

# Values and risks of second opinion in Japan's universal health-care system

Sawako Okamoto,\* Kazuo Kawahara MD PhD,† Atsushi Okawa MD PhD‡ and Yujiro Tanaka MD PhD§

\*PhD candidate, †Professor, Division of Health Care Management and Planning, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, ‡Professor and Chairman, Department of Orthopedic Surgery, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, and §Professor, Department of Medical Education Research and Development, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan

---

## Correspondence

Sawako Okamoto  
Division of Health Care Management  
and Planning  
Department of Health Policy Science  
Graduate School of Medical and  
Dental Sciences  
Tokyo Medical and Dental University  
1-5-45 Yushima  
Bunkyo-ku  
Tokyo 113-4519  
Japan  
E-mails: acto2001@verizon.net or  
sawahcm@tmd.ac.jp

## Accepted for publication

21 January 2013

**Keywords:** communication, decision-making, quality of care, risk, second opinion

---

## Abstract

**Background** Second opinion (SO) is widely recognized in Japan, but we do not know how patients view and use SO.

**Objectives** To investigate optimum seeking of SO in Japan's universal health-care system.

**Design, participants, and methods** Survey of patients at Tokyo Medical and Dental University Hospital. Of 365 responses, 67 had experienced SO with standardized protocol at SO Clinic; 82 had obtained SO elsewhere without instruction; 216 had never sought SO.

**Main outcome measures** Views of values and risks of SO.

**Results** Second opinion patients with standardized protocol better understood their illness, treatment options, individualized plan, and uncertainty in medicine, and also reported improved decision making compared with SO patients without the protocol ( $P < 0.05$ ). However, more than half of respondents misunderstood SO as a way to change doctors or treatment. Second opinion respondents ( $n = 149$ ) had a propensity to request treatment changes ( $P < 0.1$ ) and more than one-third ( $n = 82$ ) did not tell SO doctor they were being treated by another doctor. The absolute majority of non-SO patients would seek SO for a serious illness but would hesitate to tell their doctors.

**Discussion and conclusion** Respondents recognized value of SO to improve understanding and decision making. This study also found risks in SO misuse which may be reinforced by Japan's cultural tendencies and universal health-care system. Our findings suggest steps to increase the benefit of SO: ensure involvement of original doctor, instruct patients about SO and help them organize their thinking before SO and facilitate patients' return to the treating doctor for discussion and decision making.

## Introduction

Patients seek second opinions for various reasons: they may be dissatisfied with their current specialist; they may feel a need for more information about their illness or treatment; or they may harbour a hope for a different opinion than their current diagnosis or treatment.<sup>1-4</sup> To improve health-care quality, (i) patients should be given information necessary to allow them to exercise the degree of control they choose over health-care decisions, including access to their medical information and to clinical knowledge, and (ii) doctors and patients should communicate effectively and share information.<sup>5</sup> These recommendations align with the concept of patient-centredness in health care, which also assumes that patients should be actively engaged in their care.<sup>6-9</sup> Through these processes, patients can become better informed and able to make decisions about treatment, and can actively support the chosen treatment plan. In principle, obtaining a medical second opinion can both improve quality of care and create a more patient-centred environment, particularly if the second-opinion process is organized with these goals in mind.

The concept of second-opinion consultation was introduced to Japan in the early 1990s and seems to be a widely recognized practice. Japan's Ministry of Health, Labour and Welfare (MHLW) now recommends that patients seek a second opinion when diagnosed with a serious illness, particularly cancer, and covers a portion of the second-opinion fee.<sup>10</sup> Almost all university hospitals and medical centres throughout Japan have opened in-house second-opinion clinics.

Despite growing recognition of the term second opinion among the general public, Japanese culture's emphasis on harmonious relationships makes consulting another doctor about a diagnosis problematic;<sup>11-13</sup> patients may worry that expressing a desire for a second opinion could harm their relationship with their original doctor. For their part, Japanese doctors may view such a desire as an indication

of dissatisfaction with the care they are providing to the patient. This view of second opinion, along with the relative freedom of access to medical services allowable under Japan's universal health-care system, may lead some patients to bypass their original doctor and avoid telling the second-opinion doctor that they are already under someone else's care.<sup>1,14</sup>

Little is known about Japanese patients' views regarding second opinion. No standard definition exists except that the second opinion should come from an expert doctor other than the patient's original doctor.<sup>10</sup> Based on the MHLW recommendation and definitions used by the US Centres for Medicare and Medicaid Services,<sup>15</sup> for the purposes of this study, we define second opinion as a second consultation about a patient's non-emergent illness that is given by a doctor in the appropriate specialty, other than the original doctor, before the patient undergoes invasive treatment for serious illness or proceeds to a next phase of treatment, including after failure to respond to earlier treatment.

This study focuses on Japanese patients' use and views of medical second opinion, examines its values and risks within the context of Japanese culture and under a universal health-care system and addresses how the use of second opinion can best improve quality of care. In this study, we sought to answer the following questions:

1. Is the decision to seek a second opinion related to demographic characteristics, such as gender, age, education and having a medical provider in the family?
2. What do patients think are the purposes of obtaining a second opinion?
3. Why do patients fail to seek a second opinion and what helps them do so?

