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Attitudes towards second opinion services in cancer care: a nationwide survey of oncologists in Korea

Dong Wook Shin[1,2,3], Juhee Cho[4,5], Hyung Kook Yang[6], So Young Kim[6], Hyung Kyun Mok[6], Hyejin Lee[1,2,3], Seon Mee Park[7], Jung Sik Huh[8], Junsun Ryu[9], and Jong Hyock Park[6,10,*]

[1]Department of Family Medicine & Health Promotion Center, Seoul National University Hospital, Seoul, [2]Cancer Survivorship Clinic, Seoul National University Cancer Hospital, Seoul, [3]Laboratory of Health Promotion and Health Behavior, Biomedical Research Institute, Seoul National University Hospital, Seoul, Korea, [4]Department of Health, Behavior and Society & Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA, [5]Cancer Education Center, Samsung Comprehensive Cancer Center, SAHIST and School of Medicine, Sunkyungkwan University School of Medicine, Seoul, [6]Division of Cancer Policy and Management, National Cancer Control Institute, National Cancer Center, Goyang, [7]Department of Gastroenterology, Chungbuk National University College of Medicine, Cheongju, [8]Department of Urology, Jeju National University Hospital, Jeju National University College Medicine, Jeju, [9]Department of Otolaryngology–Head and Neck Surgery, Head & Neck Oncology Clinic, Center for Thyroid Cancer, Research Institute and Hospital, National Cancer Center, Goyang, and [10]College of Medicine/Graduate School of Health Science Business Convergence, Chungbuk National University, Cheongju, Korea

*For reprints and all correspondence: College of Medicine/Graduate School of Health Science Business Convergence, Chungbuk National University, Cheongju 361-763, Korea; Division of Cancer Policy and Management, National Cancer Control Research Institute, National Cancer Center, Goyang-si, Gyeonggi-do 410-769, Korea. E-mail: jonghyock@gmail.com; whitemiso@ncc.re.kr

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Abstract

Objective: Second opinion is a common phenomenon in many health systems, especially in the care of patients with cancer. However, it is not clear whether second opinion seeking should be promoted or discouraged and how second opinion services and policies can be better formalized to maximize the benefits and minimize the disadvantages.

Methods: A nationwide survey was conducted with a representative sample of 678 physicians involved in cancer care (75.5% participation rate) recruited in 13 cancer centres.

Results: Most physicians involved with cancer care perceived patients' second opinion seeking as a legitimate right (96.0%) and they acknowledged the need for second opinion services under certain conditions (98.2%). Many believed that second opinions can enhance patient satisfaction (77.3%) and quality of care (74.3%), but they also had concerns about increase in healthcare and societal costs (91.3%) and concentration in a high-volume centre (90.7%). While the majority agreed with the involvement of the first opinion physicians in the second opinion services (69.5%), there were mixed opinions regarding the desirability of remote (teleconsultation) second opinion services (49.0%) and coverage by national health insurance (51.9%).

Conclusion: Physicians were generally positive to second opinion services and expected positive consequences in terms of patient satisfaction and quality of care. However, they had concerns about the consequences regarding cost and equity, and disagreements were observed regarding

the way to improve second opinion services. The physicians' opinions revealed in our study will be helpful in developing clearer guidelines used to maximize the benefits of second opinion services.

Key words: cancer, physician, attitudes, second opinion, Korea

Introduction

Second opinion is a common phenomenon in many health systems, especially in the care of patients with cancer (1–4). More than half of cancer patients have sought a second opinion (3,5), and the majority of oncologists report seeing one to five patients each month for second opinions (1). Second opinion seeking is increasing with the expansion of health information through the media and Internet, the current emphasis on consumerism, and patient autonomy (6,7).

Seeking a second opinion is often recommended by professionals, professional societies (8,9), cancer centres (3,10), patient advocacy groups and even by the government (11–13). Proponents of second opinion services warn about potential mistakes in diagnosis and treatment decisions, and insist that second opinions can make a difference in a significant minority of patients (14). Second opinion seeking is often advocated as a patient's legitimate right (3). Some consider it mandatory for certain conditions, such as prior to undergoing invasive surgery (3,12). From the systems perspective, it is argued that second opinions reduce unnecessary procedures (15), improve the quality of health care (14–16), lower healthcare costs (3,15) and eventually decrease geographic variability of care (14).

