

約化で、検診や精検の実施状況の把握も正確に行われている。

近年、子宮がん施設検診の受診者の増加がみられず、検診効率の低下が危惧される³⁾。米国では、3年以内ががん検診を受診した人が79%におよび更に、2010年にはこの目標値を90%に設定している⁴⁾。一方、我国では、十数%の受診率にとどまり、検診の第一次5カ年計画の目標値の30%にもはるかに及ばない^{3,5,6)}。受診者の増加がみられない原因について、受診可能な施設や期間が限定され、受診者の利便性が図られず、受診を見送っている人々の存在が考えられる。これまで、受診者の利便性による受診率を比較した報告はない。そこで福島県の各自治体での子宮がん施設検診の受診可能な施設や受診可能な期間の設定と、施設検診の受診率を比較検討することで、受診率の向上に有用な施設検診のあり方について考察した。

方 法

2005年度の福島県の子宮がん施設検診の受診状況を調査した。各自治体ごとの受診者数を調査し、検診対象者に対する受診率を算出した。なお、検診対象者を当該年度に偶数年齢に達する者に限るという隔年検診を実施している自治体については、各自治体の公表している年代別人口構成から、対象年代人口の2分の1を検診対象数とした。(詳細な年齢別人口の把握が困難なため)

次に各自治体での検診の実施状況を調査した。各自治体は、市及び郡医師会に検診を委託している。そのなかで、町村において、地元の郡医師会にのみあるいは近隣のひとつの市医師会にのみ委託をしている自治体(以下、住居地限定型)と、地元郡医師会に加えて近隣の市、郡医師会でも受診を可能としている町村(以下、広域型)に分類した。市部では地元の市医師会に委託している。16町村は、車両検診のみの実施で、施設検診を実施していないので除外した。福島県の施設検診未実施16町村を除く74の自治体(平成の大合併前)を市部と町村部に分け、さらに町村部を住居限定型、広域型に分類した。各群の検診対象者の総数に対する総受診者数を算出した。各群の総受診率を χ^2 検定を用いて比較した。更に各自治体の指定する受診可能な施設数と受診率の関連を明らかにすべく単回帰分析を行った。

次に、受診が可能な期間を1月未満、1月以上4月未満、4月以上に設定している自治体の3群に分けて受診率を比較した。1月未満群の多くは、7日から十数日と短期間に限られている自治体が主で、1~4月群の多くは60日前後に、4月以上群は120日に設定している自治体が主で、受診期間の著しい差を比較するために適していると考え設定した。各群の検診対象者の総数に対する総受診者数を算出し、各群の総受診率を同様に比較した。各自治体住民が、受診可能な期間と受診率の関連をみるため回帰分析を行った。

総受診者数、受診率の比較はいずれも危険率0.05%をもって有意差ありと判断した。

結 果

福島県の平成の大合併前の90市町村の施設検診の実施状況を述べる。16町村では施設検診を実施しておらず、住民は車両検診のみ受診可能であるので、今回の解析からは除外した。住民の居住する郡医師会や隣接する単一の市医師会に登録する施設のみでの受診が可能な自治体(居住地限定型)は36町村であった。居住地の郡医師会に限らず近隣の複数の郡市医師会に登録した施設での受診が可能な町村(広域型)は28町村であった。これに市部と施設検診を実施していない自治体に向けた各自治体の受診可能施設別の実施状況を図1に示す。表1には市部と住居地限定型の町村、広域型の町村の検診対象者数、受診者、受診率の比較を示す。市部群では総検診対象者が295,138人、総受診者が31,032人で受診率は10.51%であった。町村部では、総検診対象者が172,958人、総受診者が8,705人で受診率は5.09%と市部に比して有意に低かった。 $(\chi^2=4173.41, p<0.0001)$ 町村部で、居住地限定群では総検診対象者が94,421人、総受診者が3,701人で受診率は3.92%であった。広域群では総検診対象者が78,537人、総受診者が5,094人で受診率は6.49%であった。居住地限定群と広域群での検診対象者に対する受診者数の比較では広域群が有意に受診者数が多かった。 $(\chi^2=582.25, p<0.0001)$ 図2に単回帰分析による各自治体が指定し住民が受診可能な施設数と、受診率の関連を示す。回帰係数は0.059、 R^2 乗値は0.003、 $p=0.581$ で有意ではないが、わずかながら、受診可能施設が多い自治体は受診率が高いという