Among patients who obtained second opinions:

4. Do patients who went to the Second Opinion Clinic and experienced standardized instructions to optimize the second opinion

feel that they understand their illness, treatment options and plan better than those who obtained a second opinion elsewhere?

5. When the second opinion differs from the original opinion, are patients more or less likely to ask to change the treatment plan?

## Methods

### Study subjects

This study surveyed patients at Tokyo Medical and Dental University Hospital. Because second opinions typically are provided by specialists, sampling patients at a university hospital seemed adequate for applying the research questions and for general comparative purposes. The subjects were from (i) the Second Opinion Clinic and (ii) the general patient waiting area. All participants were 20 years of age or older, remained anonymous and participated voluntarily after learning the purpose of the research.

For comparison, we classified respondents into the following three groups:

1. Patients at the Second Opinion Clinic who received the uniform protocol and help organizing their thoughts, who informed their original doctors that they were seeking a second opinion and whom the researchers were able to verify as having obtained a second opinion at the Clinic (the Second Opinion Clinic patients group);
2. Patients in the hospital's waiting area who said they had obtained second opinions at other institutions and did not have the same procedures as the Second Opinion Clinic patients, and whose experiences the researchers were unable to verify because the second opinions took place outside of the subjective university hospital. This group might have included patients whose original doctors did not know they were seeking a second opinion (the Second-opinion self-reported patients group); and
3. Patients in the waiting area who were aware of the second-opinion concept but had never sought a second opinion (the Non-second-opinion patients group).

### Protocol of the Second Opinion Clinic

At the start of the second-opinion process, the administrator in charge gives each patient a uniform explanation of the purposes of second opinion and Clinic procedures.<sup>16</sup> Each patient must submit medical records, including test results, before the second-opinion consultation. Patients complete application forms that include questions about expectations, concerns and areas they wish clarified during the consultation, which takes place several days later. Before meeting the patient, a specialist reviews the medical records, diagnoses the patient's condition(s) and addresses any concerns listed in the patient's application.

Although patients at the Second Opinion Clinic are not always referred by their original doctor, Clinic procedures involve the original doctor in the process. In Japan, patients can obtain their medical records only from their doctor; the Clinic gives the patient a note asking the original doctor for the records. After seeing the patient, the second-opinion doctor gives the patient a letter – addressed to both the patient and the original doctor – summarizing the second opinion. The procedures followed at the Second Opinion Clinic are collectively referred to as 'the standardized instructions' in this manuscript. All participants in the Second Opinion Clinic experienced the standardized instructions.

### Questionnaire

Before drafting the questionnaire, we interviewed six medical doctors using semi-structured questions to elicit issues in the second-opinion process. A pre-test of the preliminary questionnaire involved 86 patients with serious illnesses or recent surgeries. The final questionnaire was evaluated by a certified consumer adviser and a non-medical person working in a role like that of a patient advocate in the United States.

The questionnaire explored the following areas: awareness of the second-opinion concept; helpfulness of a second opinion in understanding treatment and making decisions; who recommended a second opinion; whether the

original doctor's opinion and the second opinion agreed or disagreed; whether patients requested a change in treatment after the second opinion; reasons why patients do not seek a second opinion and what makes them feel able to do so (asked only of patients who never sought second opinions); and demographic characteristics.

The Institutional Ethics Committee of Tokyo Medical and Dental University approved this study. The committee, however, asked us to phase in more detailed studies gradually in the light of Japanese cultural and individual sensitivities about contacting patients before second-opinion consultations; reviewing patients' medical histories; asking about their illnesses and the second-opinion practices of other institutions; and recording consultations.

#### Statistical analysis

We used chi-square tests to compare patients who sought second opinions (the Second Opinion Clinic patients and the Second-opinion self-reported patients) with those who had not (the Non-second-opinion patients). To evaluate whether demographics influenced them to seek second opinions, we conducted a logistic regression analysis. Respondents were classified by age into three groups: 20–39; 40–64; and 65 and older.<sup>17</sup>

To compare what the three groups – the Second Opinion Clinic patients with the standardized instructions, the Second-opinion self-reported patients and the Non-second-opinion patients – generally understood about second opinion, we used Kruskal–Wallis tests. To investigate the helpfulness of second opinion in improving understanding, we compared the two second-opinion groups using Mann–Whitney *U*-tests. To examine whether respondents thought that second opinion helped decision making, we compared the two second-opinion groups using Fisher's exact test. The relationship of the findings of the second opinion to decisions to ask for treatment changes was analysed using Spearman's Rho test (confidence interval: 95%; *P*-value <0.05). For data

analysis, we used SPSS software, 12.0J for Windows, SPSS Japan Inc., Tokyo, Japan.

## Results

### Responses

Patients returned 455 of 628 questionnaires distributed – a 73% response rate: 90 patients (20%) said they did not know what a second opinion is. Excluding this group from further analysis left 365 patients who had knowledge of second opinion and were considered valid respondents. Of 365 participants, 19% were the Second Opinion Clinic patients with standardized instructions; 22% were the second-opinion self-reported patients without standardized instructions; and 59% were the non-second-opinion patients.

### Demographics

The average age of respondents was 54 years. The Second Opinion Clinic respondents had more males than females, the reverse of the other two groups – a significant difference (Table 1).

