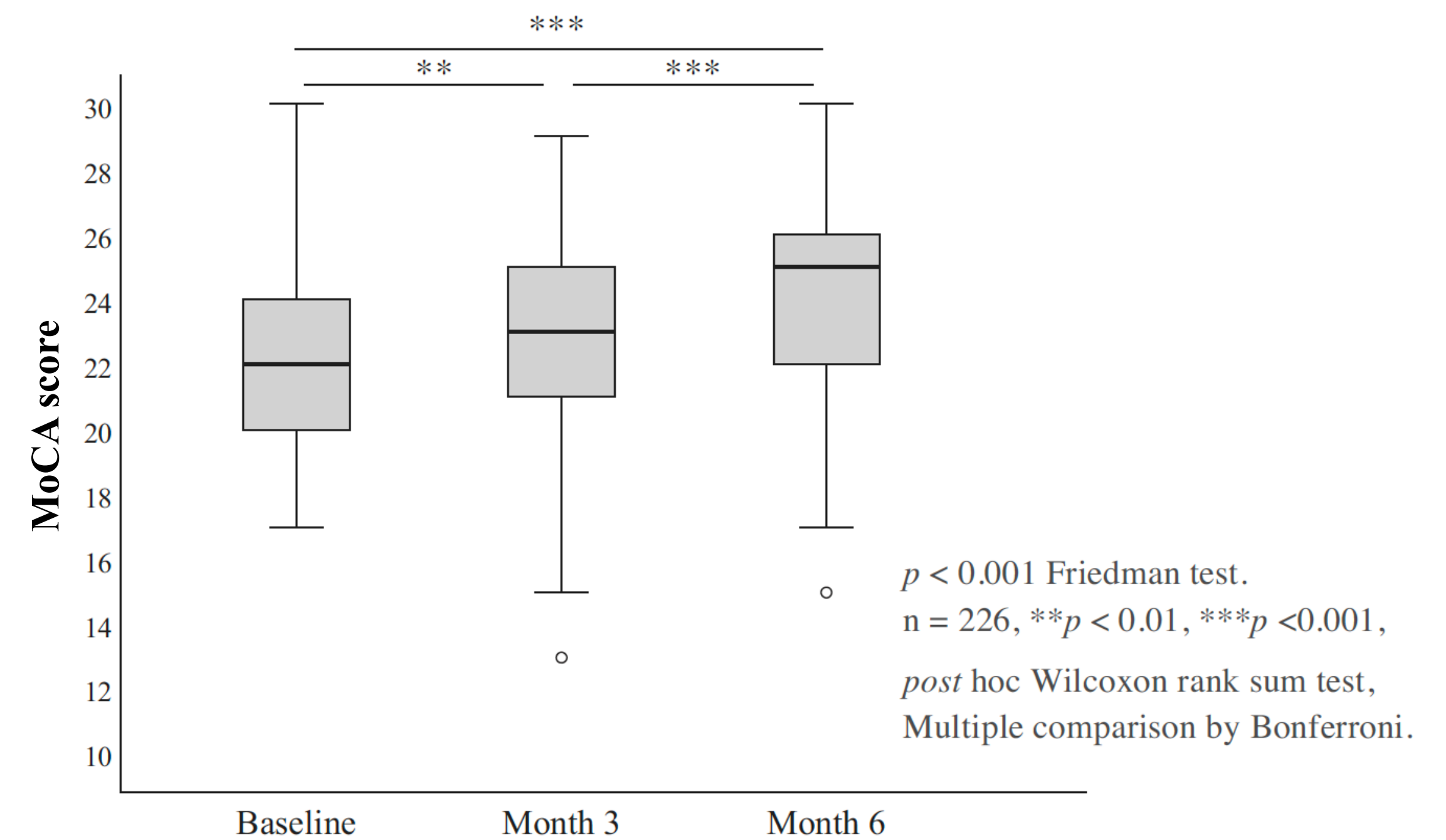
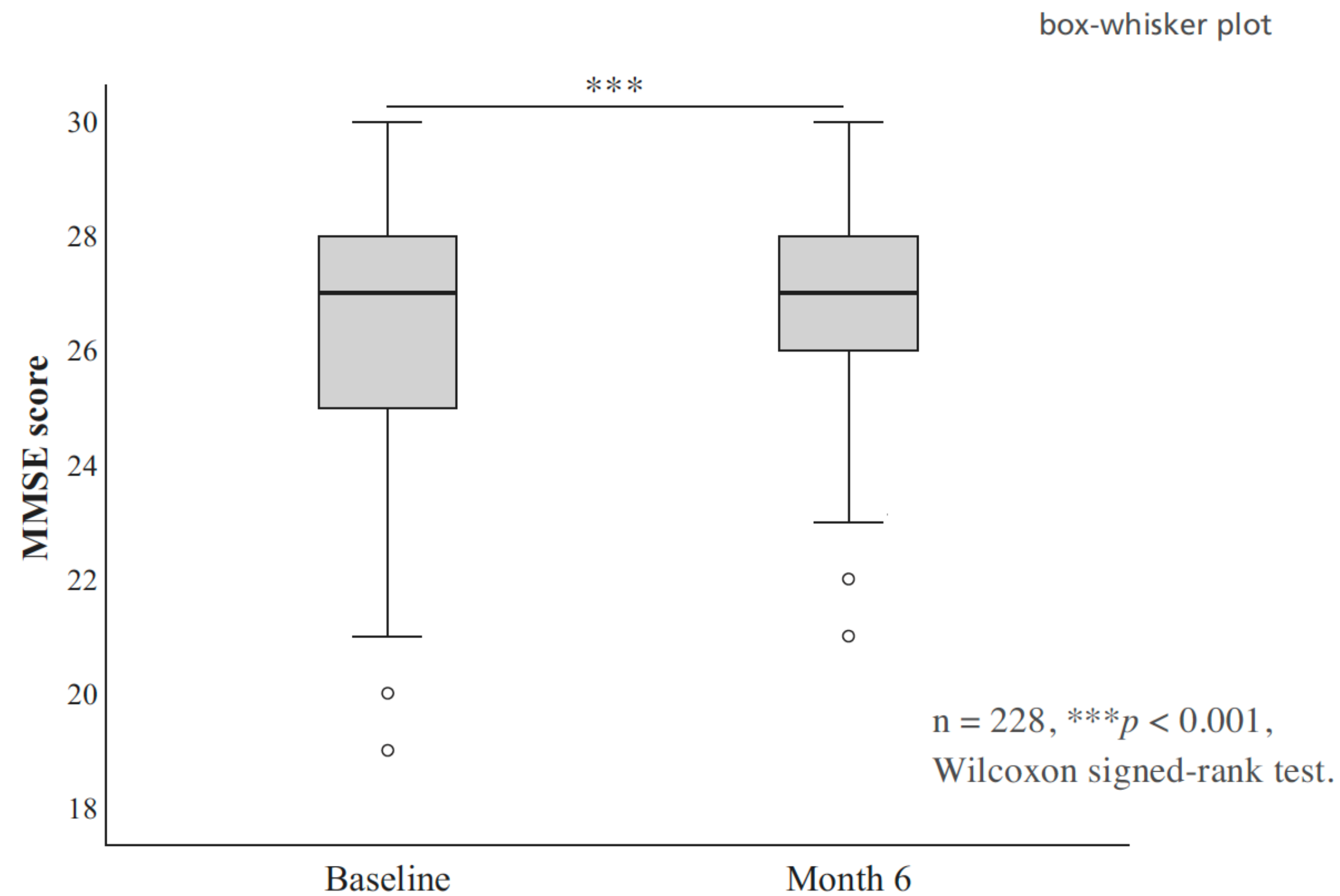
Baseline characteristics

