

Report

Smoking prevalence and beliefs on smoking cessation among members of the Japanese Cancer Association in 2006 and 2010

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(Received March 12, 2012/Revised April 26, 2012/Accepted April 28, 2012)

Smoking is a significant contributing factor to disease-related deaths worldwide. Members of the Japanese Cancer Association (JCA) can play a leading role in helping people to live tobacco-free through social action. In 2010, this study assessed smoking prevalence among JCA members and their attitudes toward smoking, smoking cessation, and their responsibilities. Results of the 2010 survey were compared with those of a 2006 survey. Final response rates were 60.8% in the 2006 survey and 47.4% in the 2010 survey, and the current smoking rates were 9.0% and 5.3%, respectively. Regarding concern by current smokers over smoking cessation, the percentage of smokers who were ready to quit smoking within the next month increased from 4.9% to 6.3% between 2006 and 2010. Most JCA members agreed with antismoking actions such as smoking bans in all workplaces, public places, or while walking in the street, regulation restricting the sale and distribution of tobacco to children, tobacco education at school, use of tobacco tax for health, provision of information on tobacco, and smoking cessation support. Approximately 30% of responders disagreed on actions to raise the price of tobacco, regulations restricting the sale of tobacco, health warnings on tobacco packaging, bans on tobacco advertisement, and antismoking campaigns. Barriers to smoking cessation interventions identified were physician's time required to provide interventions, resistance of patients to smoking cessation advice, and lack of education on tobacco control. Not only antismoking actions but also support of smokers by health professionals through adequate education on smoking cessation treatment is needed in the future. (*Cancer Sci* 2012; 103: 1595–1599)

According to the National Health and Nutrition Survey in Japan, smoking prevalence has declined to 19.5% over the last two decades. However, smoking prevalence among females has not declined and approximately 15% of females still smoke. Smoking is the single greatest preventable cause of disease and death in the world today. Smoking causes several sites of cancer.^(1,2) Recent research in Japan indicated that 39% and 5% of death from cancer in males and females, respectively, were caused by smoking, as were 44% of deaths in males and 15% of deaths in females from ischemic heart disease and stroke, and 60% of deaths in males and 16% of deaths in females from chronic obstructive pulmonary diseases and pneumonia.⁽³⁾ Another recent research report in Japan said that 30% and 5% of cancer incidence in males and females, respectively, was caused by smoking, as were 34% and 6% of deaths from cancer in males and females, respectively.⁽⁴⁾

Members of the Japanese Cancer Association (JCA) can play a leading role in helping people to live tobacco-free through

political action and by counseling people to quit smoking. We carried out surveys on smoking, targeting JCA members in 2004, 2006, and 2010 and have reported the results of the first two surveys.⁽⁵⁾ Our objective was to describe smoking prevalence among JCA members and their attitudes toward tobacco control and smoking by both medical staff members and patients in 2010. We also compared results of the 2006 survey with those of the 2010 survey.

Material

The JCA carried out postal surveys in 2004, 2006, and 2010. Survey questions were developed after extensive discussions with the Committee for Control of Tobacco Use, as shown in our previous report.⁽⁵⁾ The questionnaire covered the following topics: (i) past and current smoking status; (ii) views on tobacco control and smoking by medical staff members as well as patients; (iii) smoking cessation interventions for patients; and (iv) barriers against use of smoking cessation interventions.

Methods

Among all members identified through the membership database of the JCA, those whose last digit membership number was 5 in the 2006 survey and 2 or 7 in the 2010 survey were selected at random to receive the survey. In 2010, the survey was carried out twice, once in July and once in October, because of the low rate of response to the first survey. Out of a sample of 1523 in 2006, 1564 in July 2010, and 1620 in October 2010 who could be contacted with correct addresses, 923 in 2006, 649 in July 2010, and 863 in October 2010 completed the survey after a single reminder. Participants that did not respond to the question about smoking status in the survey (three in 2006, one in July 2010) were deleted from the analysis.

Respondents were classified as current smokers, former smokers, or never smokers. Current smokers were asked about their attempt to quit in the past 12 months and concern about smoking cessation. The transtheoretical model was used to assess the readiness of smokers for smoking cessation on a change continuum.^(6,7) Smokers who were not interested in quitting smoking and were not considering quitting in the next 6 months were defined as "immotivators," whereas those who were interested in smoking cessation but not considering cessa-

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tion in the next 6 months were defined as “precontemplators.” Those who were thinking of stopping within the next 6 months were defined as “contemplators.” Smokers planning smoking cessation within the following 1 month were considered to be in the “preparation” stage. Current smokers were asked whether they had made one attempt to quit for at least 1 day during the past 1 year.