However, there are also concerns that patients may choose more hopeful but potentially wrong opinions (3), delay treatment due to 'shopping around' (17), negatively impact the doctor–patient relationship (2,18) and increase the chance of medical litigation (17,19). From the systems perspective, there are also concerns about a significant strain on the healthcare system (12,20–22), concentration in high-volume centres and regional inequality in cancer care (16).

Despite the potential clinical and public health importance, there is little high-quality evidence on the benefits or harm done by second opinions (6,14,18). Therefore, there is continuing debate on these issues, and it is not clear whether second opinion seeking should be promoted or discouraged. Currently, the services and policies varies (3,12), and it is also not clear how second opinion services and policies can be better formalized to maximize the benefits and minimize the disadvantages (3).

Physicians are key stakeholders in any second opinion services or policies, and the receptivity of oncologists to these services is critical in designing them. However, studies to date are relatively limited and are generally focussed on how much variation there is between the first and second opinion (3,21,23,24), patients' reasons for seeking second opinions and their perspectives (7,12,25). Several studies investigated physicians' perspectives (1,18), but they were mainly qualitative (1,18), and not oncology specific (18). Therefore, it is not clear how physicians involved in cancer care perceive second opinions, what consequences they expect from their experience and what policy measures they suggest to ensure the services function in the intended manner. Our study aimed to address these issues with a representative sample of Korean physicians involved in cancer care.

Methods

Study setting

As second opinion seeking and related attitudes largely depend on structural and cultural context, it is important to describe the Korean context. In Korea, universal coverage is achieved through National Health Insurance (97%) and the Medical Aid Program (3% of the lowest income bracket). Patients are free to visit any primary care physician and they can choose any specialist with a referral letter from another physician, enabling them to self-refer for another medical opinion. Korea has a territory of 98 000 km^2, which is densely populated with over 50 million people. Travelling to the capital or major metropolitan cities takes <3–4 hours at most, and many patients travel outside the hospital referral area to get treatment in high-volume centres (26). As of 2013, electronic medical records and imaging systems have been available in almost all secondary hospitals and a majority of the primary care clinics; however, teleconsultation is currently not allowed or reimbursed.

Study design and subjects

This study is part of a nationwide survey that was conducted to explore the medical care and treatment views of physicians involved in cancer care. Physicians in the National Cancer Center and 12 participating government-designated, regional cancer centres across Korea participated in the survey. The study was approved by the institutional review board of the National Cancer Center, Korea.

Of the 901 cancer care physicians invited to participate in the study, 680 consented (75.5% participation rate) and completed the study survey. Among them, 175 were physicians who provide clinical support to oncologists (e.g. radiologists, pathologists, cardiologists, rehabilitation specialists, pain specialists and psychiatrists). Two physicians did not answer the questions regarding 'second opinions', so they were excluded from the analyses, leaving 678 as the final sample in this study.

Measures

Given the paucity of the relevant research, we developed a questionnaire based on what we could find in the literature and discussion among the researchers. Topics included (i) general attitudes towards patients' second opinion seeking (3,18,21); (ii) opinions on the possible consequences of second opinion services in terms of quality of care (3,21,23), medical litigation (17,19,27), patient satisfaction (1,28), healthcare and societal cost (3,15), selection of treating doctor (3,20), concentration in high-volume centres and regional inequality (3,12,14) and (iii) suggestions for improving second opinion services from the individual and system perspectives (2–4,10,12,13,18,29).

Statistical analysis

Descriptive statistics were used to describe responses to all the questions. All statistical analyses were conducted using Stata version 12.0 (StataCorp, TX). A P value of 0.05 was considered statistically significant.

Results

Characteristics of participants

The median age of the cancer care physicians was 42 years (range: 30–67), and the median time since board certification was 10 years (range: 10–34).

Three-quarters of the participants were male. The sample included surgical oncologists (41.9%), medical oncologists (28.0%), radiation oncologists (4.6%) and other physicians who provide clinical support for cancer care (25.5%).

Experience with patients' seeking second opinions

Nearly all oncologists (90.3–93.7%) who provide direct patient care reported that they had patients who sought them out for a second opinion, and slightly less (77.4–91.6%) had provided a second opinion to patients. Physicians who provide clinical support for cancer care were less likely to have experience with second opinions, but the proportions were still over half for providing either the first or the second opinion (Table 1).

