

# Second opinion behaviour among Japanese primary care patients

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## SUMMARY

**Background.** *Second opinion behaviour is often observed among Japanese primary care patients. These patients secretly visit university-affiliated hospitals without informing their doctors. Research to elucidate the psychosocial determinants of this behaviour in the Japanese primary care setting is needed.*

**Aim.** *To describe the sociodemographic characteristics of second opinion patients (SOPs), and to determine the factors related to this behaviour.*

**Method.** *Patients from the general medicine clinic answered our original questionnaire and a 30-item General Health Questionnaire (GHQ-30). A random sample of patients was questioned using the Diagnostic Interview Schedule. SOPs were defined as those patients who had visited another medical facility with the same complaint, and 'doctor-shopping' patients (DSPs) were defined as those patients who had visited two or more medical facilities with the same complaint.*

**Results.** *There were 420 SOPs among 1033 patients (41.0%). The multivariate analysis showed that residence and GHQ-30 were the significant differences between the SOPs and the first-visit patients (FVP) ( $P < 0.0005$  for both factors). Also, the SOPs were anxious and sought advice from anybody, unlike the FVPs. Compared with the DSPs, they had a short duration of illness and they did not feel a worsening of their symptoms ( $P = 0.0001$  for duration of illness;  $P = 0.006$  for condition of illness).*

**Conclusion.** *Our results showed that the SOPs who lived far from the medical school hospital felt anxiety and went to a university-affiliated hospital on the advice of anybody. Determining the reasons for this behaviour will require empirical studies regarding the nature of the patient's anxiety for illness.*

**Keywords:** *second opinion; questionnaire; primary care; doctor-patient relationship.*

## Introduction

THE term 'second opinion' refers to the patient's right to determine their own treatment — their right to receive better medical treatment and to select the doctor they prefer. Second opinion behaviour in the practice of gynaecology, orthopaedic surgery, orthodontics, and gastroenterology in the United States has already been reported.<sup>1-5</sup> According to McCarthy *et al.*,<sup>2</sup> of

369 patients whose recommendations for elective orthopaedic surgery were not confirmed by a consultant who had been asked for a second opinion, 82% had not had the operation performed six months or more after the initial recommendation for surgery.

In Japan today, patients determine the type of treatment they receive. Almost everyone is covered by national health insurance. Until recently, those covered paid either 10% or 30% of their medical fees, but since 1998 the percentages have risen to 20% or 30%. The Japanese system allows the opportunity to study which factors influence self-referral for a second opinion because health care costs are not an important issue for patients.

The overwhelming majority of cases in which a patient seeks a second opinion are those where patients secretly visit a university-affiliated hospital without informing the private practitioners they are already consulting. They often tell the practitioners from whom they seek a second opinion about their dissatisfaction with their previous doctors. This phenomenon is characteristic of the doctor-patient relationship in Japan. There are definite negative aspects to second opinions. Some of the factors related to this behaviour must be explored.

The objectives of this study were to describe the sociodemographic characteristics of second opinion patients (SOPs) and to determine the risk factors related to second opinion behaviour.

## Method

### Setting and subjects

Saga City, the capital of Saga Prefecture in Japan, is a typical medium-sized city. Its population of about 170 000 is primarily engaged in farming, fishing, and food processing, or employed in the electrical machinery industry.

This study was conducted at the General Medicine Clinic (GMC) of the Saga Medical School Hospital (SMSH). Established in 1981, the GMC was the first department among the national medical schools to provide an outpatient service for primary care.

The hospital has two supporting elements. The first is the GMC, which handles primary care patients, and the second is the specialty clinics, which handle secondary and tertiary care. The GMC handles approximately 32 000 patient visits per year. It is open every weekday (Monday to Friday). Neither appointments nor letters of referral are required.

### Sampling and procedure

The participants in this study included patients who were 18 years of age or older and who had visited the GMC for the first time during a one-year period. Each of the patient samples in this study was generated from complex multi-stage samples. In the first stage, two study days were randomly chosen from Monday to Friday within one week using the table of random numbers. In the second stage, we generated a list of all patients attending on the selected study days until 11.00 am. We then selected two patients for the Diagnostic Interview Schedule (DIS) using random sampling procedures. One of the authors (TS) conducted the DIS in the afternoon. We set a limit of two patients to be interviewed by one interviewer, scheduled at the patient's convenience.

