

Home Healthcare Service Awareness Survey for Korean Medicine Doctors: a survey study

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Objectives: Discussions regarding “medical blind spots” in Korea’s “aging society” are continuously rising. In addition, the demand for medical attention and care for the elderly and vulnerable populations continues to increase. Given this, the government is promoting the “home healthcare service” project. This study aims to lay the foundation for promoting this project by investigating the perception of clinical Korean Medicine (KM) doctors in the “community health care” project.

Methods: With the cooperation of the Association of Korean Medicine, we sent a questionnaire to all KM doctors through e-mail. The survey included personal information, awareness, appropriate disease and intervention, proper visit location, and pros and cons.

Results: A total of 602 responses were collected and analyzed. Approximately 20% of the doctors answered that they were well aware of the service, while 55% responded that they did not know about it. For a visit, a KM doctor selected the appropriate diseases in the order of stroke, dementia and Parkinson’s disease, osteoarthritis, and chronic diseases. Among treatments, acupuncture, moxibustion, and herbal medicine exhibited similar results. The most common opinion was that KM doctors should schedule their visits once a week for 6-12 months, which was the most prolonged period among the given options. More than 80% (84.1%) of the doctors replied that care projects were highly essential, and about 63.8% expressed their willingness to participate in these projects.

Conclusion: To provide appropriate home health care, we must raise awareness among Korean medicine doctors. In addition, the healthcare budget must be increased to provide the required support.

Keywords: home health care, home visit health care service, korean medicine

INTRODUCTION

As of 2022, the proportion of the elderly population aged 65 or more is 17.5% of the total population in Korea, and it is anticipated to enter the super-aged society with a proportion of 20.6% by 2025 [1, 2]. Due to the increase in the elderly population and the consistently low birth rate, the elderly support cost estimated in 2022 was high at 24.6% and is expected to increase rapidly after entering the super-aged society in 2025 [3].

However, the current hospital- and facility-oriented care system was evaluated as undesirable for promoting the individual

welfare of the elderly and is challenging to continue in terms of the financial aspects of health insurance. In this regard, establishing an integrated community-centered care system is being promoted in Korea through a comprehensive reorganization encompassing housing and medical welfare under the “Basic Plan for Integrated Community Care” in 2018 [1]. A medical support, in particular, is the key, and Korean medicine (KM) is expected to expand its role and involvement in the care system in the future due to high demand from elderly patients [1, 4].

The need for healthcare projects continues to rise as the human life span has extended and aging (or super-aging) society

has been established in the community. Further, life expectancy continues to increase while the overall health status decreases. Also, the prevalence of the elderly population is increasing [5]. In this situation, the preventive KM has the advantage of achieving the purpose of “promoting public health through health management + care through social welfare” in healthcare projects [1]. According to the interviews with consumers of local KM services, KM has the advantage of fewer side effects from the patient’s point of view. Patients could be diagnosed and treated simultaneously during the visit [6]. Regarding the project targets, most of them were highly responsive and preferred Korean medical treatment for elderly and disabled individuals. They had the advantage of providing excellent services centered on simple medical tools and connecting with welfare services tailored to the subject’s needs through Korean medical treatment services, residential environment exploration, and counseling [2].

However, the business period and the limited number of inadequate treatments in providing services were insufficient to show effectiveness [2]. In addition, the standards for selecting patients to provide KM services are insufficient, and medical staff (KM doctors) are required to participate in the patient selection process [2]. Regarding the provision of fees and services, related manuals are also not standardized, and it is essential to categorize them as per their regional characteristics [2].

Therefore, the current study aimed to prepare primary data on the provision criteria and manuals by surveying clinical KM doctors’ perception of KM care projects, appropriate KM services, targets, and scope of the provision.

MATERIALS AND METHODS

1. Study sample and design

We conducted a survey among KM doctors in South Korea to investigate the awareness of KM health care services. With the cooperation of the association of KM, a questionnaire was sent to all KM doctors registered in the association by e-mail. The survey was conducted twice among the same set of doctors. We collected their responses from October 25, 2022, to October 28, 2022. In this survey, we provided a brief description of home health care and the objectives of the study and obtained informed consent from the respondents.

2. Development of the survey form

Two KM experts participated in drafting the questionnaire. Further, the draft questionnaire was reviewed by two external KM experts. They conducted a pilot test with the draft survey and collected feedback. Based on the opinions and comments of the two experts, the research team had a further discussion to finalize the questionnaire.