Attitudes towards patients' second opinion seeking

Most physicians agreed with the need for second opinions in cases of rare cancer or uncertain diagnoses (98.2%) and the majority also answered that seeking a second opinion should be encouraged for all cancer types to avoid fallacies in diagnosis or treatment (67.7%). Most regarded second opinions as a patient's legitimate right (96.0%) and answered that patients should be referred if they want to be (90.1%) (Fig. 1). Physicians with experience as the second opinion doctor were more likely to regard second opinion seeking as a patient's right ($P < 0.001$) (data not shown).

Table 1. Cancer care physicians' experience of patients' second opinion seeking ($N = 678$)

	Having experienced second opinion seeking as the first opinion doctor			Having experienced second opinion seeking as the second opinion doctor		
	Yes	No	*P* value	Yes	No	*P* value
All cancer care physicians	87.2	12.8		76.0	24.0	
By specialty						
Surgical oncologists	93.3	6.7		80.3	19.7	
Medical oncologists	93.7	6.3		91.6	8.4	
Radiation oncologists	90.3	9.7		77.4	22.6	
Clinical support for cancer care	69.4	30.6	<0.001	51.5	48.6	<0.001

Opinion on the possible consequences of the second opinion services

The majority of physicians thought that the promotion of second opinion services will increase patient satisfaction (77.3%) and enhance the quality of care (74.3%). However, they also think that it can increase healthcare and societal costs (91.3%) and increase concentration in a high-volume centre (90.7%). Physicians' opinions were split on whether medical litigation would be decreased (56.3%) and whether patients might be inclined to be treated by a physician who gives a more positive prognosis (52.4%) (Fig. 2). More than half responded that promotion of second opinion services would increase the regional inequality of cancer care, as patients would choose to be treated by the second opinion doctors (58.0%); however, a significant minority thought the opposite (25.2%) (Fig. 3).

Suggestions for improving second opinion services

Most physicians agreed with the need for societal consensus among the provider, payer and patients regarding the requirements for second opinion services (79.4%), including consent or referral from the first doctor as prerequisite for second opinion services (69.5%). Most disagreed with the idea of blinding of the first opinion for objective and accurate results (80.8%). There were mixed opinions regarding the desirability of remote (teleconsultation) second opinion services (49.0%), participation of the first doctor in the process of remote second opinion services through teleconsultation (51.2%) and coverage by national health insurance (51.9%) (Fig. 4). Opinions were generally not different by physician's age, specialties or medicosocial situations in the area (data not shown).

Discussion

Despite the increasing trend towards second opinions, no country appears to have a national system or explicit policy for managing them yet; thus, policies and practices vary significantly (3). To our