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### Definition of SOPs and 'doctor-shopping' patients

In this study, SOPs were defined as those who had visited one medical facility before visiting the GMC with the same complaint. They secretly visited SMSH without informing their previous doctor. 'Doctor-shopping' patients (DSPs) were defined as patients who had visited two or more medical facilities before visiting the GMC with the same complaint. The latter definition has been discussed in previous work.<sup>6</sup>

### Variables and measurement

**Sociodemographic variables.** The following information was collected from the patients' medical charts: sex, age, residence, occupation, education, and marital status. Although annual income is a very important factor, it is difficult to obtain accurate information on income in Japan. Therefore, we replaced income with occupation because of the close relationship between the two.

**General Health Questionnaire (GHQ).** A 30-item questionnaire (GHQ-30) was used as a measure of psychological state. The validity of the Japanese version of GHQ-30 was previously examined and shown to be highly reliable.<sup>6,7</sup> The validity of the GHQ-30 was examined against the DIS modified for use in Japan (DIS-JM), based on the DSM-III as the external criteria. A cut-off point between seven and eight has been suggested.<sup>7</sup>

**Doctor-shopping questionnaire.** This contained questions concerning the number of visits to medical facilities. It also included 11 questions related to the patient's health status (e.g. duration of illness, condition of illness, consultation with a family doctor, understanding of illness, etc.). This questionnaire was based on a previous report.<sup>6</sup>

**Diagnostic Interview Schedule (DIS).** The DIS is a highly-structured diagnostic interview widely used to generate psychiatric diagnoses in conformity with DSM-III criteria. It generates most of the major Axis I diagnoses, both current and lifetime. Many studies have investigated the validity and reliability of the DIS and DIS-JM, and it has been found to provide valid and reliable statistical data.<sup>8,9</sup>

**Medical chart review.** The information collected from the chart review included physical and mental diagnoses made by primary care physicians and specialists. We investigated physical and mental diagnoses for the three groups of patients.

**Statistical analyses.** The variables used in this study for chi-squared and multivariate analyses included sex, age, residence, occupation, education, marital status, and questionnaire responses. Logistic analysis was conducted to determine the associations between predictor variables related to second opinion patients.<sup>10</sup> DSM-III diagnoses were obtained by computer, which analysed the scoring data using Statistical Analysis System (SAS) software.<sup>10</sup> Fisher's exact test was used also. The statistical significance was set at 0.05.

## Results

### Response rate

One thousand and eighty-eight patients were asked to complete the questionnaire. Of these, 55 (5.1%) did not answer the questionnaire item regarding the number of facilities they had visited. Data were thus obtained and analysed from 1033 patients (response rate: 94.9%; 758 patients answered all the items and 275 answered some of the items).

**Second opinion patients.** Three hundred and eighty-seven (37.5%) patients had just come for their first visit, 420 (40.6%) patients had previously visited one medical facility (SOPs), and 226 (21.9%) patients had previously visited two or more medical facilities (DSPs) (Table 1). An assessment was made of 164 (16.0%) of the 1033 patients using DIS-JM.

The mean age of the SOPs ( $n = 240$ ) was 45.2 years ( $SD = +17.4$ ). The male to female ratio was 1 to 1.5, and 263 (62.6%) were married. Three hundred and thirty-one (78.8%) patients had received more than nine years of education.

### Risk factors related to second opinion patients

**Sociodemographic variables.** The sociodemographic data in Table 1 shows that, compared with FVPs, the number of SOPs was higher among persons who lived at a distance from SMSH than those who lived nearby. This difference was statistically significant ( $P = 0.001$ ). Also, SOPs had a significantly higher educational level than DSPs ( $P = 0.017$ ). There were no differences between the two groups related to sex, age, occupation, and marital status.

**GHQ-30.** Table 2 shows that the number of SOPs with a score of eight or greater was 176 (42%), while that of the FVPs was 119 (31%). The GHQ scores of SOPs were significantly higher than those of the FVPs ( $P = 0.001$ ). The results suggest that the SOPs are more anxious than the FVPs.

**Doctor-shopping questionnaire.** An item-by-item analysis of the doctor-shopping questionnaire is shown in Table 2. Compared with the FVPs, SOPs were more likely to have a chronic illness and to believe they were in poor health (i.e. their condition was getting worse). They also took more advice from anybody than FVPs.

**Multivariate analyses.** Multivariate regression analysis was used to determine the association between the variables of the three study groups. The multivariate analysis (Table 3) shows that the GHQ-30 and place of residence were the most significant differences between SOPs and FVPs ( $P = 0.0002$  for GHQ-30;  $P = 0.0003$  for place of residence).