As shown in Table 1, a logistic regression analysis indicated that educational level was the only demographic characteristic significantly related to whether respondents sought second opinions. Patients who completed graduate school were 9.5 times (1.62, 56.01), and those who completed 4-year college were 2.1 times (1.03, 4.19) more likely to obtain second opinions than those with a high school education or less (*P* < 0.05).

### Patients' reticence

Of the 216 respondents who had never sought a second opinion (the non-second-opinion respondents), 79% (*n* = 170; one did not answer) said they *would* do so if diagnosed with a serious illness. However, 53% of these 170 would hesitate to tell their doctors of their desire for a second opinion. The most common reason, cited by 90% of the

**Table 1** Respondent characteristics

	% All respondents ( <i>n</i> = 365)	% Patients who obtained second opinions ( <i>n</i> = 149)	% Patients who never obtained second opinions ( <i>n</i> = 216)	Chi- square <i>P</i> -value
Gender				
Male	41.7 ( <i>n</i> = 148)	48.3 ( <i>n</i> = 71)	37.0 ( <i>n</i> = 77)	0.034
Female	58.3 ( <i>n</i> = 207)	51.7 ( <i>n</i> = 76)	63.0 ( <i>n</i> = 131)	
Total	( <i>n</i> = 355)	( <i>n</i> = 147) <sup>1</sup>	( <i>n</i> = 208) <sup>2</sup>	
Age				
20–39 years	21.9 ( <i>n</i> = 77)	21.9 ( <i>n</i> = 32)	21.8 ( <i>n</i> = 45)	0.070
40–64 years	50.0 ( <i>n</i> = 176)	56.2 ( <i>n</i> = 82)	45.6 ( <i>n</i> = 94)	
65 years and older	28.1 ( <i>n</i> = 99)	21.9 ( <i>n</i> = 32)	32.5 ( <i>n</i> = 67)	
Total	( <i>n</i> = 352)	( <i>n</i> = 146) <sup>3</sup>	( <i>n</i> = 206) <sup>4</sup>	
Education				
High school or less	29.1 ( <i>n</i> = 102)	20.5 ( <i>n</i> = 30)	35.1 ( <i>n</i> = 72)	0.002
Vocational or 2-year college	25.4 ( <i>n</i> = 89)	25.3 ( <i>n</i> = 37)	25.4 ( <i>n</i> = 52)	
4-year college	42.5 ( <i>n</i> = 149)	47.9 ( <i>n</i> = 70)	38.5 ( <i>n</i> = 79)	
Graduate school	3.1 ( <i>n</i> = 11)	6.2 ( <i>n</i> = 9)	1.0 ( <i>n</i> = 2)	
Total	( <i>n</i> = 351)	( <i>n</i> = 146) <sup>3</sup>	( <i>n</i> = 205) <sup>5</sup>	
Have a medical provider in the family				
Yes	28.4 ( <i>n</i> = 100)	29.5 ( <i>n</i> = 43)	27.7 ( <i>n</i> = 57)	0.715
No	71.6 ( <i>n</i> = 252)	70.5 ( <i>n</i> = 103)	72.3 ( <i>n</i> = 149)	
Total	( <i>n</i> = 352)	( <i>n</i> = 146) <sup>3</sup>	( <i>n</i> = 206) <sup>4</sup>	
Illnesses for which second opinion sought		Group 1	Group 2	
Cancer	38.1 ( <i>n</i> = 56)	54.0 ( <i>n</i> = 35)	25.6 ( <i>n</i> = 21)	– –
Neurological diseases	12.2 ( <i>n</i> = 18)	6.0 ( <i>n</i> = 4)	17.0 ( <i>n</i> = 14)	– –
Cardiovascular diseases	8.2 ( <i>n</i> = 12)	5.0 ( <i>n</i> = 3)	11.0 ( <i>n</i> = 9)	– –
Pulmonary diseases	4.8 ( <i>n</i> = 7)	6.0 ( <i>n</i> = 4)	3.7 ( <i>n</i> = 3)	– –
Orthopaedic diseases	9.5 ( <i>n</i> = 14)	6.0 ( <i>n</i> = 4)	12.2 ( <i>n</i> = 10)	– –
Illnesses of internal organs	8.2 ( <i>n</i> = 12)	6.0 ( <i>n</i> = 4)	9.8 ( <i>n</i> = 8)	– –
Others	19.0 ( <i>n</i> = 28)	17 ( <i>n</i> = 11)	20.7 ( <i>n</i> = 17)	– –
Total	( <i>n</i> = 147) <sup>6</sup>	( <i>n</i> = 65) <sup>6</sup>	( <i>n</i> = 82)	

<sup>1</sup>Two did not answer.<sup>2</sup>Eight did not answer.<sup>3</sup>Three did not answer.<sup>4</sup>Ten did not answer.<sup>5</sup>Eleven did not answer.<sup>6</sup>Two did not answer.

respondents who would hesitate to tell their doctors, was that they would feel uncomfortable telling their doctor. To make it easier for these patients to seek a second opinion in the future, 66% of the Non-second-opinion respondents preferred their original doctor to be the one to recommend the option of seeking a second opinion.

Other than a referral by the original doctor, about one-third of the Non-second-opinion respondents believed that a second opinion should be mandatory before invasive treatments; that health insurance should require patients to seek a second opinion; and that a hospital administrator should explain the concept of second opinion and support patients

who may desire to have it (respondents were allowed to check all answers that applied). More than 50% of the Non-second-opinion respondents answered that they would use information on the Internet if they did not understand or agree with their doctor's explanation.