Respondents were asked about beliefs regarding 14 antismoking actions (13 in the 2006 survey), with responses of “agree,” “disagree,” or “no opinion.” Medical professionals among the respondents were also asked whether they thought they or their patients should not smoke, whether they advised their patients to quit smoking if smoking cessation would be needed as part of treatment, or what they believed the barriers were to treatment related to smoking cessation.

The two surveys carried out in 2010 were analyzed together, and results of surveys from 2006 and 2010 were compared in terms of smoking status according to demographics such as sex and age, stage of change for current smokers, beliefs regarding antismoking actions, beliefs about medical staff members’ or patients’ smoking, and barriers to smoking cessation treatment using the χ^2 -test with the significance level of 5%. We also compared beliefs regarding antismoking actions and beliefs about medical staff members’ or patients’ smoking according to the smoking statuses of the respondents using the χ^2 -test.

Results

Included in the analysis were 920 participants in 2006 and 1511 participants in 2010 with valid response rates of 60.8% and 47.4%, respectively. Almost all were male and approximately 60% were 40–59 years of age. Current smoking prevalence in 2010 was 5.3%, which was significantly lower than that in 2006 (9.0%) (Table 1). When considering males in their 40s and 50s, current smoking prevalence was significantly lower in 2010 than in 2006. Regarding the “stage of change” profile of current smokers, the percentage of smokers in the preparation stage, that is, those who were ready to quit smoking within the next month, increased from 4.9% in 2006 to 6.3% in 2010. Those in the contemplation stage, indicating that they were thinking of quitting within the next 6 months, increased from 23.2% in 2006 to 30.4% in 2010. Looking at the percentages of current smokers both in the preparation and contemplation stages according to the presence or absence of smoking-cessation experiences within the previous year, we found an increase from 33.3% to 59.5% in smokers who had a smoking-cessation experience, and a slight decrease from 17.9% to 16.7% in smokers who did not have a smoking-cessation experience.

Beliefs regarding 14 antismoking actions (13 in the 2006 survey), with responses of “agree,” “disagree,” or “no opinion” according to smoking status are shown in Table 2. “No answer” indicates that they did not respond to the question. In both the 2006 and 2010 surveys, more never smokers agreed with almost all antismoking actions than current smokers. Over 95% of respondents (90% of current smokers) agreed with a smoking ban in the workplace except in designated smoking areas. The actions with which <70% of respondents agreed were regulations restricting the sale of tobacco, health warnings on tobacco packaging in large letters and in simple language for easier reading, bans on tobacco advertisements, and antismoking campaigns or events by the government. Actions for which there was a big difference in percentage of agreement between smokers and non-smokers, which included former smokers and never smokers, were increases in tobacco prices and health warnings on tobacco packaging. Regarding health warnings on tobacco packaging, more responders disagreed regardless of smoking status compared with the other actions. More non-smokers among all of the respondents had no opinion on matters such as health warnings on tobacco packaging, raising the price of tobacco, regulations restricting the sale of tobacco, bans on tobacco advertisements, or antismoking campaigns or events by the government.

In a comparison between the 2006 survey and the 2010 survey, the rates of responders that disagreed with the actions of a smoking ban while walking on the street and regulations restricting the sale and distribution of tobacco to children significantly increased from 1.5% to 4.1% and 0.3% to 1.5%, respectively. On the action of raising the price of tobacco, the rate of responders that agreed increased from 63.7% to 75.4%, and the rate of those who disagreed decreased from 6.6% to 3.9%.

Table 3 shows responses to the portion of the survey that targeted medical staff members regarding smoking by medical staff members and their patients ($n = 788$ in 2006; $n = 1262$ in 2010). Approximately 80% of never and former smokers thought that medical staff members should not smoke, whereas only 38.6% in 2006 and 31.7% in 2010 of current smokers felt that they should not smoke. As to attitudes toward patients’ smoking, more than half of never smokers among medical staff members thought patients should not smoke regardless of the role of smoking cessation in treatment, but <20% of current smokers responded that patients should not smoke. Table 3 also shows that approximately 90% of the 740 responders in 2006 and of the 1127 responders in 2010 who worked in a clinical capacity advise their patients to stop smoking if treatment required it. The percentage of subjects who reported that they advise patients to stop smoking significantly increased from 89.6% in 2006 to 93.8% in 2010.