Compared with FVPs, SOPs are anxious and seek advice from any doctor ( $P = 0.026$ ). In contrast, the duration of illness was the most significant difference between SOPs and DSPs ( $P = 0.0001$ ). The DSPs were more likely than SOPs to feel that their condition was growing worse, to mistrust their diagnosis and treatment, and to have high expectations for the medical school hospital.

**Diagnostic interview schedule.** There were significantly higher prevalence rates for all of the DIS psychiatric disorders among DSPs (52.5%, 21/40) than among the SOPs (31.5%, 23/73) ( $P = 0.029$ ). There were, however, no significant differences in the psychiatric prevalence rate between the SOPs and the FVPs (37.3%, 19/51).

### Physical and mental diagnoses among the three groups of patients

Table 4 shows the physical and mental diagnoses among the three groups of patients. FVP had a significantly greater frequency of diagnosis for endocrinological and metabolic disorders than did SOPs ( $P = 0.004$ ). Further, SOPs had a significantly greater frequency of diagnosis for obstetric and gynaecological disorders than did DSPs ( $P = 0.029$ ). DSP had the most frequent diagnosis of psychiatric illnesses compared with the other two groups of patients ( $P = 0.033$ ).

**Table 1.** Sociodemographic characteristics of first-visit patients, second opinion patients, and doctor-shopping patients.

	First-visit patients (FVPs) n (%)	Second opinion patients (SOPs) n (%)	Doctor-shopping patients (DSPs) n (%)	Degrees of freedom	P-value <sup>a</sup>	
					SOPs versus FVPs	SOPs versus DSPs
Total	387 (100)	420 (100)	226 (100)			
Sex						
Male	173 (45)	166 (40)	101 (45)	1	0.136	0.203
Female	214 (55)	254 (60)	125 (55)			
Age						
18–39 years	177 (46)	182 (43)	81 (36)			
40–64 years	166 (43)	166 (40)	103 (46)	2	0.064	0.175
≥65 years	44 (11)	72 (17)	42 (18)			
Residence						
Nearby	160 (41)	127 (30)	58 (26)	1	0.001	0.220
Remote	227 (59)	293 (70)	168 (74)			
Occupation						
Employed	346 (89)	371 (88)	193 (85)	1	0.629	0.285
Unemployed	41 (11)	49 (12)	33 (15)			
Education						
≤9 years	74 (19)	89 (21)	67 (30)	1	0.465	0.017
≥10 years	313 (81)	331 (79)	159 (70)			
Marital status						
Single	142 (37)	157 (37)	79 (35)	1	0.840	0.542
Married	245 (63)	263 (63)	147 (65)			

<sup>a</sup>Using chi-squared test.

## Discussion

Most research into the phenomenon of second opinions to date has focused on surgical patients and the role of the second opinion as a gatekeeper determining access to other parts of the system. McCarthy *et al* found that agreement of need for surgery varied by surgical subspecialty, with higher rates of agreement for gastrointestinal surgery and lower rates of agreement for gynaecologic surgery.<sup>11</sup> However, little of the research on second opinions has studied the psychosocial determinants for seeking a second opinion in the primary care setting. Even in Japan, the growth of the patients' rights movement and consumerism has brought with it changes in the role of patients. Instead of adopting a passive attitude in their interaction with doctors, patients are more informed about their right to obtain information about their health condition, medication, and treatment, and their right to participate in health decision-making. Also, patients more likely to describe their health as fair or poor were more likely to seek additional help, either by seeking a second opinion or by using alternative medicine.<sup>5,12,13</sup> This naturally leads to an increased financial burden on the health care system.<sup>5</sup> Therefore, obtaining a second opinion may be an inefficient use of health care resources.

### *Second opinion versus first-visit and doctor-shopping*

Generally, patients accept the diagnosis of the initial consultant and are satisfied with the encounter, but wish confirmation by another specialist. Our previous study focused on the characteristics of patients with doctor-shopping behaviour among Japanese primary care patients. It showed that doctor-shopping behaviour was associated with chronicity of illness, an inability to understand doctors' explanations, a disbelief of the doctor's diagnosis and treatment, and high GHQ scores. The most commonly reported reason for their behaviour was a persistence of symptoms and a difficulty to maintain a long doctor–patient relationship.