Regarding hesitation in those who sought second opinion (the Second Opinion Clinic and the Second-opinion self-reported respondents), factors that helped them overcome their hesitation and seek a second opinion were examined in the questionnaire. Of these second-opinion-experienced respondents ( $n = 149$ ), 65% were recommended to seek a second opinion by someone else: 26% were recommended by their original doctor; 21% by other medical staff; and 53% by a family member (three patients did not answer). Having a medical provider in the family was not significantly related to taking an action to seek a second opinion.

#### Purposes of seeking a second opinion

As shown in Table 2, the great majority of respondents in all three groups thought that patients sought second opinions to better understand their illness and to assist in decision making. The Second Opinion Clinic patients with the standardized instructions were significantly most likely to cite better understanding and decision making ( $P < 0.05$ ). A substantial

majority of all respondents thought that changing on-going treatment was a reason for seeking a second opinion, and 60% of them thought that changing doctors was a reason (no significant differences among groups) [Correction added on 08 March 2013, after first online publication: ' $P < 0.05$ ' was deleted.].

#### Value of Second Opinion Clinic practices

Respondents' personal experience with second opinion mirrored their general views, but, as shown in Table 3, a larger percentage of the Second Opinion Clinic respondents cited specific benefits they obtained by getting a second opinion, compared with the Second-opinion self-reported respondents: better understanding of treatment options ( $P < 0.05$ ); explanations of their illness and plan ( $P < 0.05$ ); the uncertainty inherent in medicine ( $P < 0.05$ ); and that the proposed treatment was designed specifically for them ( $P < 0.05$ ). The difference was not significant, however, in the percentages saying that a second opinion had helped them understand treatment risks.

#### Decision making

To assess how second opinion influenced patients' decision making, the questionnaire asked whether the second opinion was the same as the original doctor's opinion; whether

**Table 2** Respondents' opinions about why a person would seek a second opinion

A second opinion is for	% All respondents ( $n = 365$ )	% Second Opinion Clinic patients ( $n = 67$ )	% Second-opinion self-reported patients ( $n = 82$ )	% Non-second-opinion patients ( $n = 216$ )	Kruskal-Wallis Chi-square value	$P$ -value
Better understanding	88.2 ( $n = 320$ ) <sup>1</sup>	100.0 ( $n = 67$ )	92.6 ( $n = 75$ )	82.8 ( $n = 178$ )	16.359	0.0003
Decision making	90.9 ( $n = 331$ ) <sup>2</sup>	97.0 ( $n = 65$ )	95.1 ( $n = 77$ )	87.5 ( $n = 189$ )	7.409	0.025
Changing your doctor	59.6 ( $n = 217$ ) <sup>3</sup>	50.7 ( $n = 34$ )	67.9 ( $n = 55$ )	59.3 ( $n = 128$ )	3.755	0.153
Changing on-going treatment	81.6 ( $n = 297$ ) <sup>4</sup>	77.6 ( $n = 52$ )	84.1 ( $n = 69$ )	81.9 ( $n = 176$ )	1.031	0.597

<sup>1</sup>Two did not answer the question about better understanding.

<sup>2</sup>One did not answer the question about decision making.

<sup>3</sup>One did not answer the question about changing your doctor.

<sup>4</sup>Two did not answer the question about changing on-going treatment.

**Table 3** Among those who obtained second opinions, what respondents understood better as a result of the second opinion

A second opinion helped to better understand	% Total ( <i>n</i> = 149)	% Second Opinion Clinic patients ( <i>n</i> = 67)	% Second-opinion self-reported patients ( <i>n</i> = 82)	Mann–Whitney <i>U</i> -test	<i>P</i> -value
Treatment options	86.5 ( <i>n</i> = 128) <sup>1</sup>	92.5 ( <i>n</i> = 62)	81.5 ( <i>n</i> = 66)	2408.500	0.047
Illness and plan	79.7 ( <i>n</i> = 118) <sup>2</sup>	87.9 ( <i>n</i> = 58)	73.2 ( <i>n</i> = 60)	2299.000	0.025
Uncertainty in medicine	70.3 ( <i>n</i> = 102) <sup>3</sup>	81.5 ( <i>n</i> = 53)	61.3 ( <i>n</i> = 49)	2048.500	0.006
The treatment is specifically designed for your health condition	76.0 ( <i>n</i> = 111) <sup>4</sup>	87.7 ( <i>n</i> = 57)	66.7 ( <i>n</i> = 54)	2063.000	0.003
Risks of your treatment	79.6 ( <i>n</i> = 117) <sup>5</sup>	81.8 ( <i>n</i> = 54)	77.8 ( <i>n</i> = 63)	2559.000	0.525

<sup>1</sup>One did not answer the question about treatment options.

<sup>2</sup>One did not answer the question about illness and plan.

<sup>3</sup>Four did not answer the question about uncertainty in medicine.

<sup>4</sup>Three did not answer the question about the specificity of treatment to each patient's health condition.

<sup>5</sup>Two did not answer the question about risks of treatment.

the patient would ask or had asked for a change in treatment; whether the second opinion helped the patient decide to proceed with the original plan (with or without changes); and whether the second opinion made decisions more difficult. Comparisons, using Fisher's exact test, between the two second-opinion groups' answers found no significant differences (data not shown).