		Total(n=288)		MCI group (n=161)		High risk group (n=36)	
Sex	Female	211	73.3%	125	77.6%	27	75.0%
	Male	77	26.7%	36	22.4%	9	25.0%
Age	Average \pm SD	73.5 \pm 5.35		73.4 \pm 5.25		75.6 \pm 5.73	
	Range	60~88		60~87		60~88	
	60~64	16	5.6%	7	4.3%	2	5.6%
	65~69	52	18.0	33	20.5%	3	8.3%
	70~74	86	29.9%	51	31.7%	6	16.7%
	75~79	106	36.8%	55	34.2%	18	50.0%
	80~84	22	7.6%	12	7.4%	4	11.1%
	85~89	6	2.1%	3	1.9%	3	8.3%
Education	0	35	12.2%	21	13.0%	9	25.0%
	1~6	104	36.1%	64	39.8%	17	47.2%
	7~12	132	45.8%	69	42.9%	10	27.8%
	\geq 13	14	4.9%	6	3.7%	0	0.0%
	No response	3	1.0%	1	0.6%	0	0.0%
Family History	Yes	54	18.8%	34	21.1%	2	5.6%
	No	234	81.3%	127	78.9%	34	94.4%

Herbal medicine treatment to prevent dementia in patients with MCI

Results

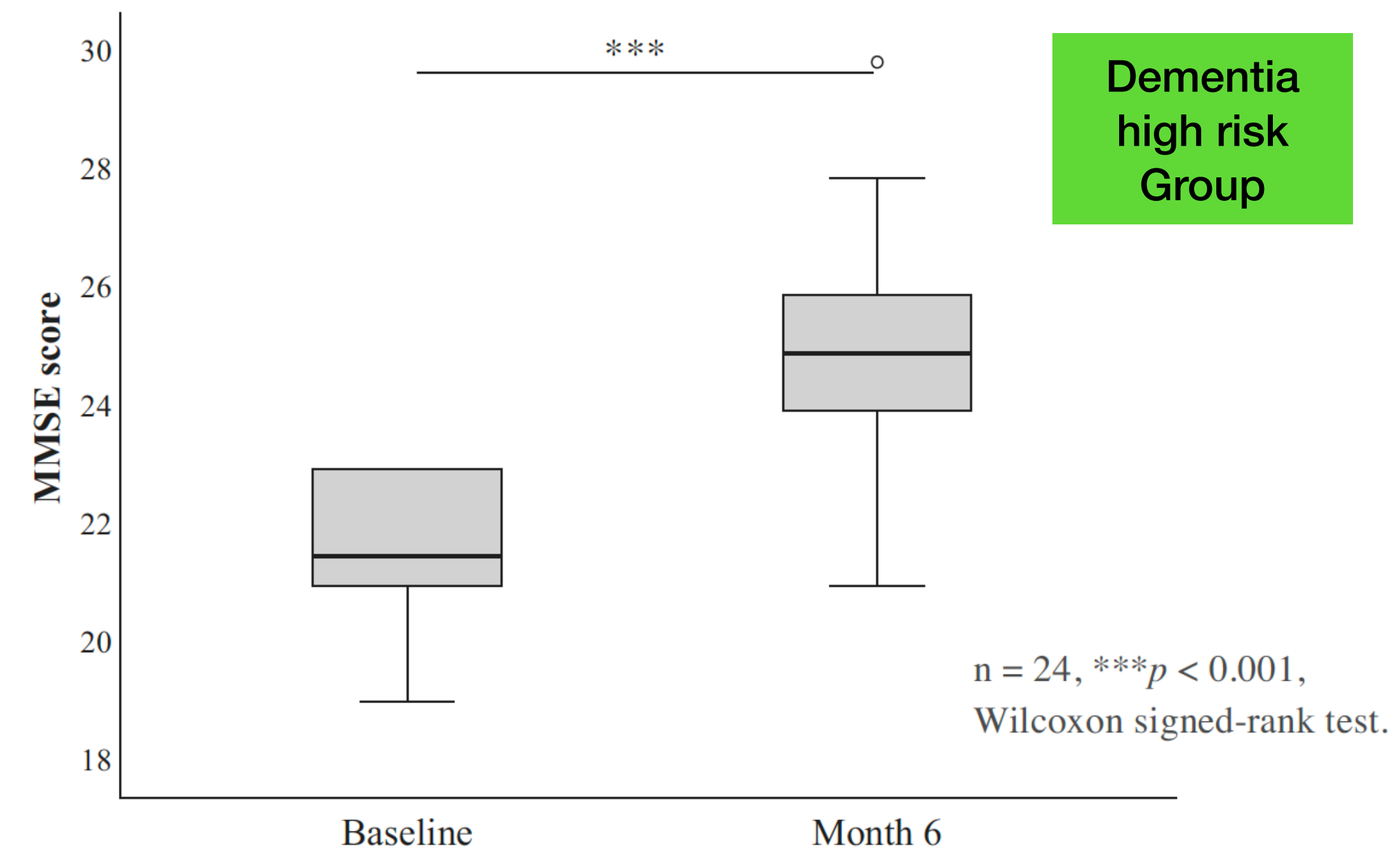
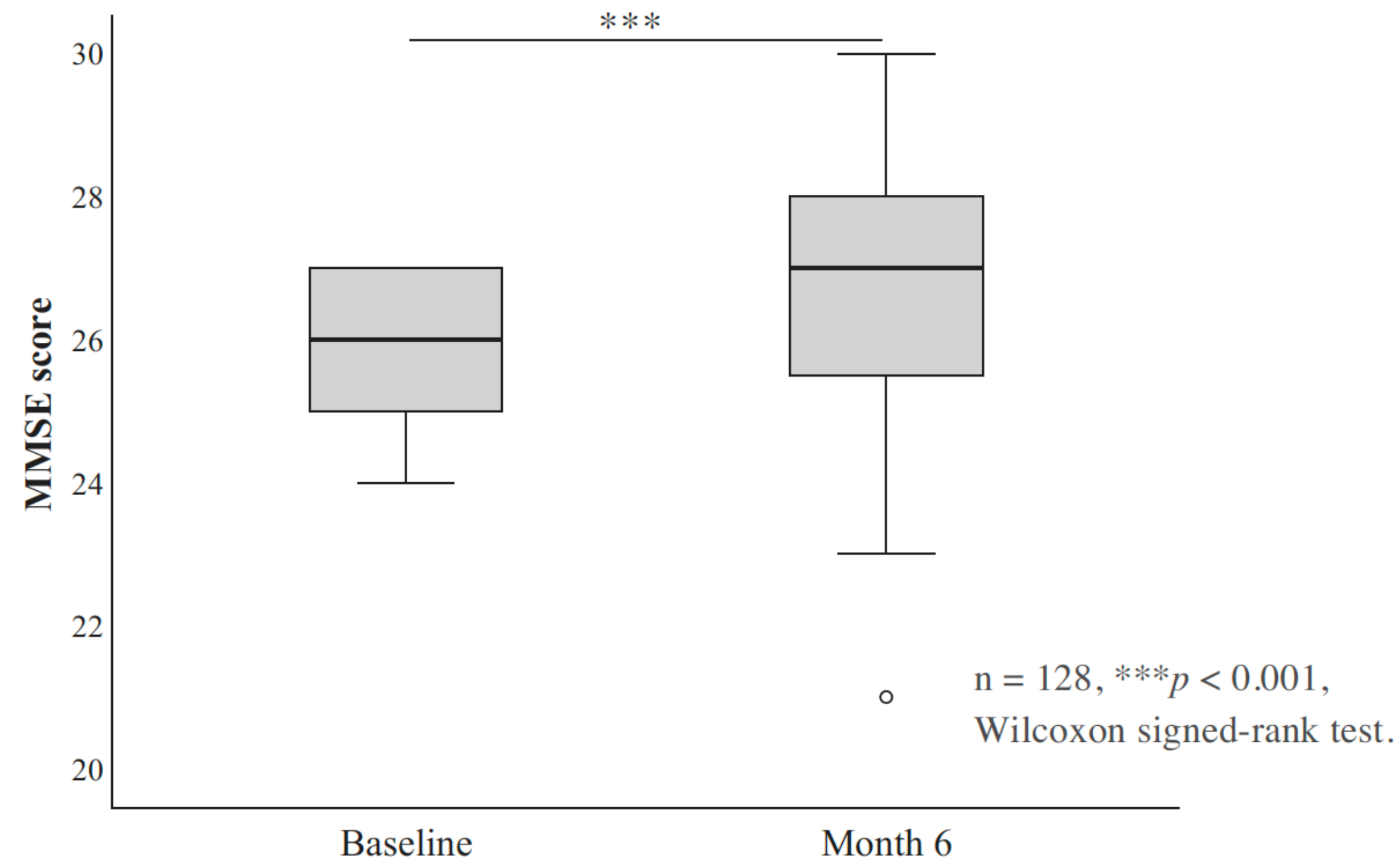
- There was a significant improvement in cognitive function in both MMSE and MoCA scores.