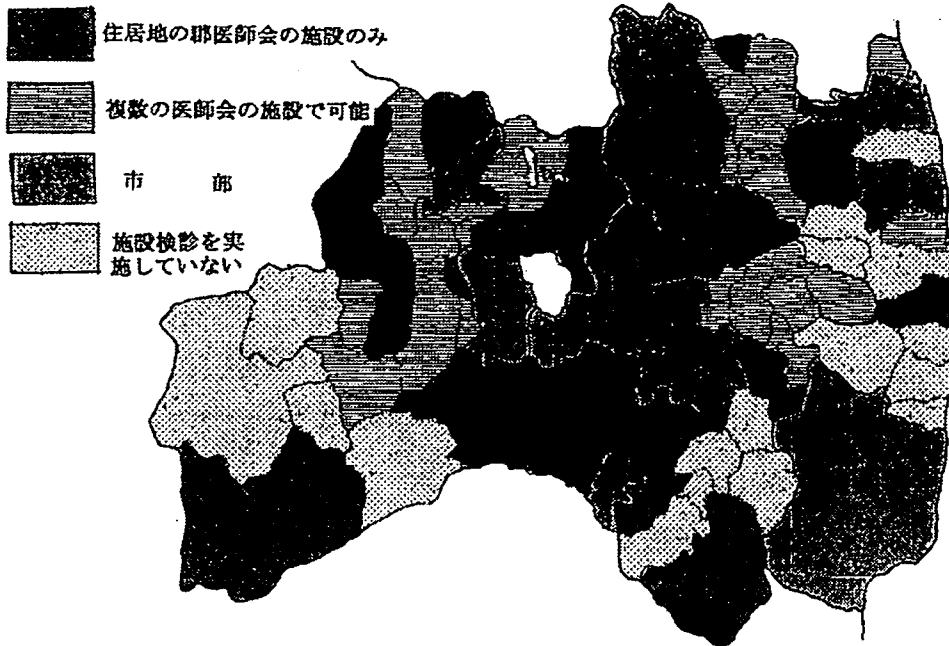


図1. 自治体別の子宮がん検診受診が可能な機関の指定状況

表1. 受診可能な施設別の受診率の比較

	自治体数 (合併前)	検診対象総数 (人)	受診者総数 (人)	総受診率 (%)	p値	χ^2 値
市部	10	295,138	31,032	10.51	<0.0001	4,173.41
町村部	64	172,958	8,750	5.03		
複数医師会で受診可能 (広域型)	28	78,357	5,049	6.49	<0.0001	582.25
居住地医師会に限る (居住地限定型)	36	94,421	3,701	3.92		

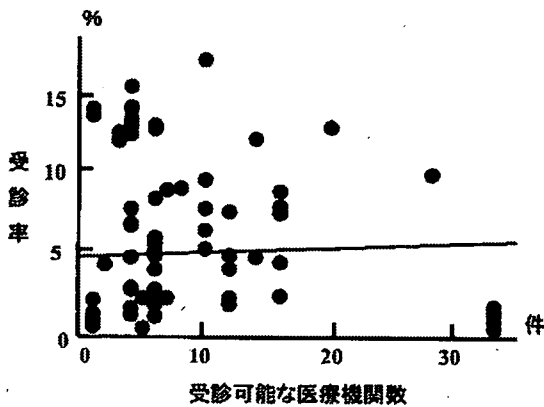


図2. 自治体別の検診が受診可能な施設数と受診率

傾向がみられた。

図3に受診可能期間を1月未満, 1月以上4月未満, 4月以上, 施設検診を実施していない自治体別に示す。表2に受診可能な期間別に分類した自治体別の受診者数, 受診率を示す。受診可能期間が1月未満の自治体が26で, 最短7日間であった。1月以上4月未満の自治体は34, 4月以上にあたって受診可能な自治体は14で最長は7月(214日)であった。1月未満の自治体全体で総計した受診対象者は, 60,626人, 総受診者数は2,847人で受診率は4.70%であった。1月以上4月未満の自治体全体で受診対象者は144,548人, 受診者は11,066人で受診率は7.66%であった。更に4月以上受診可能な自治体の総受診対象者は262,922人