As shown in Table 4, about half of second opinions were the same or almost the same as the original doctor's. The Second Opinion Clinic respondents seemed less likely to be unsure (4.5%) than the Second-opinion self-reported respondents (13%) – a statistically significant difference at the 90% confidence level.

Of 145 respondents who sought second opinions (four did not answer), 86% did not find that the second opinion made decisions more difficult. Of 147 respondents who sought second opinions (two did not answer), as shown in Table 4, the large majority were decisive about acting on second-opinion findings, either deciding to ask the original doctor to change or partially change treatment (46%) or deciding that they were unlikely to, or would not, request a change (28%).

### Requests for change due to second opinion

We investigated the relationship between the congruence of the two opinions (i.e. whether the second opinion agreed with the original opinion) and asking the original doctor to change the plan. There was a significant positive correlation between the result of second opinion and patients' decision to ask for a change of treatment (0.52,  $P < 0.0001$ ) in the expected direction: when the second opinion was the same or almost the same as the original opinion, 41% of the respondents ( $n = 74$ ) were relatively likely *not* to ask for any change; when the doctors' opinions differed, 68% of the respondents ( $n = 59$ ) sought or would seek a change or partial change.

## Discussion

### Demographics

Respondents with more education were more likely to seek second opinions. Thus, as Japan's well-educated Baby Boomers become the senior generation, the demand for second opinions is likely to increase.<sup>18</sup> As this happens, improving

**Table 4** Relationship between congruence of opinions and decision making to seek a change in treatment among all respondents receiving second opinions

	Was your second opinion the same as the original diagnosis/treatment recommendation? (% , n = 149)						Spearman's Rho (P-value)
	Same	Almost same	Not sure	Partially different	Different	Total	
Will you ask your original doctor to change the treatment plan as a result of the second opinion?							
Will not ask	69.2 (n = 9)	18.0 (n = 11)	0 (n = 0)	10.0 (n = 4)	10.5 (n = 2)	17.7 (n = 26)	0.519 (P < 0.0001)
Unlikely to ask	15.4 (n = 2)	13.1 (n = 8)	7.1 (n = 1)	7.5 (n = 3)	5.3 (n = 1)	10.2 (n = 15)	
Not sure	7.7 (n = 1)	39.3 (n = 24)	35.7 (n = 5)	20.0 (n = 8)	5.3 (n = 1)	26.5 (n = 39)	
Will ask to partially change	7.7 (n = 1)	24.6 (n = 15)	35.7 (n = 5)	32.5 (n = 13)	0 (n = 0)	23.1 (n = 34)	
Will ask to change	0 (n = 0)	4.9 (n = 3)	21.4 (n = 3)	30.0 (n = 12)	78.9 (n = 15)	22.4 (n = 33)	
Total	100.0 (n = 13)	100.0 (n = 61)	100.0 (n = 14)	100.0 (n = 40)	100.0 (n = 19)	100.0 (n = 147 <sup>1</sup> )	

<sup>1</sup>Two did not answer question about change of treatment plan.

the second-opinion process would become ever more important. One study investigated the association between socio-demographics and seeking second opinion;<sup>4</sup> however, that study showed that educational level was not significantly related to seeking a second opinion. Therefore, additional studies are necessary to determine the association between educational level and seeking a second opinion.

#### Purposes of seeking a second opinion

Respondents in all three groups appreciated the value of second opinion. Like patients in other countries,<sup>4,19–24</sup> the Japanese respondents saw second opinion as helping patients to better understand their illness, treatment options and plan and to make more informed decisions about treatment. Still, more than half of respondents thought that the purposes of second opinion included changing doctors or changing on-going treatment. These findings support reports that some patients do use second opinion for doctor shopping, while doctors expect patients to use second opinion to become better informed and more engaged in treatment.<sup>1,14,25</sup> More patients' education would be required about the use of second opinion.

#### Patient's reticence

Among the Non-second-opinion patients, the absolute majority would seek a second opinion if diagnosed with a serious condition. Still, more than half of them would hesitate to tell their doctor that they wanted a second opinion because they would not want to jeopardize the relationship. Such reticence is not unique to Japan,<sup>4,9,26</sup> but Japanese cultural attitudes may reinforce it. In Japan, individuals often feel uncomfortable questioning the opinions of older persons and experts.<sup>11,13</sup> Patients may worry that requesting a second opinion seems rude, questions the original doctor's capabilities or rejects the original diagnosis and so could harm their relationship with the doctor. Indeed, Japanese doctors may conclude that a desire for a second opinion indicates dissatisfaction. Patients in other Asian nations, especially in East Asia, may share these attitudes and behaviours due to cultural similarities.<sup>11,13</sup> Even patients in Western nations may experience some degree of discomfort in contradicting their doctor.<sup>4,9,26</sup> In Japan, a more pronounced reticence may lead patients to seek second opinions without informing their original or second-opinion doctors.



To overcome patients' reticence, the original doctor may need to take the initiative in raising the topic of second opinion with patients and explain its purposes. As to which factors may have helped patients who sought second opinions, someone else's recommendation and support seemed to help them take the action to seek a second opinion. In addition to making sure that the original doctor remains involved in the second-opinion process, the patients' family appears to play an important psychological role in helping patients overcome their reticence to seek a second opinion. As another study suggested,<sup>27</sup> legislative efforts, such as a mandatory second opinion before invasive treatment, may also encourage patients to utilize second opinions appropriately.