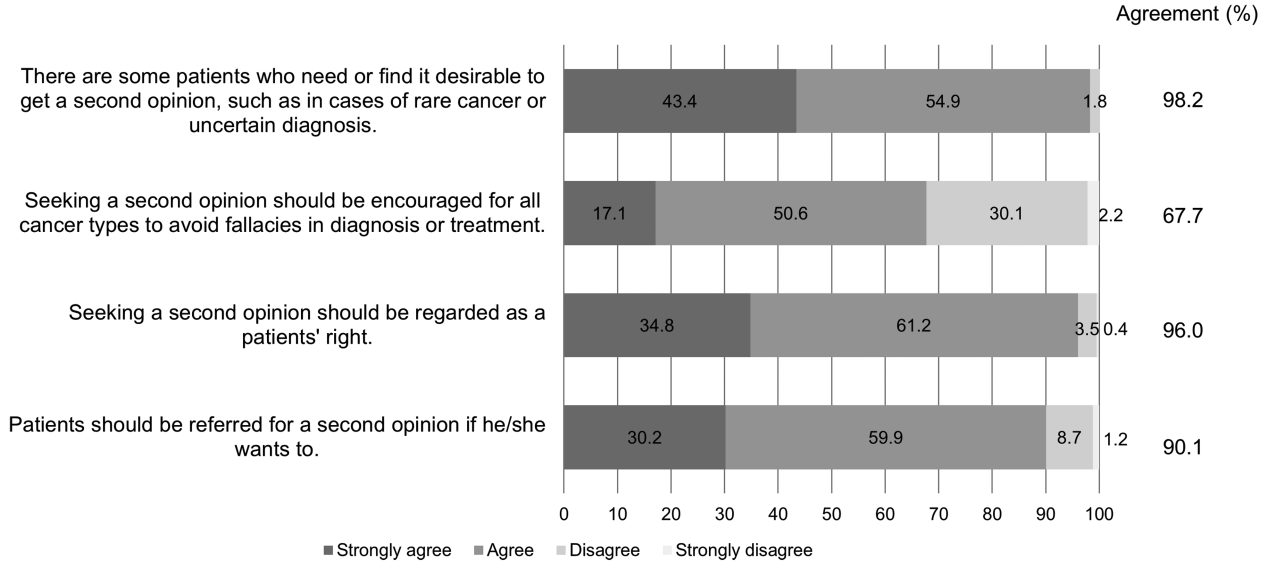

Figure 1. Cancer care physicians' attitudes towards patients' second opinion seeking.

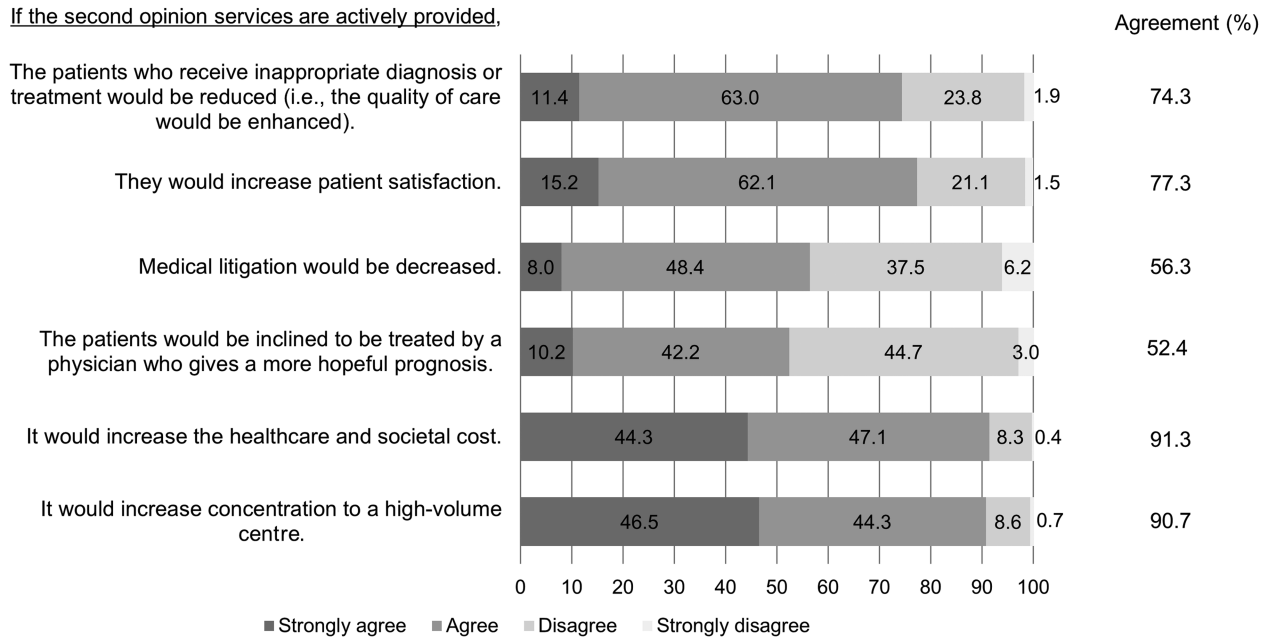

Figure 2. Cancer care physicians' opinions on the possible consequences of second opinion services.