Herbal medicine treatment to prevent dementia in patients with MCI

Results

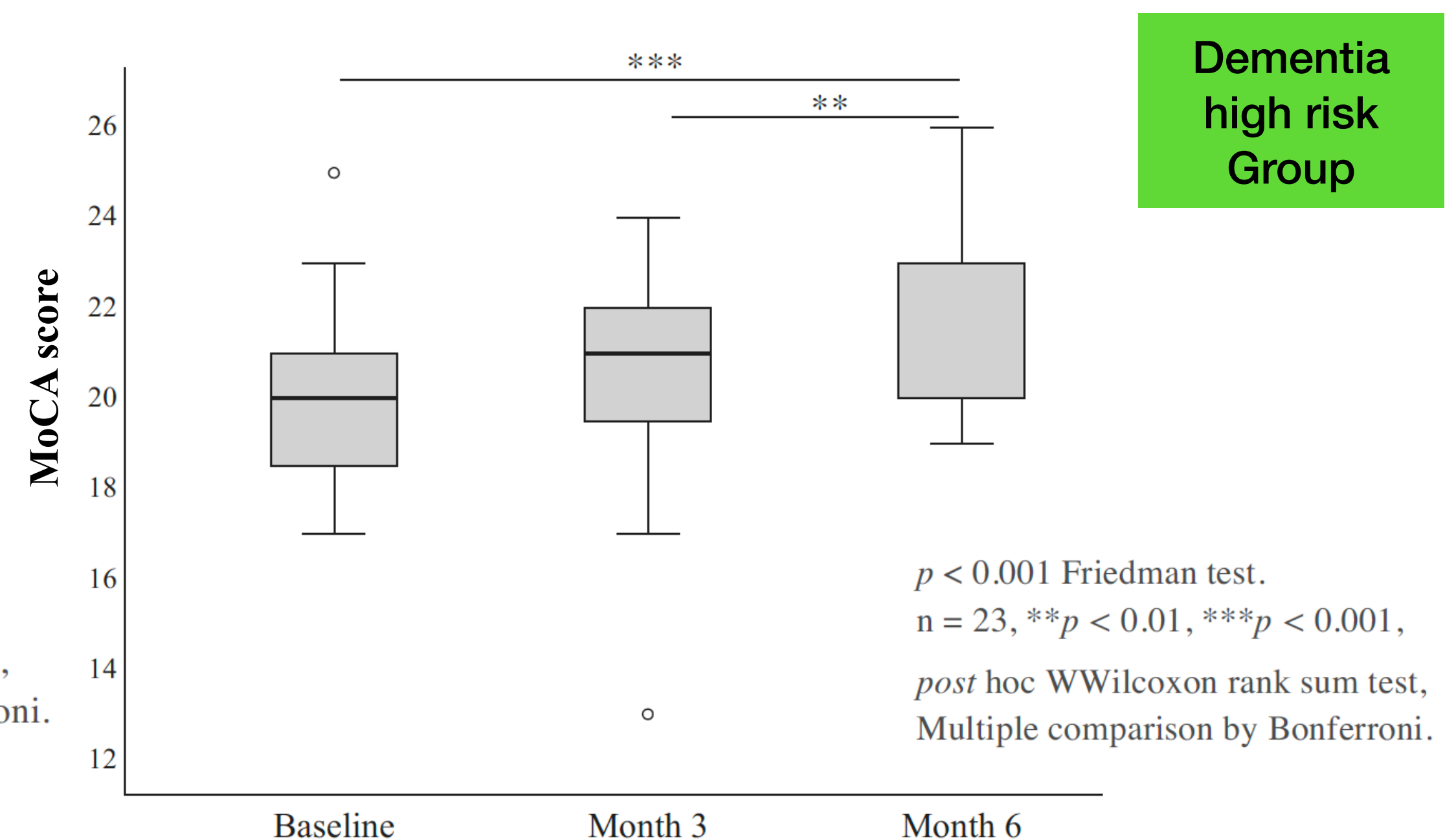
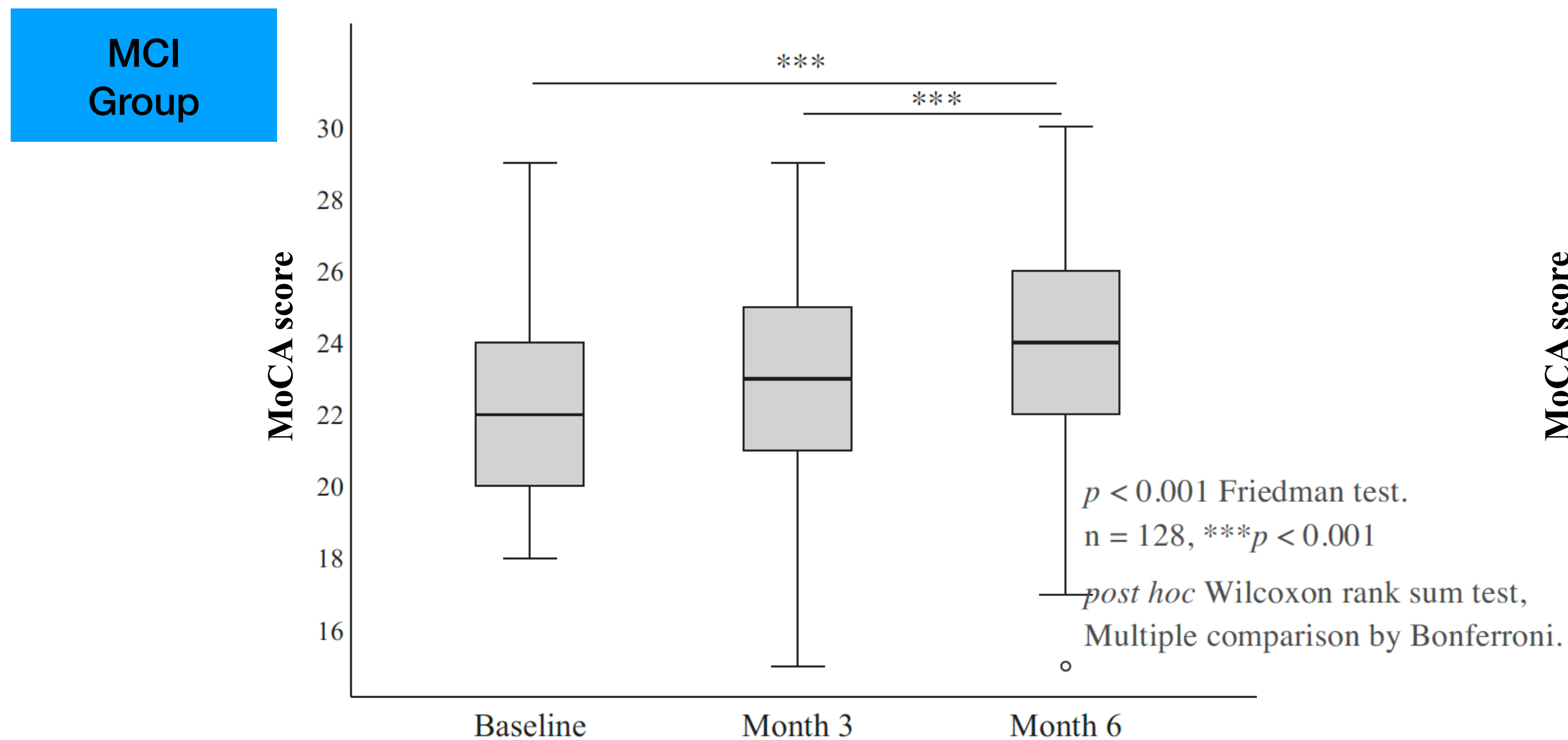
- Stratified analysis showed that there was a significant increase in the MMSE and MoCA scores in both the MCI group (MMSE 24-27) and high risk group (MMSE < 24).



