

■ Brief Communication

Patients' Perceived Quality of Family Physicians' Primary Care with or without 'Family Medicine' in the Clinic Name

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Background: Patients' perspectives of family medicine according to the physician's identity and role as a primary-care specialist need to be investigated. This study was conducted to investigate the perceived quality of the primary care of family medicine clinics as assessed by patients in a community setting.

Methods: Patients (or their guardians) visiting nine community family medicine clinics were surveyed using the Korean Primary Care Assessment Tool from April 2014 to June 2014. The scores of the Korean Primary Care Assessment Tool domains were compared according to the clinics' designation (or not) as 'family medicine' and the patients' recognition (or not) of the physicians as board-certified family medicine specialists.

Results: A total of 196 subjects responded to the questionnaire. They assessed the community clinics' quality of primary care as moderate to high. Of the clinics, those that were not designated as family medicine scored higher than those that were designated as family medicine ($P < 0.05$). The group of patients that recognized a clinic as that of a board-certified family medicine specialist awarded higher scores than the non-recognition group in the domains of coordination function and personalized care ($P < 0.05$).

Conclusion: The moderate to high scores for the community family medicine clinics' quality of primary care are encouraging. It seems that patients' recognition of the family physician's role and of the physician-patient relationship has a significant influence on their assessment of the quality of primary care.

Keywords: Family Practice; Primary Health Care; Quality of Health Care; Physicians

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INTRODUCTION

Family medicine was first introduced to Korea in 1978, and board-certified family medicine specialists began to practice in 1987. Over the course of the succeeding 31 years, family medicine has become firmly established as a specialty of primary care in Korean medicine. The management of common diseases by family physicians rather than by other general physicians or specialists has contributed to significant medical cost savings.^{1,2)} Moreover, family medicine has, relative to other specialties, produced physicians who can practice primary care efficiently.^{1,3)}

According to a 2006 research study using the Delphi method, primary care in Korea is defined as a medical field in which a private physician, who knows the patient's family and community well, cultivates a close doctor-patient relationship and manages healthcare resources appropriately to solve the common health problems of the people. This same study identified four core properties of primary care including first-contact care, continuity of relationship, comprehensiveness, and coordination, along with three complementary properties including total care, family/community-context, and community-centeredness.⁴⁾

In 2008, the Korean Primary Care Assessment Tool (KPCAT) was developed to assess the quality of primary-care performance from the patient's perspective, and its validity was tested.⁵⁾ The KPCAT was constructed by formulating and selecting items, and subjecting them to expert evaluation, principal component analysis, and validity testing under the conceptual framework of the recently developed definition of primary care.^{4,5)} This questionnaire, which enables patients and other healthcare consumers to assess primary-care services, has already been applied several times to evaluate the primary-care quality in Korea.⁶⁻¹⁰⁾

According to the Korean Academy of Family Medicine's (KAFM) member registration database, 7,700 family physicians were actively practicing in 2014, although many of them did not designate their clinic as one for family medicine. In 2013, the KAFM surveyed members' opinions for or against changing the 'family medicine' specialty name, and canvassed suggestions for a new name. However, the survey results were not officially announced, and the issue of the possible name change was dropped.¹¹⁾ In the present research, which is the first of its kind to have been conducted in Korea,¹²⁾ we used the KPCAT to investigate patients' perception of the quality of primary care by community family medicine clinics, and compared the assessment scores of those who had received primary care at clinics self-designated as family medicine with those who had received primary care at clinics not self-designated as family medicine. We hypothesized that the perceived quality of primary care would significantly differ according to the designation or non-designation of a clinic as family medicine as well as the patients' recognition or non-recognition of the practicing physician as a board-certified family medicine specialist.

METHODS

1. Research Subjects and Methods

We selected nine community clinics at which the doctor was a board-certified family medicine specialist in practice for more than three years and a member of the Cheonan Primary Care Research Network. Of the clinics, four were self-designated as family medicine and five were not.

The KPCAT questionnaire for assessment of the quality of primary care is composed of five domains and 21 items in total, including five items in the 'first contact' domain, four in the 'comprehensiveness' domain, three in the 'coordination function' domain, five in the 'personalized care' domain, and four in the 'family/community orientation' domain. Each item is assessed on a five-point Likert scale, and the final scores are converted to a 100-point scale.

The questionnaire includes 10 questions concerning the following factors: socio-demographic indicators including age, sex, marriage status, education status, and monthly income; number of chronic diseases; the period of clinic utilization; whether or not the patients recognize that the clinic is that of a board-certified family medicine specialist; and whether or not they agree with the proposal to change the name of the family medicine specialty (if they agreed, they were invited to suggest a new name or names).

The survey was conducted from April 16, 2014 to June 9, 2014. Specially trained nurses or nursing aids surveyed 196 patients (or their guardians) in a waiting room prior to a doctor's appointment. The study was performed according to the guidelines of the Helsinki Declaration and underwent scrutiny of the Institutional Review Board of Dankook University Hospital.