#### Patients' decision making

According to most respondents in the Second Opinion Clinic and Second-opinion self-reported groups, getting a second opinion and having more information did not make decision making more difficult. Based on the results of the second-opinion, most patients made clear decisions about whether to ask for a change in treatment. These findings suggest that second opinion generally plays a positive role, helping patients feel better informed.

The Second Opinion Clinic respondents were less likely than the Second-opinion self-reported respondents to be unsure whether the two opinions differed ( $P < 0.1$ ). This finding suggests that the standardized instructions had the effect of helping patients to better understand the second-opinion process and thus facilitates informed decision making. One study<sup>28</sup> reported similarly that instruction and summarizing patients' thoughts prompted patient involvement in their care, such as promoting patients' receptivity to information and more effective communication.

However, the respondents who sought a second opinion seemed to have a propensity to ask for changes in treatment. One study<sup>29</sup> found that major changes in treatment resulted in half of patients who had different second

opinions. When opinions were almost the same in the current study, about one-third would still request a change. These results may be associated with whether these respondents clearly understood the purpose of second opinion, and the likelihood that some respondents who seek second opinions probably come looking for a change. Without discussing the second opinion with the original or treating doctor, however, most patients are not likely to know how to make an informed decision when faced with conflicting opinions,<sup>30</sup> and risk making changes that are against their best interests.

#### Role of the doctor

The practices of the Second Opinion Clinic that involve the original doctor may have contributed to enhanced communication and relatively better understanding in the Second Opinion Clinic respondents than in the Second-opinion self-reported respondents. For example, the second-opinion doctor's note to the patient and original doctor may make it easier for the patient to discuss the second opinion with the original doctor, while ensuring that the second opinion is accurately communicated. Also, the brief educational instruction and help organizing patients' thoughts by the trained administrator of the Second Opinion Clinic seemed to increase understanding in the Second Opinion Clinic group.

Often, the original doctor is ideally placed to bring about this interaction. However, some patients seek second opinions because they are dissatisfied with the original doctor or his/her diagnosis, or for some other reason do not plan to return to the original doctor. Therefore, any doctor with whom the patient chooses to have treatment would be best positioned for this interaction. The results from this study showed that it is critical for patients who have second opinions to engage with a doctor when making medical decisions and with whom they can discuss information from the second-opinion consultation. A previous

study also supported the role of the doctor's opinion in patients' decision making.<sup>30</sup>

Japanese people across all generations tend to focus on the contextual framework in social life, such as the relationship with their doctors, rather than on the contractual aspect, such as the reason for seeing a doctor and whether they receive appropriate treatment,<sup>11</sup> and tend to be more expressive within close relationships.<sup>31</sup> Thus, clear communication *in the context of a close relationship with the treating doctor* is important to help Japanese patients make effective use of second opinion. Provided both parties understand and agree on its purposes, a second opinion could provide the impetus for further communication, thus promoting the patient–doctor relationship<sup>19,23</sup> and encouraging patients' involvement in their treatment.<sup>9,22,23</sup> In this respect, the findings of this study may also apply in other nations with socio-medical and cultural similarities to Japan.

#### Risks of patient reticence and misunderstanding

In addition to the propensity to ask for changes in treatment after obtaining a second opinion and misunderstanding of the purposes of second opinion, such as changing doctors or on-going treatment, this study identified several additional risks. Among the Second-opinion self-reported respondents, more than one-third reported that they had not taken their medical records to their second-opinion consultation. As in Japan patients' records could come only from their original doctors, it seems likely that these respondents may not have told their original doctor of the second opinion or may not have told the second doctor that they had previously seen another doctor. This represents a waste of doctors' and patients' time as well as health-care resources. Furthermore, when patients change doctors or treatment without coordination between the two doctors, it could lead to interrupted, duplicative or conflicting treatment that could create health risks. Delays in treatment and the opportunity to benefit

from effective treatment would appear to have a direct impact on the quality of care.

The growing use of the Internet to get information about illnesses and treatments may also contribute to confusion among patients who may not be able to discern between generic information and treatments designed specifically for them. Thus, seeking a second opinion may be important for patients to obtain more specific information related to their condition.

Taking into consideration the risks described above, our findings suggest that, as facilitated by the Second Opinion Clinic, co-operation between the second-opinion and the original or other treating doctor, thorough preparation for a second opinion, and discussion of its results can help diminish waste, risk and confusion, and support informed decision making.

#### Limitations

Several limitations existed in this study. First, the study was conducted in one university teaching hospital, which led to the small sample size. The findings should be limited to such settings and cannot be generalized to other patient populations. Second, although all respondents were from the same hospital, the data from the Second Opinion Clinic respondents may not be comparable to the data from the Second-opinion self-reported and the Non-second-opinion respondents. The Second Opinion Clinic respondents are likely to have more serious illnesses, and their responses reflect their current health situation. In contrast, the Second-opinion self-reported respondents are probably facing or have faced serious illnesses, while the Non-second-opinion respondents may or may not have faced serious illnesses. Their respective health conditions may be current, recent or past.