Herbal medicine treatment to prevent dementia in patients with MCI

Results

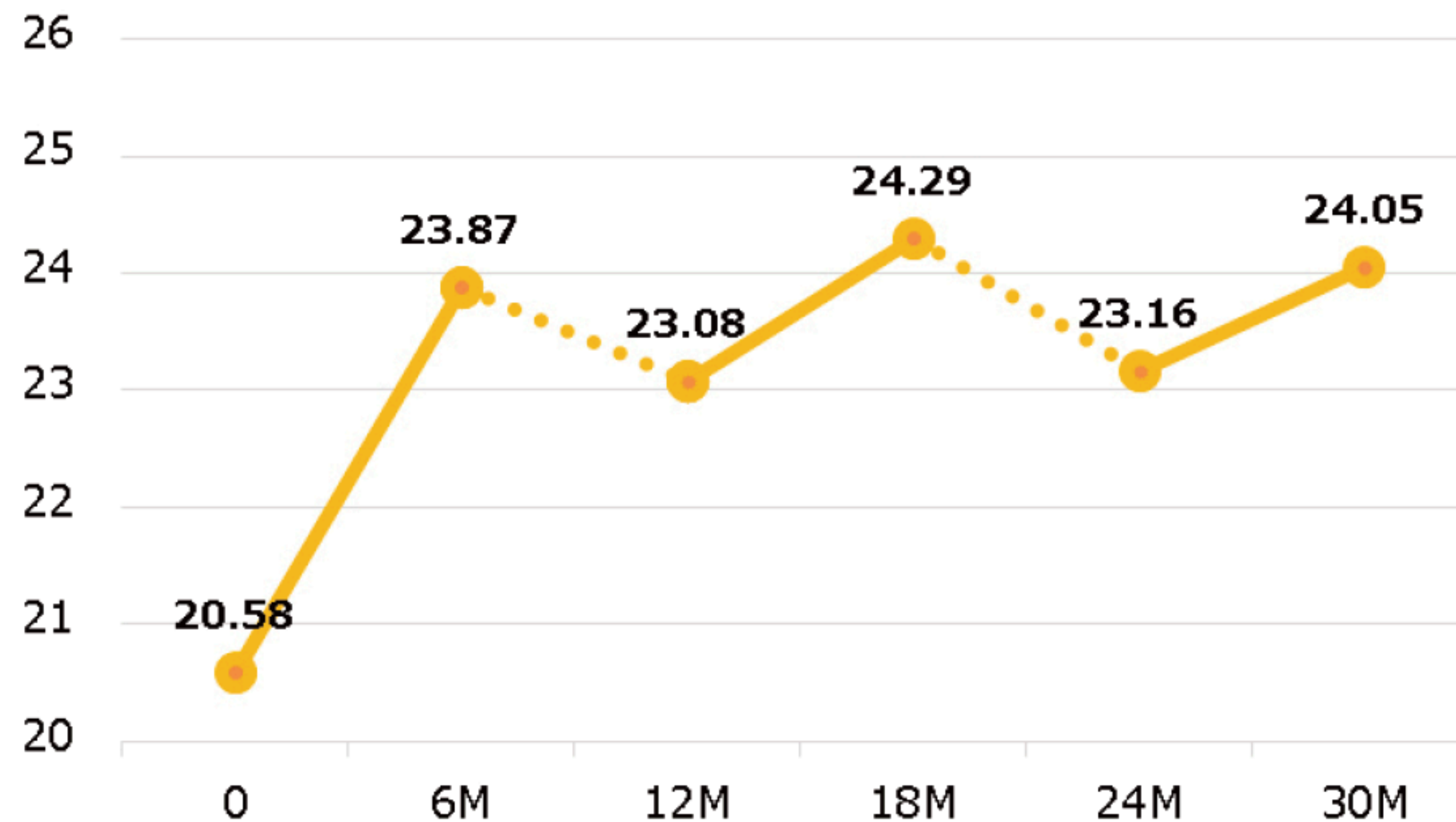
- Stratified analysis showed that there was a significant increase in the MMSE and MoCA scores in both the MCI group (MMSE 24-27) and high risk group (MMSE < 24).



Herbal medicine treatment to prevent dementia in patients with MCI

Results

- MoCA scores of 40 people who participated in this project for 3 consecutive years were followed up every 6 months.



Herbal medicine treatment in the Korean military service

Activities as a KM military doctor

- All men in Korea are obliged to serve in the military.
- Most MDs or KMDs will serve as military doctor (or local health center doctors).
- Currently, there are approximately 50 KM military doctors serving in the ROK Army.

Jakyakgamcho-Tang for Plantar Fasciitis

In Military Medical Service

- Subjects
 - Military patients with plantar fasciitis in the Korean Medicine Clinic of the Medical Service Room of the Service Support Group at the Ministry of National Defence (Seoul, Korea).
- Jakyakgamcho-Tang (JGT)
 - JGT is a dried decoction containing *Paeoniae radix* and *Glycyrrhizae radix* at a ratio (g) of 6:6.