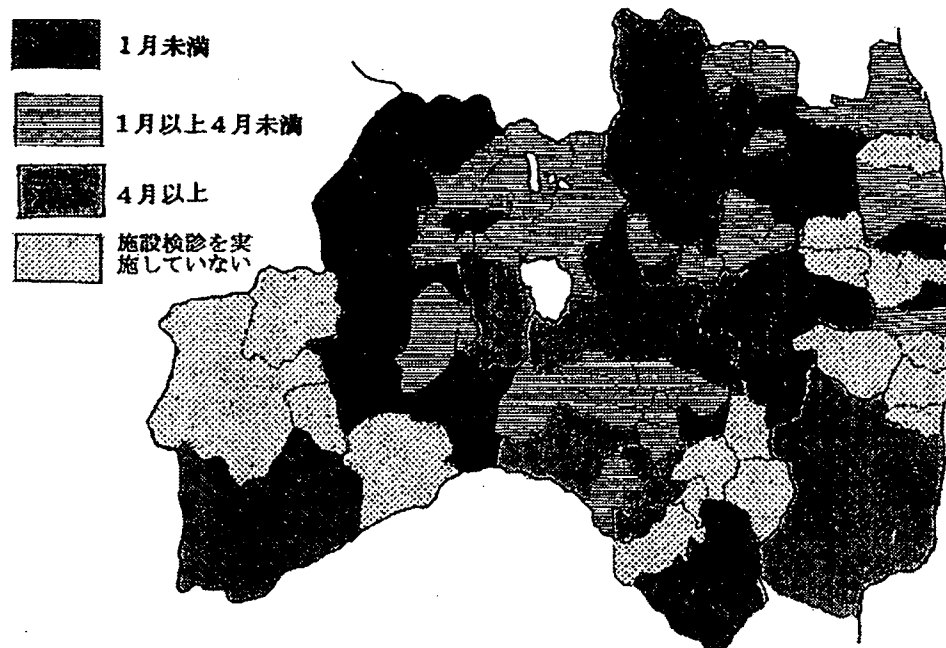


図3. 自治体別の子宮がん検診受診が可能な期間

表2. 受診可能な期間別の受診率の比較

	自治体数 (合併前)	検診対象総数 (人)	受診者総数 (人)	総受診率 (%)	p値	χ^2 値
1月未満	26	60,626	2,847	4.70	<0.0001	1,878.70
1月以上4月未満	34	144,548	11,066	7.66		
4月以上	14	262,922	25,908	9.85		

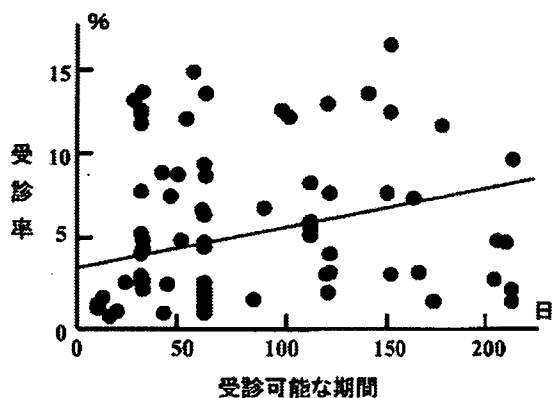


図4. 自治体別の検診が受診可能な期間と受診率

1,878.70, $p < 0.0001$) 図4に各自治体が設定した受診可能な期間と、受診率の関連を示す。単回帰分析では、回帰係数0.322, R^2 乗値は0.104, $p = 0.0020$ で受診可能期間が長い自治体の受診率が高いという関連が認められた。

考 察

子宮がん検診の有用性については、広く認められている⁷⁻¹⁰⁾。しかし、受診者の固定による検診効率の低下が、危惧されている。検診効率を高めるために、受診率を向上させることが重要といわれている¹¹⁻¹³⁾。特にわが国では、欧米諸国に比して受診率が低いといわれている^{3,5,6)}。受診率向上のためには受診者の利便性を考慮することが必要である^{5,9)}。今回、受診者の利便性と言う観点から、受

で、受診者は25,908人で受診率9.85%であった。受診期間が長い自治体が短い自治体に比して受診率が有意に高いという傾向を示した。($\chi^2 =$

診可能な施設の広域性と長期の受診可能期間が、受診率の向上に寄与しているかを検討した。

まず、管内の医療機関に限定したり、管内の郡医師会に所属している機関に限定している自治体（住居地限定型）と、近隣の市医師会や複数の医師会所属の機関での受診を認めている自治体（広域型）で受診率を比較すると広域型のほうが住居地限定型より有意に受診率が高かった。住居地限定型では、居住地以外に通勤、通学している女性にとっては、休暇をとる、早退をするなどして帰宅して居住地の機関を受診する必要があり不便である。一方、広域型では、通勤、通学地域での短い空き時間を利用しての受診が可能であるとともに、通勤、通学をしていない人も含めて住居地での機関でも受診出来ることから選択肢が広がり、受診者が増加したと考えられる。