The Institutional Ethics Committee required phasing this research over a period of time due to Japanese cultural norms and the need to protect patients' sensitivities. In this study, the requirement limited our data collection about the details of illnesses and the contents of second opinions that patients sought at other

institutions. However, we still believe that the participant sampling at the university teaching hospital sheds light on second opinion and its effective use in Japan because they all discussed their conditions and treatment options in second opinions with specialists who are more likely to be found in this setting than in the primary care setting.

Third, the data on the experiences of the Second-opinion self-reported respondents cannot be verified. This is not a limitation particular to this study; other studies using self-reports rather than observation share the same limitation.

Future studies are required to minimize these limitations. Also, future recording of second-opinion consultations would help to gauge patients' understanding of their illness, treatment options and plan, and how they reflected upon this information.<sup>32,33</sup>

## Conclusion

To our knowledge, this is the first study with data on Japanese patients' views of and expectations from seeking second opinions. Although there is cultural hesitation to seek second opinions in Japan, participants who were aware of second opinion in this study appeared to accept its value and role in increasing understanding, communication with the original or treating doctor and informed decision making. Second opinions can also make important contributions to the quality of care. However, risks associated with second opinion under the universal health-care system in Japan, as well as patients' reticence and misunderstanding of second opinion's intended purposes were also considered.

As in many other countries, the Japanese health-care system lets the patient decide whether to seek a second opinion. To optimize the value of second opinion for patients in Japan and improve the quality of care, our findings suggest three main recommendations:

1. To overcome patients' reticence, the original doctor should raise the possibility of a second-opinion consultation and discuss its

purposes and value in co-operation with patients' family members.

2. A doctor or an appropriately trained provider should help patients understand the benefits and risks of second opinion and help them organize their thoughts and concerns prior to the second-opinion consultation.
3. To counter patients' tendency to favour the second opinion, the second doctor should advise and facilitate patients' return to the original or treating doctor to discuss options and make informed decisions.

While implementing the above steps may take some time, based on the values and risks demonstrated in this study, these suggestions are likely to contribute to more effective use of second opinion in the context of Japan's universal health-care system.

This study was able to verify the findings of other international studies, such as patients' reticence in, patients' motives for and the perceived benefits of seeking a second opinion. At the same time, our study showed the unique characteristics of the data, such as patients' understanding of second opinion, the risks of second opinion, and how the original/treating and second doctors can be involved in optimizing the second-opinion process.

Because the results of this study have been discussed in the context of the international academic literature, these recommendations to avoid risks and misunderstanding about treatment and second opinion apply not only to nations with cultures and health-care systems similar to Japan's but also to Western nations and cultures.

## Acknowledgements

The authors gratefully acknowledge Dr. Young Mi Kim for reading critically and providing her opinions; Drs. Seigo Hiraga, Shizuaki Maejima, and Hideo Obayashi for their opinions and help interviewing doctors; Norie Sakamoto and Ikuko Toyoda for evaluating the questionnaire; Naoko Miyoshi, Yachiyo Shibata, Toko Sasaki-Ike, and Ayaka

Yokoyama for distributing and collecting questionnaires; Naomi Shima and Kohei Aoshima for reviewing the statistical data; and Clara Marin and Ward Rinehart for editing.

### Conflict of interest

There is no funding source involved in this study and also no conflict of interest.

