



FACTORS AFFECTING PATIENT SATISFACTION OF PRIMARY HEALTHCARE DOCTOR HOME VISIT PILOT PROJECT

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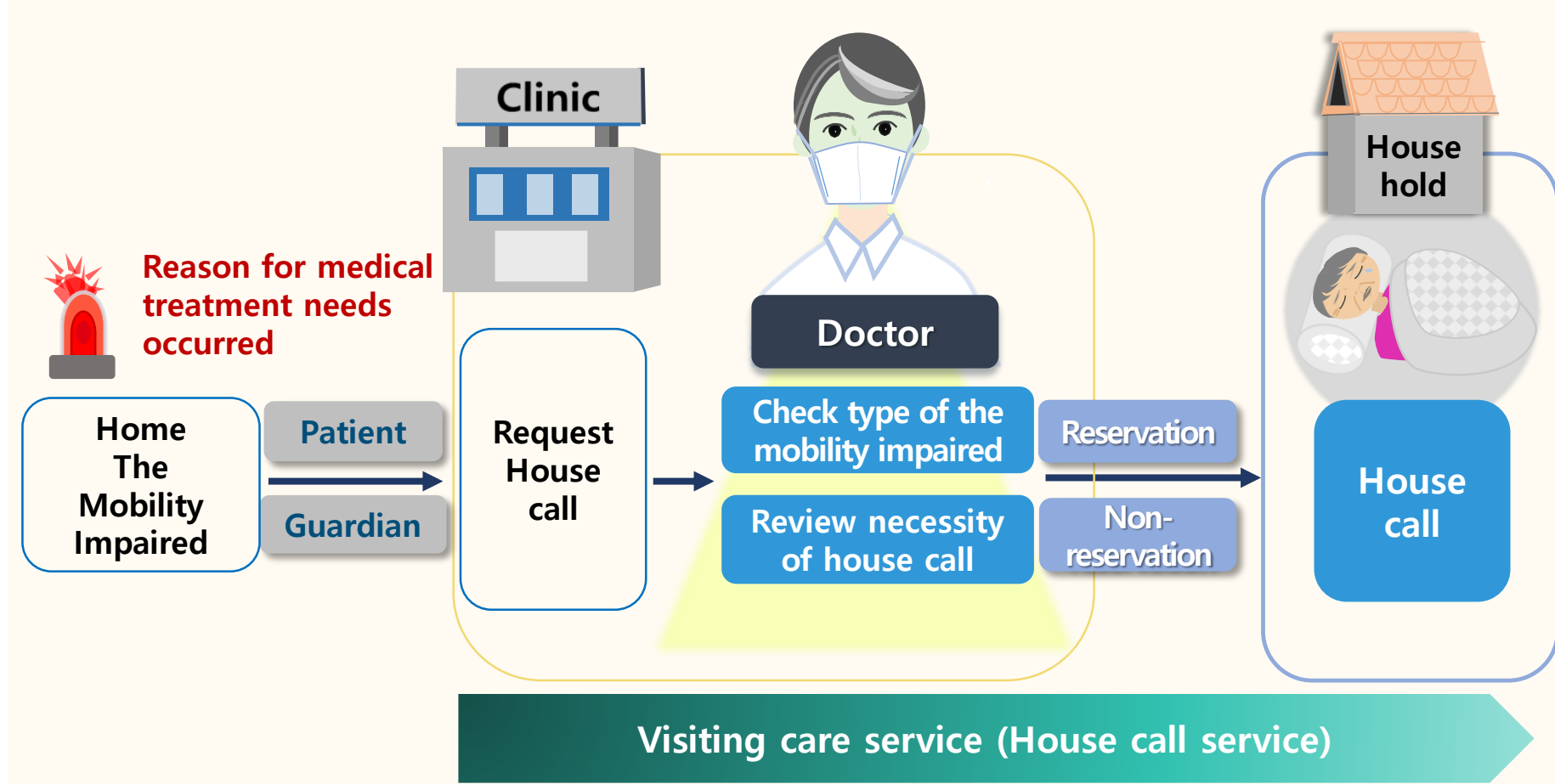
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INTRODUCTION