尚、各自治体別の受診可能な施設数と受診率の関連をみると、わずかながら正の相関がある傾向がみられたにすぎない。これは福島県の広域性や医療機関の少なさ等の理由、地域の健康行政のあり方など多彩な事情が影響していると考えられる。近隣する市に多くの医療機関があっても、受診期間が限られたり、近隣市との距離が遠い町村では、受診率が低くなる現象がみられた。一方都市周辺部の町村部では、面積は比較的小さく、医療機関もある程度密在しており、住居地限定にしても受診にあまり妨げにならず受診率が比較的高くなることもある。また、自治体によっては、受診機関を限定していても住民への受診勧告を積極的に行っている町村もある。以上のような理由で各自治体の受診率にはばらつきが多く、広域型の自治体全てが受診率が高く、住居地限定型自治体が必ずしもすべて受診率が低いという結果にはならなかった。

受診者の利便性という意味では、受診可能な期間が重要となる。受診可能期間が十数日というのであれば、受診者の都合のよい時に受診を可能にすることで受診者の増加を図るという施設検診の意図と相容れないといえる。今回の検討でも、受診可能期間が1月末満の検診対象住民で受診をしたという人は、受診可能期間が1月以上4月末満、4月以上の検診対象住民の中で受診をしたという人より有意に少なかった。更に、各自治体別に受診可能な日数と受診率の関連では、受診可能期間が長いと受診率も高かった。短期間では、多忙な

女性にとっては、限られた期間に受診のための都合を調整することが困難であると予測される。受診可能期間が長ければ、余裕を持って日程を調整できると考えられる。

このような受診者の利便性という観点からの子宮がん検診の受診率に関する検討はこれまであまりなされてこなかった。受診率に関する報告は、従来都府県単位での報告が多く、受診率の向上に関して具体的な検討があまり行われていなかった¹⁴⁻¹⁶⁾。有効な検診のためには、地区調査を行い問題点を把握する必要があるという報告がある⁹⁾。子宮がん検診の実施単位である各市町村の受診率の向上が、都府県全体の受診率の向上につながると考えられる。子宮がん施設検診の受診者数が増加しない一因として、受診希望者への十分な利便性が図られていないことがあげられる。すなわち、医療機関を限定されたり、受診可能期間が短ければ施設検診の利点が活かされない。受診者の増加のためには、「いつでも、どこでも受けられる」といった施設検診の意図に根ざして、受診が可能な機関、地域の広域化と受診可能期間の長期化が望まれる。

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Short Communication

Possible Impact of the NHK Special Questioning Cancer Treatment in Japan on Clinicians' Prescriptions of Oxaliplatin

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Medical information through media may influence physicians' prescriptions of medication. The Japan Broadcasting Corporation (NHK) aired on April and May 2005, a special program called 'Questioning Cancer Treatment in Japan', covering oxaliplatin. We investigated potential impact of this program on prescriptions, utilizing a post-marketing clinical trial monitoring of all patients receiving oxaliplatin. The post-marketing clinical trial reached the target sample size of 1200 by the 4th week of May, 44 weeks sooner than anticipated. The newly registered numbers of facilities and patients exhibited a bimodal peak in April and June. The viewer rating of NHK special was 8.3%, whereas three national newspapers and one weekly magazine took up the minor articles of oxaliplatin. In July 2007, 405 clinicians sent a written opinion to NHK, stating 'NHK special invites misperceptions and confusions to public.' NHK special might have had an impact on clinicians' prescriptions of oxaliplatin.

Key words: oxaliplatin – television program – post-marketing clinical trial – colon cancer

INTRODUCTION

The increasing incidence of malignant tumors associated with the aging population has become an object of public concern in Japan (1). In 2004, deaths from malignant tumors accounted for 31.1% of the total number of deaths, and was the leading cause of death (2). Although the age-adjusted mortality from malignant tumors has declined after 1996 due to early diagnosis and the progress in treatment (2), many patients remain uncured (2).