The questionnaire was composed of two categories comprising 18 survey items: (1) Basic information regarding seven items: sex, age, clinical career, workplace, specialist qualifications, department of specialists, and work organization. (2) Awareness, necessary disease and intervention, frequency and location of visits, pros and cons, necessity, willingness to participate, and necessary support.

3. Statistical analyses

Statistical analyses were conducted using SPSS20 for Windows (IBM, USA). Frequency analyses were performed for all variables.

4. Ethical issues

This study was conducted with IRB approval from the Woosuk University Institutional Review Board (IRB number: WSOH IRB H2210-02).

RESULTS

A total of 602 KM doctors completed the questionnaire given in this survey. Their responses were collected and analyzed. Of these, 423 (70.3%) were male, while 179 (29.7%) were female participants. People aged between 30-39 years responded the most (229, 38.0%), followed by 40-year-olds (211, 35.0%), whereas people over 60s responded the least (14, 2.3%). The most common working years were 10-20 years (194, 32.2%), followed by 5-10 years (149, 24.8%). In the survey, 30 years or more (27, 4.5%) were the least. More than half of the participants were working in Seoul (176, 29.2%) and Gyeonggi (129, 21.4%), while very few were working in Jeju Island (4, 0.7%). About 176 (29.2%) were specialists, while 426 (70.8%) participants had no specialization. Among specialists, Korean Internal Medicine specialists answered the most at 67 (35.8%), and Korean Neuropsychiatry specialists were the lowest at 3 (1.6%).

The most significant number of working institutions were KM clinics (405, 67.3%), followed by hospitals such as KM hospitals (64, 10.6%), KM university hospitals (46, 7.6%), and long-term care hospitals (31, 5.1%). Respondents from KM universities (10, 1.7%) and research institutes (9, 1.5%) also participated in the survey.

Table 1. Awareness of Korean Medicine home healthcare service

Question	Answer	N	%
Do you know KM home healthcare service?	Very aware of	38	6.3
	Aware of	82	13.6
	Normal	153	25.4
	Unaware of	211	35.0
	Very unaware of	118	19.6

Table 2. Appropriate disease of Korean Medicine home healthcare service

Classification	N (1)	N (2)	N (3)	Point
Hypertension, diabetes, hyperlipidemia	89	33	42	375
Dementia, Parkinson's disease	104	108	67	595
Stroke	239	161	72	1,111
Falling accident	23	40	42	191
Childbirth education	17	29	39	148
Menopause symptoms	10	24	29	107
Management after chemotherapy	9	37	86	187
Addiction such as smoking, alcohol, gambling, etc	0	1	4	6
Depression, anxiety disorder	7	32	51	136
Osteoarthritis management	87	84	95	524
Digestive disorders	15	46	58	195
Chronic diseases	1	0	0	3
Language disorders, physical disorders	1	0	0	3
Other	0	0	1	1

N (1) = rated as the most appropriate, N (2) = rated as the second most appropriate, N (3) = rated as the third most appropriate.

Table 3. Appropriate intervention for Korean Medicine home healthcare service

Classification	N (1)	N (2)	N (3)	Point
Acupuncture, moxibustion, cupping	298	137	51	1,219
Korean herbal medicine prescription (Korean herbal medicine, herbal medicine, etc)	199	254	41	1,146
Health care education	34	68	170	408
Check current health status (blood pressure, blood sugar, etc.)	41	56	109	344
Check the current lifestyle (eating, nutrition, exercise) and home environment	25	58	115	306
Linkage with various welfare services	5	17	91	140
Other (Chuna)	0	0	2	2

N (1) = rated as the most appropriate, N (2) = rated as the second most appropriate, N (3) = rated as the third most appropriate.

Also, more than half of the participants were not aware of the Korean Medicine home healthcare service (“unaware of”, “very unaware of”) (Table 1). For appropriate disease items, “stroke” scored the highest with 1,111 points, almost double the second-highest item (Table 2). For appropriate interventions,

acupuncture, moxibustion, cupping, and Korean herbal medicine prescription were selected (Table 3).