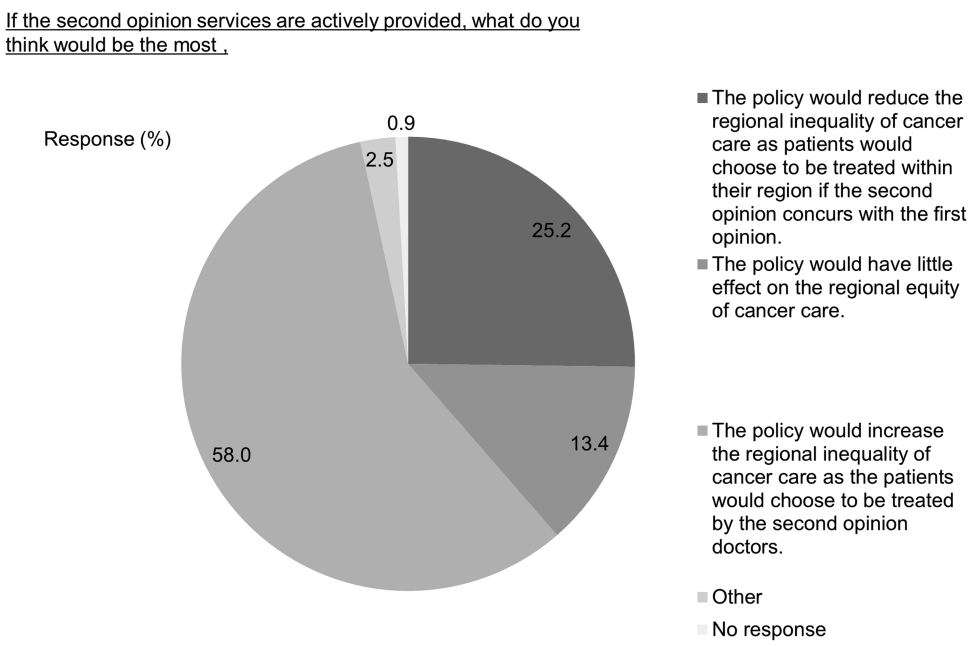

Figure 3. Cancer care physicians' opinions on the possible consequences of second opinion services: impact on regional equity.

knowledge, this is the first study to quantify physicians' attitudes towards second opinion services in a cancer care setting at the national level.

Most physicians showed positive attitudes towards patients' second opinion seeking; they endorsed the need for second opinions under certain conditions or if the patient wanted one, and regarded it as a patient's legitimate right. Our results are consistent with previous qualitative studies, which show that specialists perceived a patient's desire to get a second opinion as legitimate (18), even when they felt offended by it (1,18). However, fewer physicians agreed with encouraging second opinion seeking to avoid possible fallacies, indicating some physicians' reluctance to promote patients' active pursuits of second opinions.

The majority of physicians thought that second opinions can have positive consequences in terms of patient satisfaction, which is consistent with previous research showing that patients who accessed multiple providers were more likely to be satisfied with their decision making (28). This also fits with the most commonly advertised reason for seeking a second opinion: peace of mind (9). Second opinions afford patients an opportunity to improve communication, be aware of and evaluate different treatment options, collaborate in decision