Oxaliplatin is a promising anticancer drug for advanced colorectal cancer. Oxaliplatin was approved in France in

1996 (3) and in the United States in 2002 as a combination therapy with 5-FU/leucovorin for colorectal cancer resistant to irinotecan combination therapy (4). In Japan, combination therapy (FOLFOX4 treatment) with continuous intravenous administration of oxaliplatin and 5-FU/leucovorin for inoperable advanced and recurrent colorectal carcinoma was approved in March 2005 (5), following petition to the Minister of Health, Labor and Welfare for early approval by cancer patient societies (6). As the experience in FOLFOX4 treatment had been little in Japan, the package leaflet attached to Elplat (the brand name of oxaliplatin) contains a warning stating that 'only physicians who are sufficiently knowledgeable and experienced can use this product. Administer only to selected patients. Provide patients with a thorough explanation of the risk involved with the use of this product'. Monitoring all patients that use oxaliplatin was

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mandated as part of a post-marketing clinical trial once oxaliplatin went on the market in Japan on 6 April 2005 (7). Registered patients were followed for a minimum of 3 months, and the decision whether to continue monitoring after the 3 month of administration was left to each medical facility. The distributor (Yakult Pharmaceutical Inc. Co. Ltd, Tokyo, Japan) estimated the number of patients eligible to administration of oxaliplatin to be 1400 people for a year. The target sample size of the post-marketing clinical trial was 1200 patients (8).

In 2005, the Japan Broadcasting Corporation (NHK) began a 'Cancer Support Campaign' (9). As a part of this, NHK aired on April 30 and May 1, 2005 a three-part, audience-participation program called 'Questioning Cancer Treatment in Japan'. Viewer ratings were estimated to be 8.3%, 6.3% and 8.4% (10), comprising a total of approximately three million people. The first program of the series dealt with oxaliplatin. After introducing patients who had privately imported oxaliplatin for personal use, the in-studio audience then debated the issue. Approximately 24 min were spent on introducing and debating oxaliplatin. After the program was aired, clinicians issued to NHK a letter claiming that some parts of the story were medically inappropriate (11).

The possibility has been suggested that providing medical information to the public through advertisements and media may influence physicians' prescriptions of medication (12), although it is unclear. Meanwhile, physicians involved in cancer treatment may not easily be influenced as they have a high level of specialty. A detailed analysis of the NHK special and changes in the number of prescriptions of oxaliplatin may provide information on the media impact on cancer specialists' prescriptions.

MATERIALS AND METHODS

We investigated the weekly numbers of contracted facilities, registered facilities, registered patients and collected questionnaires which were listed on Yakult Honsha's homepage (monitoring all patients using Elplat) (13). We also collected data on fatal patients from 'the Line List of adverse effects and fatal patients from monitoring of all patients using Elplat' (14) on the same homepage. We followed the judgments of attending physicians listed on the homepage with regard to the causal relationship between deaths and oxaliplatin.

To investigate the potential impact of mass media on oxaliplatin prescriptions, we reviewed media reports on oxaliplatin between April and June 2005 among four newspapers (Asahi Shimbun, Yomiuri Shimbun, Mainichi Shimbun and Nikkei Shimbun), seven magazines (Weekly Shincho, Weekly Bunshun, Weekly Post, Weekly Gendai, Weekly Mainichi, Weekly Asahi and Weekly Yomiuri), and five nationally broadcasted television programs (NHK, Asahi Television, Fuji Television, Tokyo Broadcasting System and Nippon Television).

To investigate reactions of medical practitioners and patients to the NHK special, we reviewed media reports and commentaries on the NHK special between July 2005 and February 2006 among four forementioned newspapers, seven forementioned and some more magazines, and blogs.

We used an internet database (15–19) to search newspapers and blogs and the Oya Soichi Library to search magazines (20). We contacted television stations for broadcasts pertaining to television programs on oxaliplatin.

RESULTS

CHANGES IN THE NUMBER OF CONTRACTED FACILITIES

Figure 1 shows changes in the number of newly contracted facilities per day during the post-marketing clinical trial. The graph exhibited a bimodal peak on April 6–19 and June 1–7.

NUMBER OF PATIENTS USING OXALIPLATIN

Figure 1 shows changes in the number of patients registered in the oxaliplatin post-marketing clinical trial. The target sample size of 1200 patients was reached in the 4th week of May. This was 44 weeks sooner than anticipated by the pharmaceutical distribution company.

As of 7 February 2006, reports on 4019 patients had been submitted. Of these, 381 patients (9.5%) had died. Within 30 days of administration, 138 patients (3.4%) died. Deaths related to adverse events of oxaliplatin were diagnosed in 22 patients (0.5%).