Jakyakgamcho-Tang for Plantar Fasciitis

In Military Medical Service

Table 1. Changes in FFI and FRS Before and After Administration of Jakyak-Gamcho-Tang

Case Number (Gender/Age) (Region)	Disease Duration, d	Follow-up Duration, d		Time					Appearance (Previous Treatment)	
				Baseline	After 1 wk	After 2 wk	After 3 wk	After 4 wk		Final Results
1 (Male/23) (Both sides)	33	21	FFI	49.40	30.00	21.10	0.00	–	0.00	Burning sense and heel pain [calf stretching, piroxicam (30 mg/d), biperiden (6 mg/d)]
			FRS	6	3	2	0	–	0	
2 (Male/27) (Both sides)	200	14	FFI	39.40	8.80	0.00	–	–	0.00	Pain aggravation during walking [calf stretching, piroxicam (30 mg/d), biperiden (6 mg/d)]
			FRS	5	2	0	–	–	0	
3 (Male/20) (Left side)	90	21	FFI	52.40	20.60	9.40	1.20	–	1.20	Pain aggravation while standing for an extended period and at the first step after getting out of bed [calf stretching, piroxicam (30 mg/d), biperiden (6 mg/d)]
			FRS	6	3	2	1	–	1	
4 (Male/41) (Left side)	190	14	FFI	27.60	14.10	0.00	–	–	0.00	Pain aggravation at the first step after getting out of bed and while standing and walking [calf stretching, piroxicam (30 mg/d)]
			FRS	4	3	0	–	–	0	
5 (Male/20) (Right side)	3	28	FFI	32.40	25.90	18.20	9.40	0.00	0.00	Pain aggravation after playing soccer (none)
			FRS	5	3	3	1	0	0	
6 (Male/20) (Left side)	6	14	FFI	44.10	28.20	0.00	–	–	0.00	Pain aggravation during running and walking (none)
			FRS	6	3	0	–	–	0	
7 (Male/21) (Both sides)	7	28	FFI	35.80	30.00	11.20	11.20	11.20	11.20	Pain aggravation after walking on the snow for 2 h (none)
			FRS	5	4	2	2	2	2	
8 (Male/19) (Left side)	90	21	FFI	41.20	25.30	13.50	4.10	–	4.10	Pain aggravation during walking [calf stretching, aceclofenac (300 mg/d)]
			FRS	6	3	2	1	–	1	
9 (Male/22) (Left side)	180	21	FFI	40.00	28.24	5.88	2.35	0.00	0.00	Pain aggravation during standing and walking [calf stretching, aceclofenac (300 mg/d)]
			FRS	7	5	3	1	0	0	
10 (Male/23) (Right side)	30	21	FFI	48.82	19.41	21.18	0.00	–	0.00	Pain aggravation at the first step after getting out of bed and while standing and walking [calf stretching, aceclofenac (200 mg/d)]
			FRS	6.5	3	3.5	0	–	0	
Total, average ± standard deviation				Pre-treatment			After treatment			P-values
				82.90 ± 80.32	21.00 ± 5.72	FFI	41.11 ± 7.86			<.001
						FRS	5.65 ± 0.88			<.001

FFI, Foot Function Index; FRS: Facial Rating Scale.

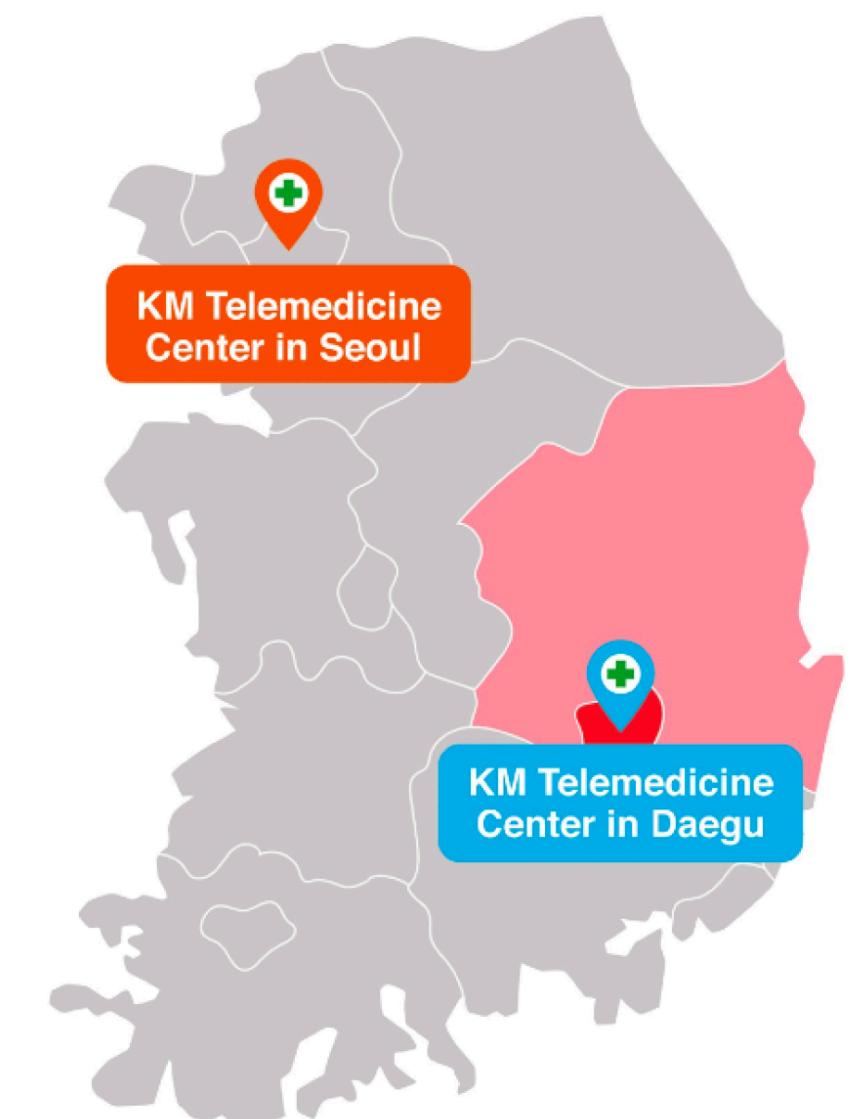
The P-value was obtained by using the paired t test to compare the pre-treatment and post-treatment data.