Over half of the participants (322, 53.5%) selected “Once a week” for the appropriate visit cycle. Almost all KM doctors (598, 99.4%) chose to visit at least once a month. Nearly

Table 4. Opinions on details of Korean Medicine home healthcare service

Question	Answer	N	%
Appropriate visit cycle	Once a week	322	53.5
	Once a two-week	198	32.9
	Once a month	78	13.0
	Once a two-month	2	0.3
	Etc.	2	0.3
Appropriate period	1 month	14	2.3
	2 months	23	2.8
	3 months	139	23.1
	3-6 month	178	29.6
	6-12 months	238	39.5
	Etc.	10	1.7
Appropriate place	Home visit	190	31.6
	Community-use facilities (senior center, welfare center, care safe house, etc.)	226	37.5
	Public institutions in the region (health centers, administrative welfare centers, etc.)	183	30.4
	Other (patient-specific)	3	0.5

Table 5. Advantages and disadvantages of Korean Medicine home healthcare service

Quesiton	Answer	N	%
Advantage of KM home healthcare service	Communication between doctors and patients gets longer.	31	5.1
	Medical care can be provided to people who have difficulty visiting hospitals, such as the elderly and the disabled.	368	61.1
	Medical costs may decrease through reducing the number of clinic visits.	21	3.5
	Diseases can be detected early or its worsening can be prevented.	48	8.0
	General health counseling is available in addition to treating diseases.	134	22.3
Disadvantage of KM home healthcare service compared to clinic visit	It is difficult to receive treatment using medical devices such as physical therapy.	217	36.0
	Other (personal charges)	3	0.5
	There is a risk of privacy exposure due to home visits.	58	9.6
	It is difficult to meet a doctor when I want.	39	6.5
	It is difficult to choose doctors I want.	40	6.6
	It is difficult to receive treatment as many times as I want.	159	26.4
The activeness of the staffs may be insufficient.	86	14.3	

DISCUSSION

half (238, 39.5%) answered “6-12 months” for the appropriate visit cycle. Most KM doctors (555, 92.1%) responded that they should schedule the visit for at least three months. The most responsive methods were community-use facilities (226, 37.5%), followed by a home visit (190, 31.6%), public institutions (183, 30.4%), and others (3, 0.5%) (Table 4).

More than half of the participants accepted the advantage of the following: “Medical care can be provided to people who have difficulty visiting hospitals, such as the elderly and the disabled”. In contrast, more than 20% accepted the advantage of the following: “General health counseling is available in addition to treating diseases” (Table 5). More than 80% of respondents replied that care projects were very necessary (245 people, 40.7%) or necessary (261 people, 43.4%). In addition, more than half of the respondents replied that they had a very high intention to participate in these projects (Table 6). For necessary support items, “Sufficient medical fees” scored the highest (Table 7).

The current survey suggested that many KM doctors perceive the project as a home visit service (Tables 1, 5). Home healthcare service is the complementary version of the home visit service. Various services, such as healthcare education, facility support, and environmental improvement, as well as treatment through home visiting, are provided in this project. Although the home healthcare service is still at the pilot project stage, further promotion of the service among KM doctors should be conducted for its successful implementation.

Also, patients receiving home health services should be educated regarding health management and improving their daily lifestyles. One of the main aspects of the service is to link the patient’s deficiencies to the welfare center. However, only 22.3% of the KM doctors responded to the following point: “KM doctors can serve as the primary care physician in treating disease”; therefore, we assumed that some of them comprehended the real meaning of the service.

Most KM doctors selected the appropriate diseases that

Table 6. Necessity, willingness to participate in Korean Medicine home healthcare service

Question	Answer	N	%
Do you think that KM home healthcare service is necessary?	Very necessary	245	40.7
	Necessary	261	43.4
	Normal	86	14.3
	Unnecessary	8	1.3
	Very unnecessary	2	0.3
Are you willing to participate in KM home healthcare service?	Very high	175	29.1
	High	209	34.7
	Normal	158	26.2
	Low	35	5.8
	Very low	25	4.2

Table 7. Necessary support for Korean Medicine home healthcare service

Question	Answer	N (1)	N (2)	Total
Which support is necessary for Korean Medicine home healthcare service?	(For Korean medicine doctor) Business introduction and education provision	34	41	109
	(For Korean medicine doctor) Sufficient medical fees (monetary support)	434	96	964
	(For Korean medicine doctor) Providing items necessary for the project (visit bags, patient education materials, etc.)	41	117	199
	(For patient) Sufficient services (number of times, duration, etc.)	66	202	334
	(For patient) Support for linking various welfare services	27	80	134

require a visit in the order of stroke, dementia and Parkinson's disease, osteoarthritis, and chronic diseases. Stroke obtained the highest value (1,111), followed by dementia and Parkinson's disease (595), osteoarthritis (524), and chronic diseases (375). Most of Hira's top 20 oriental outpatient diseases are musculoskeletal disorders and pain [7]. Most cases of hospitalized morbidity are musculoskeletal disorders, while stroke-related diseases such as hemiplegia and cerebral infarction and dementia are in the top 10. The number and ranking of stroke and dementia patients are higher than those of 70-79 years old and 80 years old or older, which are the main targets of home healthcare services, compared to all age groups. This ranking is probably because older patients must be more careful about stroke and dementia. In the case of stroke, the sequelae are serious, such as facial paralysis, speech disorders, and mental confusion, or hemiplegia in severe cases.