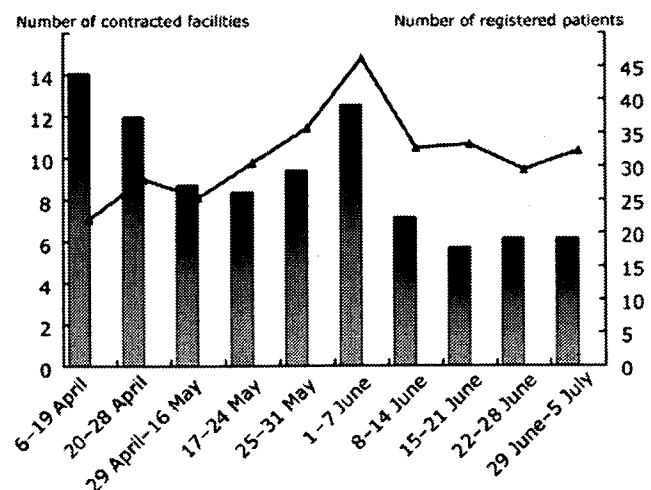


Figure 1. Changes in the number of contracted facilities and the number of patients registered in the post-marketing clinical trial for 3 months after oxaliplatin release. The bars show the average number of newly contracted facilities per day during the post-marketing clinical trial; the line indicates the average number of newly registered patients per day.

MEDIA REPORTS ON OXALIPLATIN

Table 1 shows media reports on oxaliplatin from April to June 2005 and Table 2 shows media reports on the NHK special from April 2005 to February 2006.

DISCUSSION

As the government mandates monitoring all patients for a minimum of 3 months when hospitals first introduced oxaliplatin, the number of patients registered in the post-marketing clinical trial from April to June 2005 accurately reflects the number of patients who received oxaliplatin. The present study demonstrates the possibility that physicians' prescriptions may have been influenced by media. The number of patients registered in the post-marketing clinical trial increased sharply after mid-May, peaking in June 1–7. The number of contracted facilities in the post-marketing clinical trial also peaked during the same period (Fig. 1). The increase in the number of patients who received oxaliplatin resulted from an increase in the number of facilities that introduced oxaliplatin, not because patients were concentrated at any particular facility.

Interestingly, the increase in the number of contracted facilities exhibited a bimodal peak during the short period of 2 months. There are four possible explanations. First, the change in the number of contracted facilities may exhibit an intrinsic bimodal peak since there are two groups of facilities; some sign the contract before the drug was released and initiate prescribing at the time of drug release, whereas others begin contractual procedures after the drug release. To further investigate this possibility, it would be useful to compare drugs for which post-marketing clinical trials were carried out during the same period. We found the status of a post-marketing clinical trial for Arava (Sanofi-Aventis K.K., Tokyo, Japan) (21). The status of Arava contrasts with that of oxaliplatin. The number of monitoring facilities peaked in

the second year after the drug release and fell off flatly after the peak. Therefore, this hypothesis alone would be difficult to explain the change in the number of contracted facilities for oxaliplatin.

Second, the number of patients treated in the first month of approval was relatively small compared with that of contracted hospitals at the first peak, because the physicians selected patients and used oxaliplatin carefully for the safety at the beginning of inexperienced treatment. The second peak of the contracted hospitals coincided with the increase of patients as the physicians got used to the treatments. This scenario seems also reasonable and understandable, whereas it was not the case with Arava.

Third, some information released after oxaliplatin went on the market may have influenced prescriptions. In addition to the NHK special, three national newspapers and one weekly magazine covered the topic of oxaliplatin between April 6 and July 6 (Table 1). Although Yomiuri Shimbun, Asahi Shimbun and Weekly Gendai published minor articles or a column on cancer treatment, they did not emphasize oxaliplatin. These media reports probably had little influence on oxaliplatin prescriptions. Meanwhile, the NHK special and Nikkei Shimbun mentioned oxaliplatin as the main topic of the program or an article. Yet, Nikkei Shimbun mentioned oxaliplatin in a minor article similarly to Yomiuri Shimbun and Asahi Shimbun, which had less impact than did the NHK program with special emphasis on oxaliplatin. On the basis of these search results, there is little possibility that media reports on oxaliplatin between April and July 2005 other than the NHK special had an impact on oxaliplatin prescriptions.