However, doctor-shopping behaviour was slightly different from second opinion behaviour in the Japanese primary care setting. From our clinical experience, seeking a second opinion is

commonplace behaviour and not abnormal. Understanding the determinant of second opinion behaviour in Japan would thus enable us to reduce the duplication of tests and money spent on health care and to reduce the level of mistrust in medical treatment.<sup>14</sup>

Our results show that SOPs are more likely than FVPs to live far from a medical school hospital, feel anxiety about their illness, and come to a university-affiliated hospital as a result of advice from anybody. These SOPs had a shorter duration of illness and were less likely to feel a worsening of their symptoms than DSPs. Therefore, our results suggest that SOPs feel anxiety about their illness and may seek confirmation by other specialists.

### *Health care system in Japan*

One of the factors associated with second opinion behaviour in Japan is that the general primary care system is not conducive to good communication between doctors in private practice and general hospitals and doctors in university hospitals. Many patients thought the consultant had not spent sufficient time with them.<sup>4</sup> They agreed that the consultant had asked appropriate questions, but some thought that the consultant had not answered all their questions.<sup>4</sup> This suggests that communication difficulties may be an important factor in patient satisfaction.

According to Koizumi, all doctors with overseas experience are surprised to note that few countries around the world have systems such as the one in Japan which completely segregates the doctors in private practice and general hospitals, and the doctors at university hospitals.<sup>14</sup> The international standard is for doctors to visit patients admitted to hospital after the patients have visited them at their office.<sup>14</sup> We must take a hard look at the system here in Japan, where we cannot seem to establish a system of the type that is standard around the world.

### *Directions for future research*

We must also create an environment where there is open doctor-to-doctor communication and patient-to-doctor communication. If the doctor–patient relationship were an open one, patients

**Table 2.** Results of questionnaire of first-visit patients, second opinion patients, and doctor-shopping patients.

	First-visit patients (FVPs) <i>n</i> (%)	Second opinion patients (SOPs) <i>n</i> (%)	Doctor-shopping patients (DSPs) <i>n</i> (%)	Degrees of freedom	P-value <sup>a</sup>	
					SOPs versus FVPs	SOPs versus DSPs
Total	387 (100)	420 (100)	226 (100)			
<i>GHQ-30 score</i>						
≤7	268 (69)	244 (58)	118 (52)	1	0.001	0.151
>8	119 (31)	176 (42)	108 (48)			
<i>Questionnaire items</i>						
<i>Duration of illness</i>						
<1 month	183 (47)	177 (42)	49 (22)			
1–12 month	69 (18)	136 (32)	81 (36)			
>12 months	74 (19)	82 (20)	91 (40)	3	0.000	0.000
None	59 (15)	25 (6)	5 (2)			
No answer	2 (1)	0 (0)	0 (0)			
<i>Condition of illness</i>						
Getting worse	133 (34)	158 (38)	103 (46)			
No change	170 (44)	187 (45)	98 (43)			
Getting better	23 (6)	44 (10)	20 (9)	3	0.000	0.057
None	55 (14)	26 (6)	5 (2)			
No answer	6 (2)	5 (1)	0 (0)			
<i>To consult family doctor</i>						
Yes	–	335 (80)	192 (85)			
No	–	32 (8)	14 (6)	2	–	0.405
None	–	48 (11)	20 (9)			
No answer	–	5 (1)	0 (0)			
<i>Satisfactory explanation</i>						
Yes	–	172 (41)	85 (38)			
No	–	172 (41)	120 (53)	2	–	0.004
No explanation	–	51 (12)	13 (6)			
No answer	–	25 (6)	8 (3)			
<i>To believe doctor's diagnosis and treatment</i>						
No	–	181 (43)	124 (55)			
Yes	–	206 (49)	92 (41)	1	–	0.012
No answer	–	33 (8)	10 (4)			
<i>High expectation for medical school hospital</i>						
Yes	83 (21)	99 (24)	77 (34)			
No	90 (23)	77 (18)	35 (16)	2	0.206	0.018
Unknown	210 (54)	242 (58)	114 (50)			
No answer	4 (2)	2 (0)	0 (0)			
<i>Improvement or explanation</i>						
Improvement	202 (52)	232 (55)	144 (64)			
Explanation	113 (29)	124 (30)	52 (23)	2	0.426	0.106
No answer	72 (19)	64 (15)	30 (13)			
<i>Anxiety related to serious illness</i>						
Yes	109 (28)	92 (22)	52 (23)			
No	206 (53)	262 (62)	138 (61)	2	0.029	0.939
No answer	72 (19)	66 (16)	36 (16)			
<i>Relieved by doctor's reassurance</i>						
Yes	309 (80)	326 (78)	163 (72)			
No	14 (4)	12 (3)	12 (5)	2	0.619	0.220
Unknown	63 (16)	77 (18)	44 (19)			
No answer	1 (0)	5 (1)	7 (4)			
<i>Overconcern related to illness</i>						
Yes	188 (49)	222 (53)	123 (54)			
No	149 (39)	130 (31)	67 (30)	2	0.066	0.779
Unknown	47 (12)	64 (15)	30 (13)			
No answer	3 (0)	4 (1)	6 (3)			
<i>Advice from anybody</i>						
Yes	255 (66)	310 (74)	174 (77)			
No	119 (31)	98 (23)	42 (19)	1	0.015	0.192
No answer	13 (3)	12 (3)	10 (3)			