### References

- 1 Sato T, Takeichi M, Hara T, Koizumi S. Second opinion behavior among Japanese primary care patients. *British Journal of General Practice*, 1999; **49**: 546–550.
- 2 Van Dalen I, Groothoff J, Stewart R, Spreeuwenberg P, Groenewegen P, van Horn J. Motives for seeking a second opinion in orthopaedic surgery. *Journal of Health Services Research & Policy*, 2001; **6**: 195–201.
- 3 Clauson J, Hsieh YC, Acharya S, Rademaker AW, Morrow M. Results of the Lynn Sage second-opinion program for local therapy in patients with breast carcinoma. *Cancer*, 2002; **94**: 889–894.
- 4 Mellink WA, Dulmen AM, Wiggers T, Spreeuwenberg PM, Eggermont AM, Bensing JM. Cancer patients seeking a second surgical opinion: results of a study on motives, needs, and expectations. *Journal of Clinical Oncology*, 2003; **21**: 1492–1497.
- 5 Improving the 21st-century health care system. In: Committee on Quality of Health Care in America, Institute of Medicine (ed.) *Crossing the Quality Chasm: A New Health System for the 21st Century*. Tenth printing. Washington, DC: National Academy Press, 2010: 39–60.
- 6 Ong LML, de Haes JCJM, Hoos AM, Lammes FB. Doctor-patient communication: a review of the literature. *Social Science and Medicine*, 1995; **40**: 903–918.
- 7 Mead N, Bower P. Patient centredness: a conceptual framework and review of the empirical literature. *Social Science and Medicine*, 2000; **51**: 1087–1110.
- 8 Bensing J. Bridging the gap. The separate worlds of evidence-based medicine and patient-centered medicine. *Patient Education and Counseling*, 2000; **39**: 17–25.
- 9 Roter D, Hall JA. *Doctors Talking with Patients/Patients Talking with Doctors*. Westport, CT: Praeger, 2006.
- 10 Japan Ministry of Health, Labor, and Welfare. Notice: revision of calculation for health care reimbursements. No. 0306012 March 6, 2006.
- 11 Yum JO. The impact of Confucianism on interpersonal relationships and communication patterns in East Asia. In: Samovar LA, Porter RE (eds) *Intercultural Communication*. Belmont, CA: Wadsworth, 2000: 63–73.
- 12 McDaniel ER, Quasha S. The communicative aspects of doing business in Japan. In: Samovar LA, Porter RE (eds) *Intercultural Communication*. Belmont, CA: Wadsworth, 2000: 213–324.
- 13 Chen G-M, Chung J. The “five Asian dragons”: management behaviors and organizational communication. In: Samovar LA, Porter RE (eds) *Intercultural Communication*. Belmont, CA: Wadsworth, 2000: 301–312.
- 14 Sato T, Takeichi M, Shirahama M, Fukui T, Gude JK. Doctor-shopping patients and users of alternative medicine among Japanese primary care patients. *General Hospital Psychiatry*, 1995; **17**: 115–125.
- 15 United States Centers for Medicare & Medicaid Services. Getting a second opinion before surgery. CMS Product No. 02173, revised June 2010.
- 16 Tokyo Medical and Dental University Hospital, the Second Opinion Clinic instruction. Retrieved from the hospital’s Web site at <http://www.tmd.ac.jp/medhospital/2nd/index.html>, accessed 28 January 2011.
- 17 Japan Ministry of Health, Labor, and Welfare. Act 20th—designated healthcare checkup.
- 18 Japan Ministry of Internal Affairs and Communications, Statistics Bureau, Director-General for Policy Planning (Statistical Standards) & Statistical Research and Training Institute. Statistics Today No.32 (S. Okamoto, Trans.). Retrieved at <http://www.stat.go.jp/info/today/032.htm>, accessed 25 March 2011.
- 19 Paris M, Salsberg E, Berenson L. An analysis of nonconfirmation rates. Experiences of a surgical second opinion program. *The Journal of the American Medical Association*, 1979; **242**: 2424–2427.
- 20 Gertman PM, Stackpole DA, Levenson DK, Manuel BM, Brennan RJ, Janko GM. Second opinions for elective surgery. The mandatory Medicaid program in Massachusetts. *New England Journal of Medicine*, 1980; **302**: 1169–1174.
- 21 McCarthy EG, Finkel ML. Second consultant opinion for elective orthopedic surgery. *American Journal of Public Health*, 1981; **71**: 1233–1236.
- 22 Graboys TB, Headley A, Lown B, Lampert S, Blatt CM. Results of a second-opinion program for coronary artery bypass graft surgery. *The Journal of the American Medical Association*, 1987; **258**: 1611–1614.
- 23 Rosenberg SN, Gorman SA, Snitzer S, Herbst EV, Lynne D. Patients’ reactions and physician-patient

- communication in a mandatory surgical second-opinion program. *Medical Care*, 1989; **27**: 466–477.
- 24 Mounjid N, Gafni A, Bremond A, Carrere M-O. Seeking a second opinion: do patients need a second opinion when practice guidelines exist? *Health Policy*, 2007; **80**: 43–50.
- 25 Tanaka M, Nakayama T, Iishi H, Awata O. Qualitative research on second opinion for cancer patient support groups and medical institutions affiliated with Japan cancer center conference (S. Okamoto, Trans). The 48th Annual Meeting of Japan Society of Clinical Oncology, p. 1126, October 2010, Kyoto, Japan.
- 26 Mendel R, Traut-Mattausch E, Frey D, Buhner M, Berthele A, Kissling W, Hamann J. Do physicians' recommendations pull patients away from their preferred treatment options? *Health Expectations*, 2011; **15**: 23–31.
- 27 Wagner TH, Wagner LS. Who gets second opinion? Once a technique for controlling inappropriate care, second medical opinions have become a controversial practice under managed care. *Health Affairs*, 1999; **18**: 137–145.
- 28 Goldman RE, Sullivan A, Back AL, Alexander SC, Matsuyama RK, Lee SJ. Patients' reflections on communication in the second-opinion hematology-oncology consultation. *Patient Education and Counseling*, 2009; **76**: 44–50.
- 29 Mellink WAM, Henzen-Logmans SC, Bongaerts AHH, Ooijen BV, Rodenburg CJ, Wiggers T. Discrepancy between second and first opinion in surgical oncological patients. *European Journal of Surgical Oncology*, 2006; **32**: 108–112.
- 30 Mazur DJ, Hickam DH, Mazur MD, Mazur MD. The role of doctor's opinion in shared decision making: what does shared decision making really mean when considering invasive medical procedures? *Health Expectations*, 2005; **8**: 97–102.
- 31 Gudykunst WB. Interpersonal and intergroup communication in Japan and the United States. In: Gudykunst WB (ed.) *Communication in Japan and the United States*. Albany, NY: State University of New York Press, 1993: 149–214.
- 32 Roter D, Larson S. The Roter interaction analysis system (RIAS): utility and flexibility for analysis of medical interactions. *Patient Education and Counseling*, 2002; **46**: 243–251.
- 33 Elwyn G, Hutchings H, Edwards A, Rapport F, Wensing M, Cheung WY, Grol R. The option scale: measuring the extent that clinicians involve in decision making tasks. *Health Expectations*, 2005; **8**: 34–42.