Fourth, information provided to physicians from the academic community or pharmaceutical companies may have influenced oxaliplatin prescriptions; however, no major meetings pertaining to clinical oncology (Japanese Cancer Association, Japanese Society of Medical Oncology, Japan Society of Clinical Oncology) were held in Japan between

Table 1. Media reports on oxaliplatin from April to June 2005

Media type	Media agency	Coverage/release date	Title	Homepage
Television	NHK	30 April 2006	<i>NHK supesharu 'nihon no gan iryou wo tou'</i> (NHK Special: 'Questioning Cancer Treatment in Japan')	http://www.nhk.or.jp/special/
Newspapers	Nikkei Shimbun	6 April 2006	<i>Yakuruto, daichougan chiryouyaku, kokunai de hanbai kaishi</i> (Yakult to Begin Selling Drug Treatment for Colon Cancer in Japan)	
	Yomiuri Shimbun	11 April 2006	<i>Touyaku ha 'kumiyase' to 'sajikagen'</i> (Medication 'Combinations' and 'Prescriptions')	http://www.yomiuri.co.jp/iryou/medi/gantotomoni/20050411sq01.htm
	Asahi Shimbun	20 May 2006	<i>Kurashi to kenkou coramu: kokunai mishouin kouganzaai ga 'iwayuru kongou shinryou' to taishou ni</i> (Health and Lifestyle Column: Unapproved Anticancer Drugs in Japan Target 'So-called Mixed Treatment')	http://www.asahi.com/health/jhcolumn/050520/
Magazines	Weekly Gendai	30 April 2006	<i>Kouganzaai 'okisaripurachin'</i> (The Anticancer Drug 'Oxaliplatin')	

NHK, Nihon Hoso Kyokai (Japan Broadcasting Corporation).

Table 2. Media reports on the NHK special from July 2005 to February 2006

Media type	Media agency	Coverage/release date	Title	Homepage
Newspapers	Asahi Shimbun	8 July 2005 Morning edition; page 2 of Nation section	<i>Ishi 400 nin. NHK ni ikensho: gan tokuban, kyakkansel wo kaku</i> (Written opinion from 400 physicians claims NHK cancer special lacks objectivity)	
		9 July 2005 Morning edition; page 2 of Nation section	<i>Gan tokuban 'gokai maneki': ishira ikensho, NHK ha 'de-to seikaku'</i> (In response to a written opinion from physicians claiming cancer special 'invites misperceptions', NHK says 'data is correct')	
		10 July 2005 Morning edition	<i>NHK gan tokuban ni rinshoutai ga ikensho</i> (Physicians issue written opinion on NHK cancer special)	
Magazines	Yomiuri Shimbun	13 July 2005 Morning edition	<i>NHK gan iryou bangumi ni ikensho: ishira 405 nin okuru</i> (405 physicians issue written opinion on NHK cancer treatment program)	
		January, 2006 edition; released 5 December 2005	<i>Chouryuu 06 'rinshoutai no koe'</i> (Trends of '06: What Clinicians Have to Say)	http://literacy.umin.jp/ronza.pdf
		March, 2006 edition; released 4 February 2006	<i>NHK spesharu 'nihon no gan iryou wo tou'</i> (Problems with the NHK Special 'Questioning Cancer Treatment in Japan')	http://opendeers.asahi.com/data/detail/7212.shum
Blogs	AERA	8 August 2005 edition; released 1 August 2005	<i>Kouganzai ha kita no ka?</i> (Do Anticancer Drugs Work?)	http://black.ap.teacup.com/apple/saikyou/200601/archive?b=7
		8 January 2006	<i>'NHK no gan tokushuu, sono ichi'</i> (NHK cancer special: part 1)	http://black.ap.teacup.com/apple/saikyou/200601/archive
		10 January 2006	<i>'NHK no gan tokushuu, sono ni'</i> (NHK cancer special: part 2)	http://black.ap.teacup.com/apple/saikyou/200601/archive
		11 January 2006	<i>'NHK no gan tokushuu, sono san'</i> (NHK cancer special: part 3)	http://black.ap.teacup.com/apple/saikyou/200601/archive
		12 January 2006	<i>'NHK no gan tokushuu, sono yon'</i> (NHK cancer special: part 4)	http://black.ap.teacup.com/apple/saikyou/200601/archive
		1/25/2006	<i>'Hirogaru NHK gan spesharu no hankyou'</i> (Widespread reactions to NHK cancer special)	http://black.ap.teacup.com/apple/saikyou/200601/archive
		11 January 2006	<i>NHK spesharu 'nihon no gan iryou wo tou' wo susumenai wake</i> (Why I do not recommend the NHK Special 'Questioning Cancer Treatment in Japan')	http://nakoyusa.blog42.fc2.com/blog-entry-40.html
	<i>Yusa nako no okiraku na iryou nikki</i> (Nako Yusa's Personal Medical Diary)		http://ac-drugs-blog.try-2-live-4-u.com/?eid=394873	
	<i>Kouganzai hetupidesaku</i> (Helpdesk for Anticancer Drugs)			