<sup>a</sup>Using chi-squared test.

could freely ask the doctors they are consulting whether they would have any objections to the patients seeking the opinion of another doctor, without having to go in secret.

In addition, future research of second opinion behaviour should include informed consent in the primary care setting. Some Japanese

doctors, especially elderly doctors, tend to expect unspoken agreement from patients because the way information is conveyed in Japan is different from that in Western countries. Qualitative empirical approaches that take Japanese culture into consideration will be needed to solve this problem of illness behaviour.

**Table 3.** Different risk factor associated with second opinion behaviour in a multivariate logistic regression model (OR = odds ratio).

	SOPs versus FPVs		SOPs versus DSPs	
	Standardized OR	P-value	Standardized OR	P-value
Education	1.066	0.385	0.959	0.473
Residence	1.697	0.0003	0.771	0.166
GHQ-30	1.047	0.0002	0.984	0.184
Questionnaire				
Duration of illness	0.887	0.104	0.629	0.0001
Condition of illness	0.949	0.507	1.335	0.006
Satisfactory explanation	–	–	1.066	0.567
To believe doctor's diagnosis and treatment	–	–	1.393	0.017
High expectation for medical school hospital	1.053	0.576	1.208	0.065
Anxiety related to serious illness	1.133	0.285	1.184	0.242
Advice from anybody	0.740	0.026	1.072	0.682

**Table 4.** Physical and psychiatric diagnoses among first-visit patients, second opinion patients, and doctor-shopping patients.

	First-visit patients n (%)	Second opinion patients n (%)	Doctor-shopping patients n (%)	Total	Consultation rate (%)
Total	51 (100)	73 (100)	40 (100)	164	–
Obstetrics and gynaecology	6 (12)	15 (21) <sup>b</sup>	2 (5)	23	100
Bone and joints	6 (12)	5 (7)	7 (18)	18	77.8
Psychiatry	3 (6)	5 (7)	9 (23) <sup>c</sup>	17	82.4
Gastroenterology	5 (10)	8 (11)	1 (2)	14	28.6
Endocrinology and metabolism	9 (18) <sup>a</sup>	2 (3)	2 (5)	13	7.7
Skin/allergy/collagen diseases	3 (6)	6 (8)	3 (8)	12	91.7
Otolaryngology/head and neck surgery	4 (7)	4 (5)	3 (8)	11	72.7
Neuromuscular system	1 (2)	4 (5)	3 (8)	8	75.0
Cardiology	1 (2)	4 (5)	2 (5)	7	85.7
Ophthalmology	2 (4)	3 (4)	1 (2)	6	100
Respiratory disease	2 (4)	3 (4)	1 (2)	6	16.7
Kidney and genitourinary organs	0 (0)	4 (5)	0 (0)	4	100
Oral and maxillofacial surgery	2 (4)	0 (0)	2 (5)	4	100
Haematology	2 (4)	0 (0)	0 (0)	2	0
Anaesthesiology	0 (0)	0 (0)	1 (2)	1	100
Paediatrics	0 (0)	0 (0)	0 (0)	0	0
No definite diagnosis	5 (10)	10 (14)	3 (8)	–	–

<sup>a</sup>P = 0.004 by Fisher's exact test between second opinion patients and first-visit patients. <sup>b</sup>P = 0.033 by Fisher's exact test between second opinion patients and doctor-shopping patients. <sup>c</sup>P = 0.029 by Fisher's exact test between second opinion patients and doctor-shopping patients.

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