Traditional Korean Herbal medicine for COVID-19

COVID-19 telemedicine center of Korean medicine

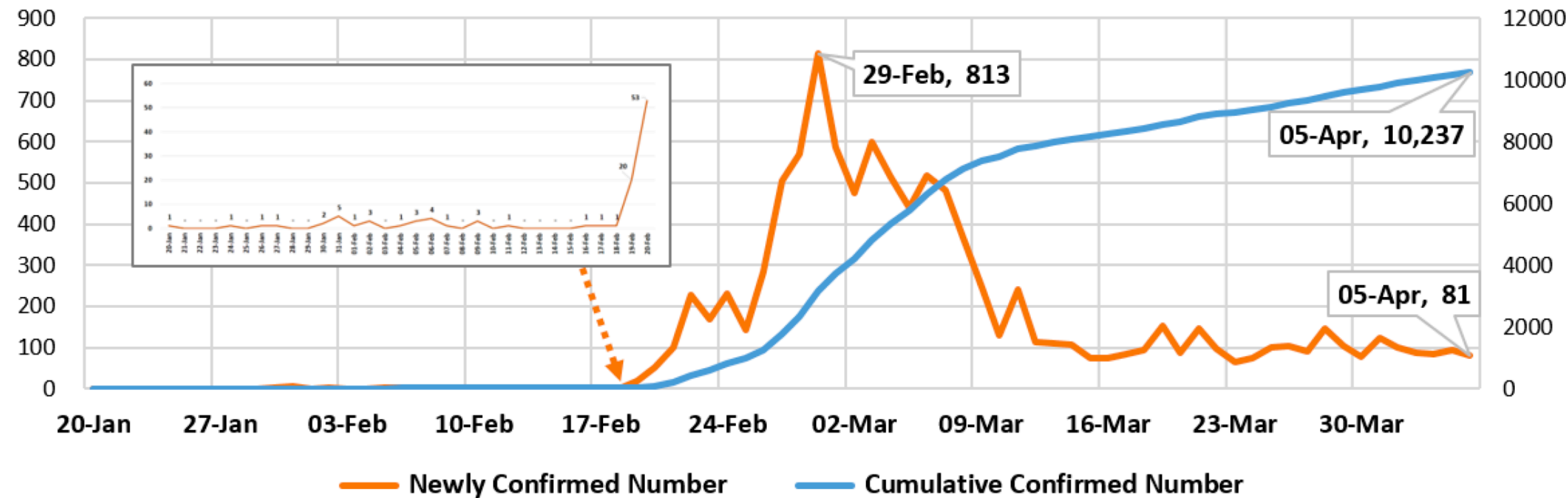


- The Association of Korean Medicine (AKOM) established the COVID-19 telemedicine center of Korean medicine (KM telemedicine center) in Daegu and Seoul.