Approximately 85% of the participants replied that home healthcare service was critical. Regarding the duration and frequency of visits, the response with the highest frequency (once a week, 6-12 months) was the maximum. However, only 63.8% of KM doctors expressed their intention to participate in the service. Considering that many KM doctors requested a sufficient medical fee, it is an important factor to focus on service participation. KM Home-care Service is a project launched in 2018 to meet the needs of residents' oriental medicine after the government-led Community Care Service. KM treatment is particularly suitable for providing home-care services for older people as it effectively improves the quality of life and treats musculoskeletal diseases and chronic pain in the elderly.

Continuous studies are being conducted concerning such KM Home-care Services. However, in the case of existing studies, most have focused on the effectiveness or efficiency of oriental medical treatment in KM Home-care Services [8, 9]. In particular, a few studies confirmed the efficiency or efficacy of the KM Home-care Service, and there were no studies on the perception of this service. In addition, there were no previous studies conducted on oriental doctors.

In this regard, the current study has great significance of being the first research on awareness survey statistics on KM Home-care Services for oriental medicine doctors. This study will help to lead the KM Home-care Service in the future. We studied the perception and desirable development direction of the project from the perspective of medical providers, not medical beneficiaries. In addition, if the effectiveness and efficiency of KM Home-care Services are increased through these

studies, the average health level of the community is expected to enhance in the future.

However, there is a limitation to the current study that only the perception of KM doctors among various medical providers was investigated. In addition, there is a limitation regarding the basis of the judgment that cannot be known because answers were selected by multiple-choice. Despite the constraints, we need to conduct more research about KM home healthcare service because it is one of the most critical systems that will be sustainable during the health insurance crisis.

CONCLUSION

To promote appropriate KM home healthcare services, awareness must be raised among KM doctors and increase the healthcare budget so that more support can be provided to the community.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

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REFERENCES

1. Statistics Korea. 2022 elderly statistics. Daejeon: Statistics Korea; 2022.
2. Ministry of Health and Welfare (MOHW), National Development Institute of Korean Medicine (NIKOM), Association of Korean Medicine (AKOM). Guide to the publication of the results of the health care promotion of Korean medicine. Gyeong-san: National Development Institute of Korean Medicine; 2020.
3. Statistics Korea. National Approval Statistics No. 10133 [Internet]. Daejeon: National Archives of Korea; 2019 [cited 2022 Oct

- 31]. Available from: <https://www.archives.go.kr/next/search/listSubjectDescription.do?id=002190&pageFlag=&sitePage>.
4. Ministry of Health and Welfare, National Development Institute of Korean Medicine, Gallup. 2020 basic report on the survey on the use of Korean medicine (general public) [Internet]. Seoul: NIKOM; 2021 [cited 2022 Oct 31]. Available from: https://nikom.or.kr/koms/board/view.do?menu_idx=19&manage_idx=142&board_idx=27161&group_depth=0&parent_idx=0&group_idx=0&rowCount=10&search_type=title%2Bcontent&search_text=&viewPage=1.
 5. Statistics Korea. National Approval Statistics No. 101035 [Internet]. Daejeon: Statistics Korea; 2021 [cited 2022 Oct 31]. Available from: <https://www.narastat.kr/metascv/index.do?confmNo=101035&inputYear=2021>.
 6. National Development Institute of Korean Medicine (NIKOM). A Study on the Development of Community-Based Health and Welfare Service Model and System for Korean Medicine [Internet]. Seoul: NIKOM; 2019 [cited 2022 Oct 31]. Available from: <https://nikom.or.kr/board/boardFile/download/106/8726/11307.do>.
 7. Healthcare Bigdata Hub. Frequent Disease Statistics [Internet]. Wonju: Health Insurance Review & Assessment Service; 2020 [cited 2022 Oct 31]. Available from: <http://opendata.hira.or.kr/op/opc/olapHifrqSickInfo.do>.
 8. Sung SH, Baik YS, Han JE, Lee EJ, Kim J, Park M, et al. Traditional Korean medicine home care for the older adults during the COVID-19 pandemic in South Korea. *Int J Environ Res Public Health*. 2022;19(1):493.
 9. Park J, Yi E, Yi J. The provision and utilization of traditional Korean medicine in South Korea: implications on integration of traditional medicine in a developed country. *Healthcare (Basel)*. 2021;9(10):1379.