2. Statistical Analyses

Frequency analyses of the categorical variables were performed. The mean scores of the quality of primary care were compared between family medicine-designated clinics and non-designated clinics using the Student t-test. The mean scores of the quality of primary care were compared according to whether or not patients recognized a clinic as that of a board-certified family medicine specialist using the non-parametric Mann-Whitney U-test. The IBM SPSS ver. 20.0 (IBM Co., Armonk, NY, USA) was used for the statistical analyses. The level of significance was designated as $P < 0.05$.

RESULTS

1. Socio-Demographic Characteristics of Research Subjects

A total of 326 questionnaires were distributed and 198 were collected. The response rate was 60.1%. Two inadequate questionnaires were discarded due to missing data. One hundred and sixteen questionnaires were collected from clinics self-designated as family medicine, and 80 from those not self-designated as family medicine.

Among the respondents, 74 (37.8%) were male and 122 (62.2%) female. The average age was 45.3 (standard deviation [SD]=14.8) years.

The respondents whose monthly income was over 3 million won numbered 122 (62.2%). As for education status, those who continued past high school numbered 163 (83.2%).

The socio-demographic characteristics and utilization variables between the self-designating and non-self-designating groups were compared. According to the results, there were no significant statistical inter-group differences for any of the variables except for the period of clinic utilization ($P>0.05$) (Table 1).

2. Quality of Primary Care (Korean Primary Care Assessment Tool) Scores as Assessed by the Patients

The overall average score of the quality of primary care was 70.08 (SD=15.64). The average score of the domain of personalized care was rated the highest at 83.9 (SD=14.61). The average score of the domain of first contact was 81.7 (SD=17.6), of family/community orientation it was 72.8 (SD=20.8), and of comprehensiveness it was 56.5 (SD=26.0).

The average score of the domain of coordination function was rated the lowest at 42.22 (SD=26.95) (Table 2).

3. Comparison of Korean Primary Care Assessment Tool Scores by Designation of Clinic

Regarding the KPCAT scores according to clinic designation, the total score of the family medicine-designated group was 66.5 (SD=15.9), and that of the non-designated group was 75.3 (SD=13.8). This result represented a significantly higher rating for the non-designated group ($P<0.001$). In fact, this group's scores were significantly higher in three of the four KPCAT domains, the exception being for coordination function (Table 2).

Table 1. Socio-demographic characteristics of study subjects

Characteristic	Total (N=196)	Patients of designated family medicine clinics (N=116)	Patients of non-designated family medicine clinics (N=80)	P-value*
Age (y)	45.3±14.8	46.7±14.6	43.3±14.9	0.059
Sex				0.551
Male	74 (37.8)	46 (39.7)	28 (35.0)	
Female	122 (62.2)	70 (60.3)	52 (65.0)	
Marriage status				0.180
Married	163 (83.2)	100 (86.2)	63 (78.8)	
Not married	33 (16.8)	16 (13.8)	17 (21.2)	
Income (million won/mo)				0.084
<1	21 (10.8)	14 (12.1)	7 (8.8)	
1-2	53 (27.0)	36 (31.0)	17 (21.2)	
≥3	122 (62.2)	66 (56.9)	56 (70.0)	
Education (y)				0.794
<10	33 (16.9)	16 (13.8)	17 (21.2)	
10-12	73 (37.2)	44 (37.9)	29 (36.3)	
≥13	90 (45.9)	56 (48.3)	34 (42.5)	
No. of chronic diseases				0.756
0	133 (67.9)	80 (69.0)	53 (66.3)	
≥1	63 (32.1)	36 (31.0)	27 (33.7)	
The period of clinic utilization (y)				0.005
≤5	128 (65.3)	68 (58.6)	60 (75.0)	
>5	68 (34.7)	48 (41.4)	20 (25.0)	

Values are presented as mean±standard deviation or number (%).

*Obtained from Student t-test for the continuous variables and χ^2 test for the categorical variables when comparing the differences between the two subgroups.

Table 2. Primary-care scores for the five domains of the Korean Primary Care Assessment Tool according to the designation of the clinic as family medicine

Domains	No. of items	Total (N=196)	Designated family medicine clinic group (N=116)	Non-designated family medicine clinic group (N=80)	P-value*
First contact	5	81.7±17.6	78.6±19.4	86.3±13.3	0.001
Comprehensiveness	4	56.5±26.0	50.1±24.5	65.6±25.5	<0.001
Coordination function	3	42.2±27.0	40.1±25.5	45.3±28.8	0.183
Personalized care	5	83.9±14.6	81.6±14.9	87.1±13.7	0.084
Family/community orientation	4	72.8±20.8	68.8±21.9	78.8±17.5	<0.001
Total average score	21	70.1±15.6	66.5±15.9	75.3±13.8	<0.001

Values are presented as mean±standard deviation.

*Obtained from Student t-test for the continuous variables when comparing the mean differences between the two subgroups.