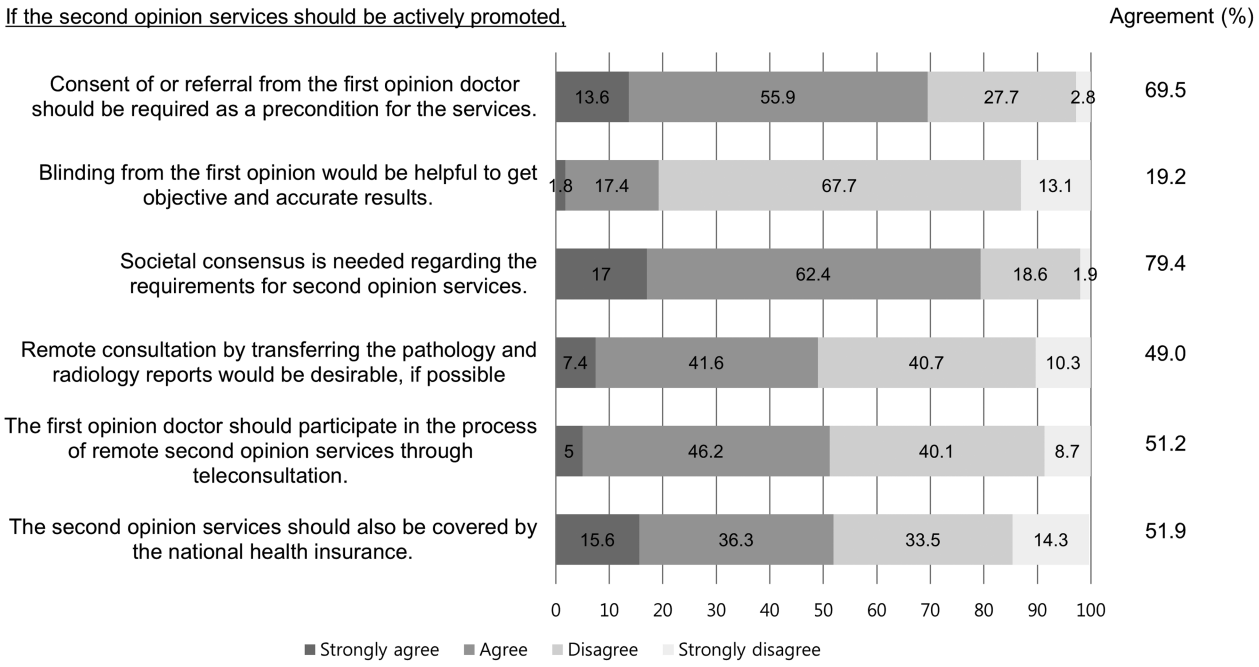

Figure 4. Suggestions for improving second opinion services.

making and increase their confidence in treatment choices (2,28), ultimately increasing patient satisfaction.

In addition, most physicians also perceived second opinions as having the potential to enhance quality of care by reducing inappropriate diagnoses or treatment. There is evidence that second opinions in surgical oncology (21,23), pathology (24) and radiology (3) resulted in major therapeutic and prognostic modifications, although the number of affected cases may not be large. Second opinions are usually sought in multidisciplinary centres with better access to newer techniques or facilities and physicians with more experience with complex or rare cases, which could result in additional information and discrepant decisions (3). The opinions of our study participants seemed to reflect such notions, along with a general view that every doctor can make mistakes. On the other hand, only half of the physicians agreed with the statement 'second opinions will decrease the risk of medical litigation'. This may reflect some physician's concerns that second opinions can make patients aware of the errors of the previous physician, resulting in medical litigation (19).

More than half of the physicians had concerns that patients would choose the answer they like better and get treatment from physicians who provide a more positive prognosis. Similar concerns from oncologists were noted in the literature (18). Indeed, considerable portion of patients who seek second opinions hope for different advice (1,20) and often ask for changes in treatment (12). Such concern of the oncologists might be enhanced in the Korean health system, where patients are free to choose any treating physician without restriction or referral from a designated primary care physician.

Most physicians expect an increase in healthcare and societal costs if second opinion services are promoted. This is consistent with the common concerns that second opinions represent duplicative efforts (20–22). In the Korean health system with free choice and fee-for-service reimbursement, patients might hide their consultation with the first doctor and receive the same preoperative test expecting different or independent opinion from the first one. Physicians also have incentives to repeat preoperative tests in terms of added revenue, as well as lack of full credibility towards the first opinion hospital. This is in contrast with some US insurance company policies that mandate second opinions on some procedures with the intent of preventing unnecessary surgeries, thereby reducing costs (3). Direct comparison is not easy, however, as the impact on healthcare and societal costs may depend on the characteristics of the health system and how second opinion services are organized.

Almost all physicians thought that promotion of second opinion services would concentrate cancer treatment in high-volume centres. There were also similar concerns that second opinion services would steal patients from the first opinion physician (3,16). Indeed, many patients misunderstood the second opinion as a way to change their doctors (12) and many wish to get their treatment in the second opinion centre (21). On a related note, physicians also expected that second opinion services would increase the regional inequality of cancer care. Geographic characteristics of small territories, combined with a healthcare system that enables free choice of healthcare providers, might have contributed to the opinion of our respondents. However, patients in the US and other countries travel for a second opinion and/or treatment to different states or abroad (30,31). On the other hand, one-quarter of our physicians answered that the second opinion services would reduce the regional inequality of cancer care as patients would remain in the same region. There is some evidence showing that only 1% of patients who used online second opinion services registered with that medical institution after the consultation (14) and 78% of second surgical opinion patients were referred back to their first specialist (21). Further studies are warranted to determine what components are necessary to organize second opinion services in a way that support first opinion physicians and minimize undesirable concentrations in high-volume centres (10).

Around 80% of physicians agreed with the need for consensus regarding the requirement for second opinion services. This may reflect a current void of clear guidelines or behavioural norms guiding referrals for second opinions or responding to requests for second opinions. First opinion doctors often feel uncomfortable at the patient

request (20), and the second opinion doctor also wants to avoid taking the other doctor's patients (1). Clear guidelines would be helpful to ease the burden of decision making.