- ◆ The elderly have complex needs for medical and long-term care due to mobility impairment caused by frailty or multiple chronic diseases.
- ◆ Health care delivery system in Korea is designed for patients to visit medical institutions directly. But considering rapid aging trend of Korea, the Ministry of Health and Welfare launched doctor home visitation program in 2019 to provide home-based primary healthcare.
- ◆ Clinic doctor can visit to homebound patients and deliver medical services (c.f. consultation, prescription, screening test, and education for diseases).
- ◆ Brief of Home visitation pilot Program(Dec.'19.~Dec.'25.)
 - Eligibility: National Health Insurance, Medical Aid
 - Provider: local clinic doctors
 - Payment: doctors can choice the payment type (type1) fixed-payment per visit, (type2) Fee for service
 - Co-payment ratio: 30%, but Medical Aid 5~10%
 - Status: voluntarily participated (as of April.'22)
(n. of clinics) 335, (n. of patient) 3,285

Fig.1 Service Delivery Process of Home visitation program



AIM

- ◆ This study investigated factors affecting patient satisfaction & doctor's willingness for future participation to evaluate the effectiveness of the project.

METHOD

1. Data collection

- ◆ A questionnaire-based survey (mobile web · cell phone) in the aspects of service beneficiary as well as provider from 27.April. '22 to 13.May. '22.

2. Subject

- ◆ Patient : 381 beneficiary of the 1,753, responded to the survey (21.7% response rate)
- ◆ Doctor : 103 home visiting doctors of the 335, responded to the survey (30.7% response rate)

3. Data analysis

- ◆ Frequency analysis, chi-square test, Fisher's exact test and logistic regression analyses were performed using SAS Enterprise Guide 7.1
- ◆ P-value < 0.05 : considered statistically significant

RESULTS

1. Patient Satisfaction

- ◆ **78% of the patients (297/381) reported of a satisfactory experience with the project.**

A. Individual Factor

- **no** statistically significant **difference** in the general characteristics between unsatisfied and satisfied patients.

<Table 1> Comparison of patient satisfaction by general characteristics

Variable		Patient Satisfaction					
		Total (%) (N=381)	Unsatisfied(%) (N=84)	Satisfied(%) (N=297)	OR	95% CI	p
Age group	≤70s	127 (33.3)	29 (22.8)	98 (77.2)	1.00		
	80s	172 (45.1)	35 (20.3)	137 (79.7)	1.52	0.71-3.30	0.283
	≥90s	82 (21.5)	20 (24.4)	62 (75.6)	0.93	0.38-2.35	0.883
Gender	Male	121 (31.8)	22 (18.2)	99 (81.8)	1.00		
	Female	260 (68.2)	62 (23.8)	198 (76.2)	0.90	0.42-1.88	0.777
Insurance Type ¹⁾	MA	93 (24.4)	15 (16.1)	78 (83.9)	1.00		
	NHI	288 (75.6)	69 (24.0)	219 (76.0)	0.90	0.39-1.98	0.786
Location	Urban	322 (84.5)	73 (22.7)	249 (77.3)	1.00		
	Rural	59 (15.5)	11 (18.6)	48 (81.4)	1.71	0.65-4.81	0.288
Eligibility of Long-term care insurance ²⁾	Ineligible, Unknown	74 (19.4)	14 (18.9)	60 (81.1)	1.00		
	Eligible	307 (80.6)	70 (22.8)	237 (77.2)	0.59	0.23-1.42	0.247
Mobility Discomfort	Independent	11 (2.9)	2 (18.2)	9 (81.8)	1.00		
	Dependent	370 (97.1)	82 (22.2)	288 (77.8)	0.91	0.10-6.02	0.930

Note : 1) NHI: National Health Insurance, MA: Medical Aid
2) social insurance for the elderly experiencing difficulties with daily activities due to old age or age-related diseases

B. Service Experience Factor

- Patient satisfaction was significantly affected by **length of wait, doctor consultation time, the number of visits, appropriateness of payment.**

<Table 2> Factors affecting patient satisfaction by logistic regression analysis

Variable		Patient Satisfaction (N=381)		
		OR	95% CI	p
Length of wait	1-3 days	1.00		
	≥ 4 days	0.46	0.23-0.90	0.024*
Appropriateness of payment ¹⁾	Inappropriate	1.00		
	Appropriate	5.20	2.57-10.90	<0.001**
Doctor consultation time	≤ 15 min	1.00		
	≥ 16 min	4.09	2.01-8.53	0.0001**
Improvement in health condition	Not improved	1.00		
	Improved	6.04	2.89-13.41	<0.001**
The number of home visits (recent 1 year)	1-2 times	1.00		
	≥ 3 times	3.02	1.39-6.94	0.007**
Willingness to use home visit service consistently	No	1.00		
	Yes	3.43	1.57-7.65	0.002**
Prior experience of other doctor home visits	Yes	1.00		
	None or Unknown	2.65	1.17-6.07	0.020*
Prior experience of other medical expert home visits	Yes	1.00		
	None or Unknown	0.84	0.41-1.70	0.629