Table 3. Primary-care scores for the five domains of the Korean Primary Care Assessment Tool according to the patients' recognition of the board-certified family medicine specialist

Domains	No. of items	Total (N=196)	Family medicine recognition group (N=177)	Family medicine non-recognition group (N=19)	P-value*
First contact	5	81.7±17.6	82.5±16.8	74.7±22.9	0.210
Comprehensiveness	4	56.5±26.0	57.0±25.0	51.6±34.3	0.632
Coordination function	3	42.2±27.0	43.6±27.5	28.9±17.0	0.033
Personalized care	5	83.9±14.6	84.8±13.6	74.7±20.0	0.027
Family/community orientation	4	72.8±20.8	73.4±20.4	67.1±23.8	0.218
Total average score	21	70.1±15.6	70.9±15.0	62.3±19.7	0.056

Values are presented as mean±standard deviation.

*Obtained from the Mann-Whitney U-test when comparing the mean differences between the two subgroups.

4. Comparison of Korean Primary Care Assessment Tool Scores according to Patient Recognition of the Physician as a Board-Certified Family Medicine Specialist

The KPCAT total score for the group that recognized that the family medicine specialist was board-certified was 70.9 (SD=15.9), and that for the non-recognition group was 62.3 (SD=19.7). Whereas the score was higher in the recognition group, the difference was statistically insignificant ($P=0.056$). As for the KPCAT domains, the scores for coordination function and personalized care were significantly higher in the recognition group ($P<0.05$) (Table 3).

DISCUSSION

The results of this research show that patients who visited nine community family medicine clinics rated the quality of primary care as moderate to high. The comprehensiveness and coordination function domains of primary care were assessed as moderate, while the first contact, personalized care, and family/community orientation domains were evaluated as high. These results are similar to those of previous research with hypertensive patients who continually visited family physicians' clinics.⁹⁾

The present results further showed that patients who used clinics that were not self-designated as family medicine, assessed the quality of primary care as higher than those who used self-designated clinics. This finding is contrary to our research hypothesis, which was that physicians designating their clinics as family medicine would be considered more responsible and confident in their practice, reflective of the first contact, comprehensiveness, continuity of care, and coordination properties of primary care.

The reason that our hypothesis is contrary to the results of our research is that whether or not family medicine is designated in a clinic's name, it did not affect the patient's assessment of the quality of that clinic's primary care. Rather, a family physician's relationship with his/her patients and their own competence in the practice of primary care strongly affected a patient's assessment of that clinic.

Meanwhile, the group of patients that recognized the visited clinic as that of a board-certified family medicine specialist assessed the quality of primary care to be higher than the group that did not so recognize the visited clinic. Baek et al.¹³⁾ reported that patients who had

visited a private physician rated the quality of primary care to be higher than those who had not. Consistent with this, the present research found that patients' recognition of the practicing physician as a family medicine specialist, as well as the family physician's responsible role as a private physician, were important factors affecting patients' assessment of primary care, and that the clinic title was relatively unimportant.

Designating a clinic as family medicine has served, since family medicine's very beginnings, to establish and emphasize its specialty. Such a designation is meant to differentiate the practicing family physician from other specialists; that is, it indicates that the practicing physician considers the family as a unit of care and, as such, evaluates a patient's biomedical situation as it relates to his/her family, managing it in such a way as to emphasize family-centered care.¹⁴⁾

However, it should be recognized that what is more important than the assertion of the family medicine specialist's accreditation, is the competence and capacity of the family physician to implement primary care effectively. In most family medicine residency programs, residents complete a 2–3 months' rotation period in the department of family medicine every year, during which time they gain experience in the implementation of family-centered healthcare as a private family physician in real practice. Thanks to this education, family physicians' future real practice in their respective communities can be in accord with the name of their specialty; indeed, it is possible that designating their clinics as family medicine will come to fully reflect their identity as family physicians and competent primary-care practitioners.

The main limitation of this research is the small sample size. Therefore, the obtained results cannot be generalized. Further research with larger subject cohorts is necessary. A second limitation is the arbitrary selection of the questionnaire respondents in each clinic, which could have incurred selection bias. A third limitation is the fact that the research results could not be adjusted according to the characteristics of the clinics' respective practices, including average consultation time per patient, number of patients per day, specific diseases treated, and practicing physicians' attitudes to family medicine.

Notwithstanding the limitations of the research, it is certainly meaningful that the quality of the primary care of family medicine clinics was assessed by patients in a community setting. The fact that patients perceived the quality of primary care as high in the domains of first

contact, personalized care, and family/community orientation is particularly encouraging. The quality of primary care was perceived as high when patients recognized that the practicing physicians were board-certified family physicians, even though their clinics were not designated as family medicine. We believe that physician's behaviors in practice, patient education materials, the characteristics of the physician-patient relationship, and the attitude of office personnel can provide patients with clues to recognizing a practice as a family medicine clinic.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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