One of the delicate issues is whether first opinion physicians should be involved in the second opinion consultation. A related topic is whether the second medical opinion should be independent of the first (32). Some patients seek second opinions without informing either their first or second opinion doctors (12), and reveal the first opinion only after the second physician has given his/her opinion, if they reveal the first opinion at all (18). Patients do this because they worry about the potential influence of the relationship between the physicians and/or the interdependence of the second opinion (12). However, physicians are offended by such behaviours and perceive these patients as manipulative (18). It is true, however, that most oncologists acknowledge that the first opinion may affect the second opinion (32) and their recommendations based on what the first doctor advised (13). Indeed, most agreed with the requirement of consent or a referral from the first opinion doctor, and disagreed with the need for blinding from the first opinion, suggesting that physicians value harmonious decisions more than independent decision making.

Remote consultation via online services is a possible option for rendering second opinions (3), and it continues to evolve and grow every year with the advancement of technologies (4). It allows patients to consult with medical experts without leaving home to obtain a second opinion (4). It is particularly helpful to those living in rural areas or overseas (16). In the US, patients can receive online access to second opinion services from renowned medical institutions by submitting their medical record via the Internet at the average cost of US$500–1500, depending on the number of radiology or pathology interpretations required (4,10,29,33). In the Netherlands, the Dutch Lung Cancer Information Center provides online specialists and second opinion consultations to patients or informal caregivers (34). In Korea, where such remote services are not allowed, there was disagreement among physicians regarding remote consultations and first opinion physicians' involvement in them. While the reason for the responses were not pursued, it is possible that some physicians think remote consultations would increase the chance of patients remaining with the first physician (14), and others think remote consultations would not be the same as face-to-face ones, especially for the complex cases (35).

Physicians' opinions regarding the coverage of second opinions by National Health Insurance were split. Currently, insurance coverage varies among countries. While second opinion services are not usually covered by health insurance in the US (10,29), Medicare covers a second opinion before surgery under certain conditions (36), and some US insurers have a policy of mandating second opinions before selected procedures (3), or they cover remote second opinions (4). Most European countries and Japan either partially or totally cover formal or informal, voluntary second opinion options (3,12). In Korea, second opinions are generally covered fee-for-service, without clear guidelines. Since insurance coverage is a major limiting factor in seeking second opinions (4), further investigation is necessary to determine the conditions in which second opinions should be covered by insurance.

There are several limitations to this study. Our questions did not meticulously discriminate the various possible situations and reasons for seeking second opinions. Second opinions can be initiated by patients, physicians and payers (7). Additionally, patients seek second opinions for various reasons: they may want reassurance, they may have had a negative experience with the first opinion doctor or they may want a more positive prognosis (12,20). Physicians' attitudes and opinions towards second opinion seeking might be different based on these motives. Second, there is a possibility of a social desirability bias, which may influence the responses towards positive ones. Physicians have a tendency to intellectualize the issue of second opinions and deny their emotional and personal aspects (18). Lastly, our results cannot be extrapolated to other health systems and cultures, as patients' behaviours of second opinion seeking and physicians' attitudes towards them are largely dependent on the structural and cultural context in which second opinion encounters are taking place (6,18).

In conclusion, most of the physicians involved with cancer care perceived patients' second opinion seeking as a legitimate right and they acknowledged the need for second opinion services under certain conditions. Many believed that second opinions can enhance patient satisfaction and quality of care, but they also had concerns about the consequences regarding cost and equity. While the majority agreed with the involvement of the first opinion physicians in the second opinion services, disagreements were observed regarding remote consultation and insurance coverage.

To maximize the benefits of second opinion services in real clinical practice, a practical guideline would be necessary. The physicians' opinions revealed in our study will be helpful in developing guidelines that is acceptable to physicians, and to guide further studies to find out the solutions to resolve their concerns and disagreement. Certainly, physicians' opinions would be not enough to develop a guideline, and further studies are warranted regarding patients' view on and experience with second opinion services, and its impact on healthcare quality or patient satisfaction. In Korea, collaboration of National Cancer Center, National Health Insurance Corporation and professional societies would be needed for successful development and implementation of such guideline.

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Conflict of interest statement

None declared.

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