Note: *p<0.05, **p<0.01, ***p<0.001 (Bold : statistically significant)
1) Co-payment ratio is set as 30%, Medical Aid 5%~ 10%, Not mobility impaired as 100%

CONCLUSIONS

- ◆ The survey results of home visitation pilot program in Korea show that patient satisfaction is generally high(78%), and doctors also have the willingness to participate in the projects continuously(77.7%).
- 1. Considering the frequency of home visits, it is necessary to change the program model from one-time visit as required to systematic management through a comprehensive evaluation of the patient.
- 2. In order to achieve more patient participation, it is necessary to standardize the service model considering

2. Doctor

- ◆ **77.7% of the home visitation doctors (80/103) positively considered to participate in the pilot project repeatedly.**

A. Individual Factor

- **no** statistically significant **difference** in the general characteristics between doctors who are willing to participate in the project and those who are not.

<Table 3> Comparison of doctor's willingness to participate in the pilot project according to general characteristics

Variable		Doctor's willingness to participate					
		Total (%) (N=103)	No (%) (N=23)	Yes (%) (N=80)	OR	95% CI	p
Age group	≤40s	26 (25.2)	7 (26.9)	19 (73.1)	1.00		
	50s	37 (35.9)	10 (27.0)	27 (73.0)	1.16	0.30-4.52	0.831
	≥60s	40 (38.8)	6 (15.0)	34 (85.0)	3.73	0.85-17.62	0.085
Gender	Male	93 (90.3)	21 (22.6)	72 (77.4)	1.00		
	Female	10 (9.7)	2 (20.0)	8 (80.0)	1.45	0.24-12.10	0.701
Physician's practice type	Group	11 (10.7)	2 (18.2)	9 (81.8)	1.00		
	Solo	92 (89.3)	21 (22.8)	71 (77.2)	1.84	0.22-11.36	0.527
Type of specialty	Other	52 (50.5)	12 (23.1)	40 (76.9)	1.00		
	Family medicine	51 (49.5)	11 (21.6)	40 (78.4)	0.69	0.21-2.16	0.527
Location	Rural	16 (15.5)	3 (18.8)	13 (81.3)	1.00		
	Urban	87 (84.5)	20 (23.0)	67 (77.0)	0.54	0.08-2.91	0.504

B. Service Experience Factor

- There are no statistically significant factors affecting the doctor's future willingness to participation except **actual home visiting experience after applying for the pilot program**, however, the level of compensation and restriction on the number of visits per doctor are reported to be adequate.

<Table 4> Factors affecting doctor's willingness to participate in the project repeatedly by logistic regression analysis (N=103)

Variable		Willingness to participate		
		OR	95% CI	p
Having experience of actual home visits after project application	None	1.00		
	Yes	7.11	2.29-24.76	0.001**
Prior experience of other home visit projects	None	1.00		
	Yes	3.31	0.84-15.72	0.103
Satisfaction of medical home care service fee ¹⁾	Unsatisfied	1.00		
	Satisfied	1.29	0.19-13.00	0.808
Appropriateness of restriction on the number of visits per doctor ²⁾	Inappropriate	1.00		
	Appropriate	1.61	0.43-5.77	0.465

Note: **p<0.01 (Bold : statistically significant)
1) Medical home care service fee (as of July. '22) :
(i) Medical Fee type I : 124,280 KRW (≒ 94\$ or 85€)
(ii) Medical Fee type II : basic fee 86,460 KRW + FFS (≒ 65\$ or 59€ + FFS)
2) Restriction on the number of visits : maximum, 15 times per week, per doctor(as of July. '22)

the factors of improving patient satisfaction. At the same time, it is necessary to consider the patient-centered medical and care linkage scheme.

- 3. According to the survey results, 84% of providers are located in the urban area and are solo practice(89.2%). As mentioned earlier, in Korea, patients visit medical institutions directly, so solo practice doctor must close the medical institution in order to visit patient's home. Therefore, various incentive policies should to be developed to attract more providers to participate, especially in rural areas and solo practice.

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