Continued

Table 2. Continued

Media type	Media agency	Coverage/release date	Title	Homepage
	<i>Mayurin kimama nikki</i> (Mayurin's Self-Indulgent Journal)	14 July 2005	<i>Rinshoui tachi no ikensho</i> (Clinicians' written opinion)	http://mayurin.blog.jp/entry/207332/
		12 January 2006	<i>Koe wo ageru to iu koto</i> (It's about raising our voices)	http://mayurinkimama.blog42.fc2.com/blog-entry-97.html
		14 January 2006	<i>Ishi no kaku bunshou</i> (The physicians' report)	http://mayurinkimama.blog42.fc2.com/blog-date-20060114.html
	<i>Yururito haigan ki</i> (Lung Cancer at Your Own Pace)	9 July 2005	<i>Ikensho</i> (Written opinion)	http://www.yururi.net/2005/2005f.html
		11 July 2005	<i>Rinshoui netto</i> (Net of clinicians)	http://www.yururi.net/2005/2005f.html
		14 January 2006	<i>NHK futaya renzaku no tokushuu bangumi</i> (Night two of the NHK Special)	http://www.yururi.net/2006/02.html
	<i>Takeshi no honne to-ku</i> (Takeshi's Truth Talk)	11 July 2005	<i>NHK gan supesharu 'gokai maneku' to ishira ikensho</i> (Physicians' written opinion that NHK cancer special 'invites misperceptions')	http://blog.saito-ortho.com/archives/27737600.html

April and July 2005. The meeting of the American Society of Clinical Oncology was held on 14–17 May 2005, without any presentation on the results of large-scale clinical trials of oxaliplatin for advanced cancer. Although the distributor Yakult held a symposium commemorating the release of oxaliplatin on 1 July 2005 (22), it does not explain the increase in the number of oxaliplatin prescriptions in the first week of June. The above circumstances suggest that media or other information sources other than the NHK special could have hardly influenced oxaliplatin prescriptions.

In contrast, the NHK special was aired on April 30 and May 1, which preceded the second increase on June 1–7 in the numbers of contracted facilities and patients registered in the post-marketing clinical trial. Medical practitioners' reactions after the broadcast of the NHK special suggest that the NHK program significantly influenced prescriptions by physicians. The media reports and commentaries on the NHK special from April 2005 to February 2006 are listed in Table 2. Notably, 405 clinicians involved in cancer treatment sent a written opinion to NHK on 8 July 2005, stating that the NHK special invited misperceptions among its viewers as if life-prolonging anticancer drugs such as oxaliplatin were 'curing' drugs and caused confusions in patients (11), whereas changes in the degree of patient expectation on the efficacy of oxaliplatin were not directly surveyed. Major newspapers such as the Asahi Shimbun (23), Yomiuri Shimbun (24) and Mainichi Shimbun (25), a general-interest magazine (26,27) and numerous blogs mentioned this issue. They indicated that many clinicians felt the NHK special exerted an inappropriate impact on physicians' prescriptions of anticancer drugs. The above circumstances support the association between the NHK special and the increase in the number of oxaliplatin prescriptions.

The present study demonstrated the chronological association between the NHK special and the increase in the number of oxaliplatin prescriptions, suggesting the potential impact of television programs on prescriptions by medical specialists and provided valuable information for consideration on the relationship between media and cancer treatment, although our study left some issues to be mentioned. First, the exact causal association between the NHK special and the increase in the number of oxaliplatin prescriptions was not proven in our study. Second, we cannot ascertain whether the increase in oxaliplatin prescriptions after the NHK special was the result of its direct influence on physicians' judgment or its indirect influence on physicians' prescriptions to meet patients' expectations. Further studies need to focus on the reasons why physicians prescribed oxaliplatin.

In conclusion, we should recognize the possibility that media can be powerful tools for improving the national level of medical treatment, considering the impact of media on cancer treatment as demonstrated in the present study. Although it is essential to provide viewers with accurate information appropriately and to establish amicable relations between medical practitioners and media, few

interdisciplinary studies/projects integrating media and medical practitioners have been conducted in Japan. Groundbreaking studies such as Media Doctor (28) in Australia, and Hollywood, Health and Society (29) could serve as useful references in Japan. Further interdisciplinary studies/projects integrating media and medical practitioners are awaited in Japan.

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Conflict of interest statement

None declared.

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