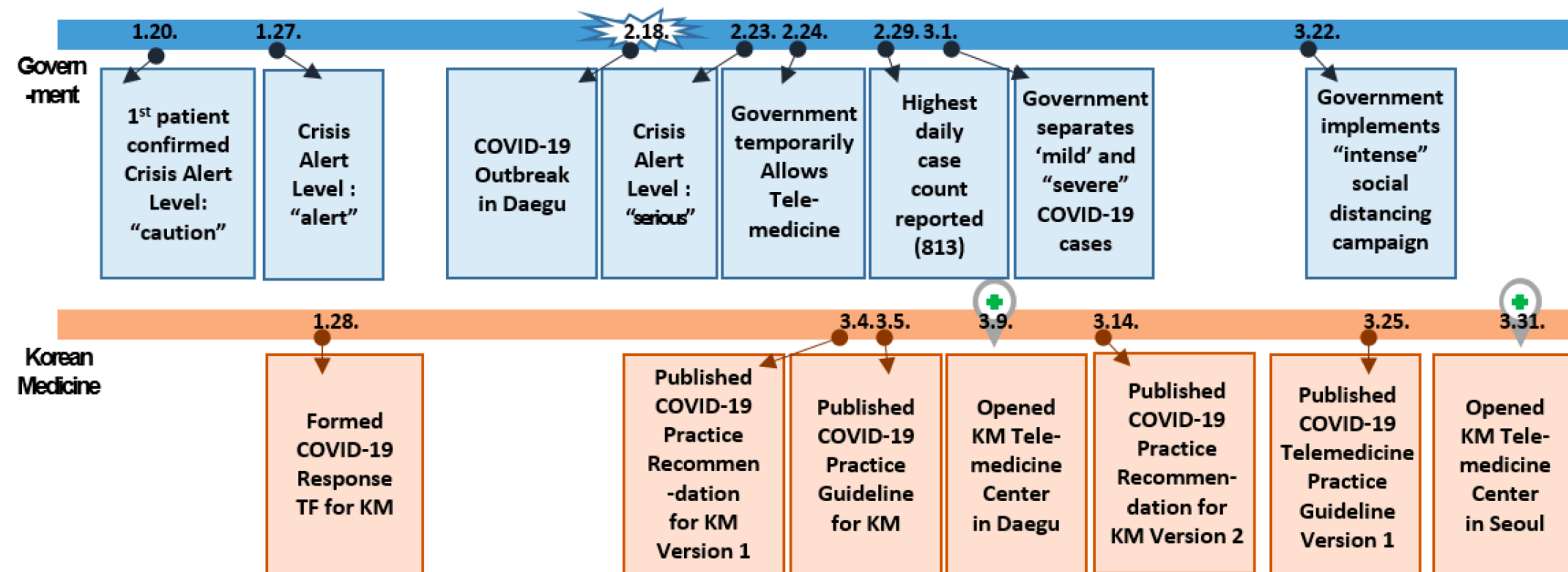


Traditional Korean Herbal medicine for COVID-19

Background



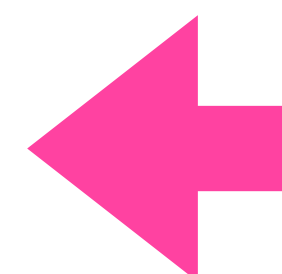
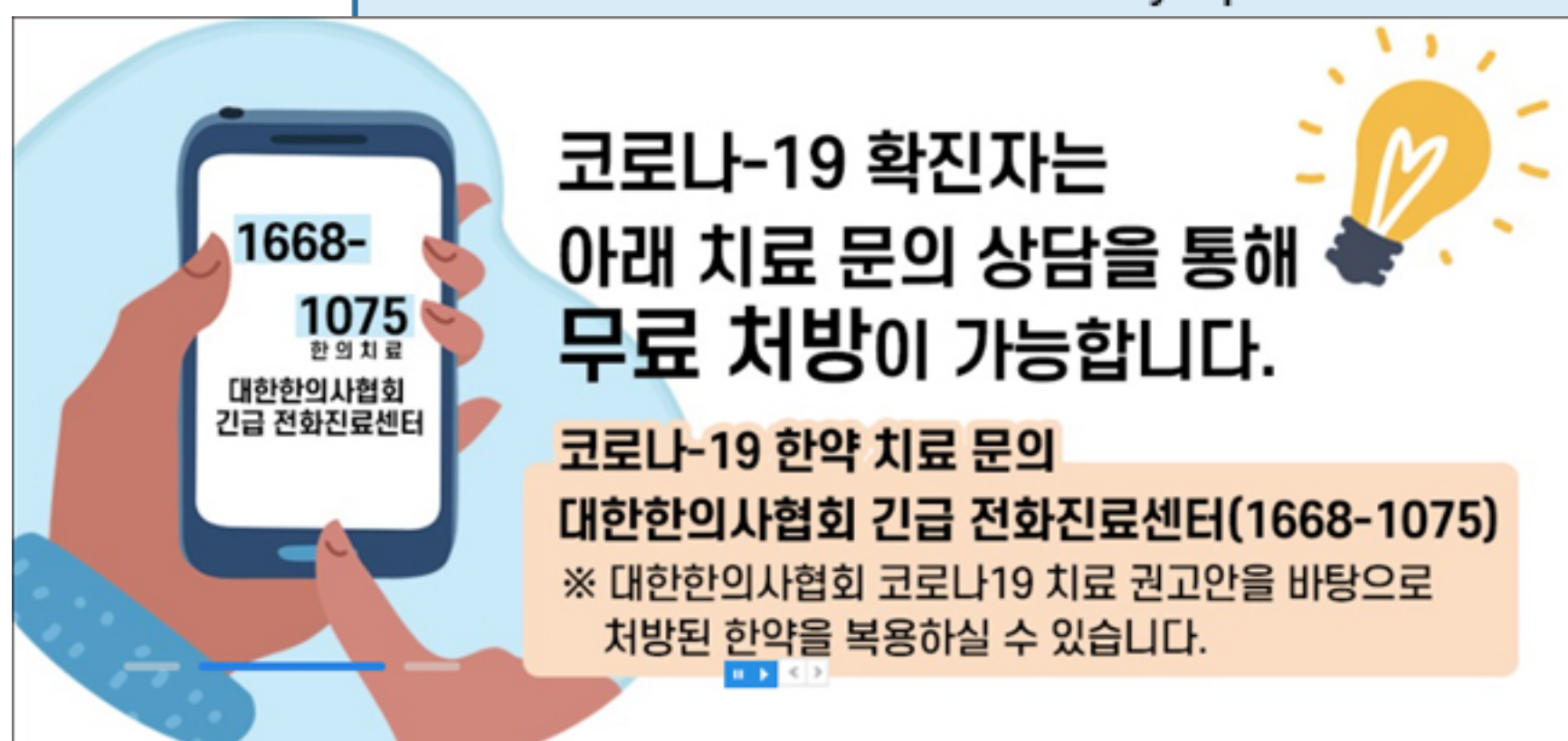
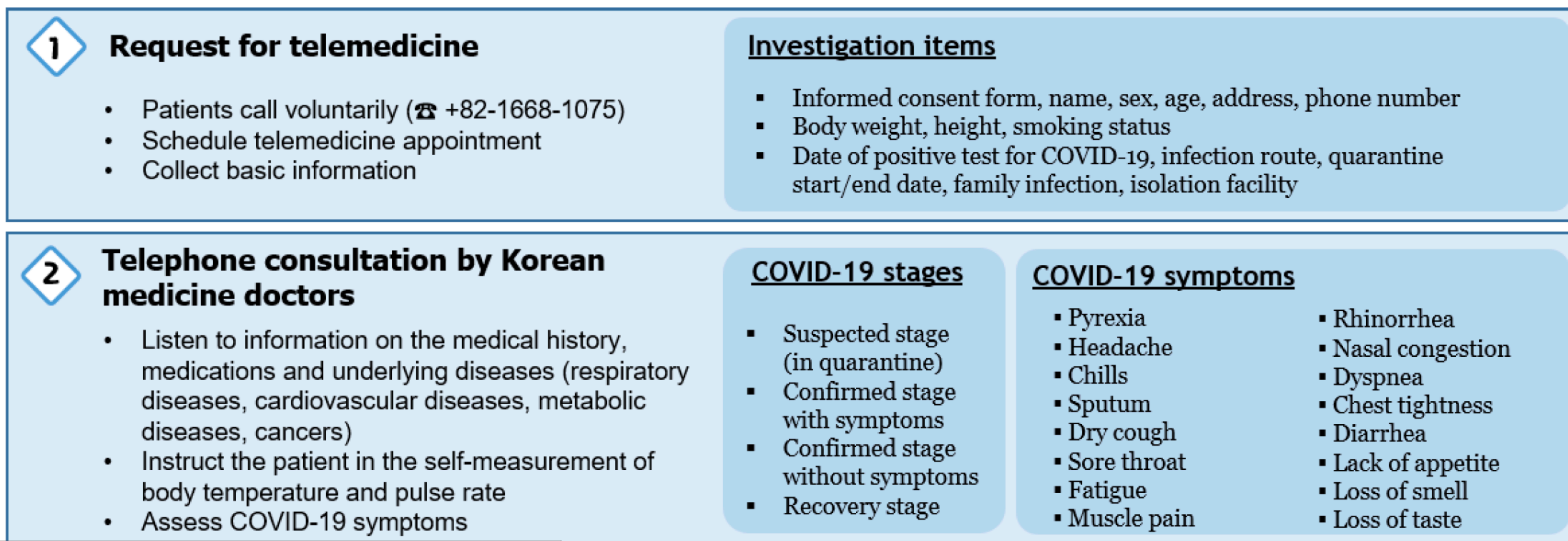
- There was an outbreak of COVID-19 in Daegu and Gyeongbuk due to religious gatherings attended by many people; consequently, the total number of cases rapidly increased from 30 on February 17 to 8086 on March 14.



- This surge in patients with COVID-19 led to a shortage of hospital beds, medical institutions, and medical personnel, as well as a gap in the management of patients.

Traditional Korean Herbal medicine for COVID-19

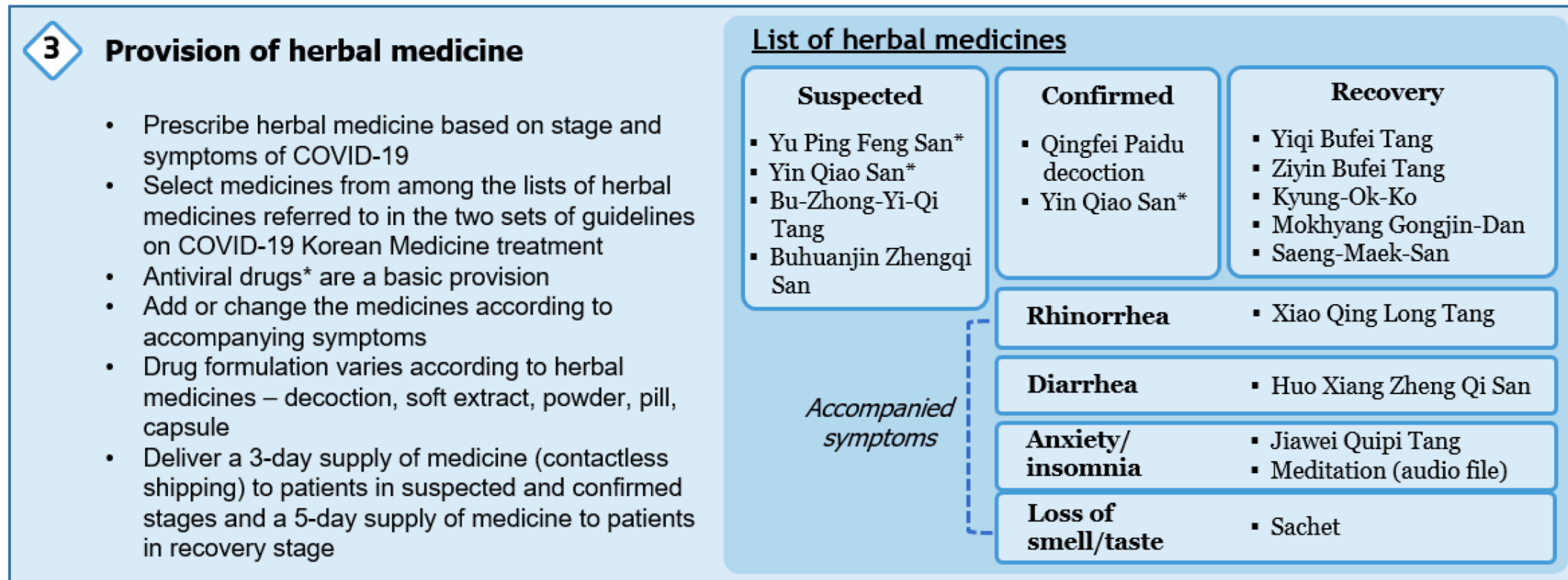
Flow diagram of steps undertaken by the COVID-19 telemedicine center of Korean Medicine



Promotional images posted on the Internet

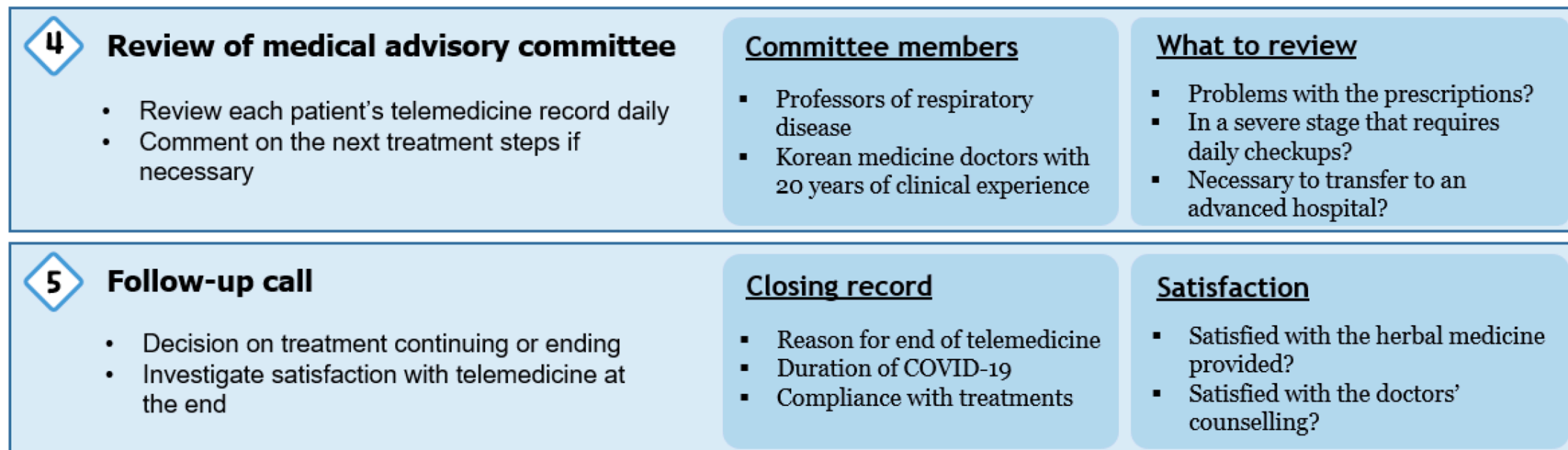
Traditional Korean Herbal medicine for COVID-19

Flow diagram of steps undertaken by the COVID-19 telemedicine center of Korean Medicine



Traditional Korean Herbal medicine for COVID-19

Flow diagram of steps undertaken by the COVID-19 telemedicine center of Korean Medicine



Traditional Korean Herbal medicine for COVID-19

Baseline characteristics

Characteristics	Patients, n (%)		
Sex		Residence of patients (based on first consultation)	
Male	569 (24.5)	Home	2165 (93.2)
Female	1755 (75.5)	Facility	69 (2.9)
Age (years)		Hospital	43 (1.9)
0-19	97 (4.2)	Other, unknown	47 (2.0)
20-39	555 (23.9)	Underlying diseases	
40-59	1121 (48.2)	Hypertension (n=1912)	
≥60	550 (23.7)	No	1548 (81.0)
Unknown	1 (0.0)	Yes, not taking medication	44 (2.3)
Region		Yes, taking medication	320 (16.7)
Daegu and Gyeongbuk	2196 (94.5)	Diabetes mellitus (n=1859)	
Seoul	32 (1.4)	No	1690 (90.9)
Other	94 (4.1)	Yes, not taking medication	25 (1.3)
Diagnosis (based on first consultation)		Yes, taking medication	144 (7.7)
Suspected cases	45 (1.9)	Hyperlipidemia (n=1844)	
Confirmed cases	211 (9.1)	No	1626 (88.2)
Recovering cases after discharge	2009 (86.4)	Yes, not taking medication	72 (3.9)
Other, unknown	59 (2.6)	Yes, taking medication	146 (7.9)
Number of calls (per patient)		Cancer (n=1734)	
1	166 (7.1)	No	1661 (95.8)
2	329 (14.2)	Yes, not taking medication	49 (2.8)
3	432 (18.6)	Yes, taking medication	24 (1.4)
4	338 (14.5)	Chronic respiratory diseases (n=1726)	
≥5	1059 (45.6)	No	1611 (93.3)
		Yes, not taking medication	82 (4.8)
		Yes, taking medication	33 (1.9)

Traditional Korean Herbal medicine for COVID-19

Frequency of prescriptions for COVID-19

Prescription	Uses	First call, n (%)	Others, n (%)	Total, n (%)
Qingfei Paidu decoction I	Exogenous fever and influenza	448 (13.4)	758 (6.9)	1206 (8.4)
Kyung-Ok-Ko	Fatigue, weak condition, and dry cough	439 (13.2)	1846 (16.7)	2285 (15.9)
Ziyin Bufe Tang	Short breath, fatigue, decreased appetite, dry mouth, and dry cough	369 (11.1)	1411 (12.8)	1780 (12.4)
Yiqi Bufe Tang	Short breath, fatigue, decreased appetite, and loose stool	348 (10.4)	1151 (10.4)	1499 (10.4)
Qingfei Paidu decoction II	Exogenous fever and influenza	263 (7.9)	584 (5.3)	847 (5.9)
Jiawei Quipi Tang	Anxiety, overthinking, and insomnia	234 (7.0)	840 (7.6)	1074 (7.5)
Mokhyang Gongjin-Dan	Fatigue and weak condition	176 (5.3)	747 (6.8)	923 (6.4)
Huo Xiang Zheng Qi San	Loose stool or diarrhea, chest tightness, and lack of vigor	139 (4.2)	420 (3.8)	559 (3.9)
Saeng-Maek-San	Thirst, dry mouth, cold sweat, and weak condition	82 (2.5)	259 (2.3)	341 (2.4)
Xiao Qing Long [Tang	Nasal symptoms, watery rhinorrhea, and allergic rhinitis	94 (2.8)	347 (3.1)	441 (3.1)
Yin Qiao San	Sore throats and headaches with inner heat	89 (2.7)	348 (3.2)	437 (3.0)
Yu Ping Feng San	Cold, influenza, and sweating	40 (1.2)	71 (0.6)	111 (0.8)
Buhuanjin Zhengqi San	Cold, headache, and fatigue	26 (0.8)	124 (1.1)	150 (1.0)
Other	N/A ^a	584 (17.5)	2129 (19.3)	2713 (18.9)
Total ^b	N/A	3331 (100.0)	11,035 (100.0)	14,366 (100.0)

Traditional Korean Herbal medicine for COVID-19

Symptom changes

COVID-19 symptoms and severity	At first call, n (%)	At last call, n (%)	P value ^a
Dry cough			<.001
Severe	3 (0.1)	0 (0.0)	N/A
Moderate	116 (5.5)	16 (1.3)	N/A
Mild	640 (30.6)	233 (18.7)	N/A
None	1335 (63.8)	994 (80.0)	N/A
Total	2094 (100.0)	1243 (100.0)	N/A
Fatigue			<.001
Severe	15 (0.7)	3 (0.2)	N/A
Moderate	164 (8.1)	27 (2.2)	N/A
Mild	616 (30.5)	325 (26.7)	N/A
None	1223 (60.6)	860 (70.8)	N/A
Total	2018 (100.0)	1215 (100.0)	N/A
Muscle pain			<.001
Severe	7 (0.3)	0 (0.0)	N/A
Moderate	60 (2.9)	8 (0.7)	N/A
Mild	334 (16.2)	108 (9.1)	N/A
None	1661 (80.6)	1066 (90.2)	N/A