Table 1. Smoking prevalence among surveyed members of the Japanese Cancer Association, 2006 and 2010

	2006 ($n = 920$)						2010 ($n = 1511$)					
	Current smoker		Former smoker		Never smoker		Current smoker		Former smoker		Never smoker	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Sex												
Male*	74	10.3	237	33.0	408	56.7	71	6.2	438	38.1	642	55.8
Female	1	0.9	9	7.8	106	91.4	3	1.4	14	6.3	205	92.3
Age (years)												
20–39	21	8.7	40	16.5	181	74.8	20	4.8	78	18.9	315	76.3
40–59*	59	10.7	173	31.3	320	58.0	47	5.4	313	35.8	514	58.8
≥60	3	2.5	57	46.7	62	50.8	13	5.9	116	53.0	90	41.1
Total*	83	9.0	273	29.7	564	61.3	80	5.3	508	33.6	923	61.1

Not all subjects responded to questions regarding sex or age. *Significant differences ($P < 0.01$) between 2006 and 2010 when the χ^2 -test with two degrees of freedom.

Table 2. Beliefs regarding antismoking actions among surveyed members of the Japanese Cancer Association, 2006 and 2010

	2006 (n = 920)								P-value*	2010 (n = 1511)								P-value*
	Current smokers		Former smokers		Never smokers		Total			Current smokers		Former smokers		Never smokers		Total		
	n	%	n	%	n	%	n	%		n	%	n	%	n	%	n	%	
Smoking ban in workplaces except in designated smoking areas																		
Agree	76	91.6	266	97.4	555	98.4	897	97.5	<0.01	70	87.5	489	96.3	97	97.2	1456	96.4	<0.01
Disagree	0	0.0	1	0.4	0	0.0	1	0.1		3	3.8	5	1.0	5	0.5	13	0.9	
No opinion	7	8.4	5	1.8	7	1.2	19	2.1		6	7.5	12	2.4	15	1.6	33	2.2	
No answer	0	0.0	1	0.4	2	0.4	3	0.3		1	1.3	2	0.4	6	0.7	9	0.6	
Smoking ban while walking in the street**																		
Agree	70	84.3	255	93.4	548	97.2	873	94.9	<0.01	60	75.0	485	95.5	870	94.3	1415	93.6	<0.01
Disagree	4	4.8	7	2.6	3	0.5	14	1.5		8	10.0	15	3.0	39	4.2	62	4.1	
No opinion	9	10.8	11	4.0	10	1.8	30	3.3		12	15.0	7	1.4	10	1.1	29	1.9	
No answer	0	0.0	0	0.0	3	0.5	3	0.3		0	0.0	1	0.2	4	0.4	5	0.3	
Smoking ban in public places such as stations or hospitals																		
Agree	51	63.8	257	94.1	538	95.4	849	92.3	<0.01	52	65.0	461	90.7	887	96.1	1400	92.7	<0.01
Disagree	10	12.5	3	1.1	3	0.5	16	1.7		14	17.5	9	1.8	10	1.1	33	2.2	
No opinion	19	23.8	13	4.8	21	3.7	53	5.8		14	17.5	35	6.9	21	2.3	70	4.6	
No answer	0	0.0	0	0.0	2	0.4	2	0.2		0	0.0	3	0.6	5	0.5	8	0.5	
Regulations restricting the sale and distribution of tobacco to children**																		
Agree	75	90.4	234	85.7	512	90.8	821	89.2	0.09	69	86.3	429	84.4	820	88.8	1318	87.2	0.09
Disagree	1	1.2	0	0.0	2	0.4	3	0.3		3	3.8	7	1.4	13	1.4	23	1.5	
No opinion	6	7.2	38	13.9	46	8.2	90	9.8		8	10.0	71	14.0	86	9.3	165	10.9	
No answer	1	1.2	1	0.4	4	0.7	6	0.7		0	0.0	1	0.2	4	0.4	5	0.3	
Education on the risks of tobacco use at school																		
Agree	63	75.9	230	84.2	491	87.1	784	85.2	0.09	49	61.3	406	79.9	773	83.7	1228	81.3	<0.01
Disagree	4	4.8	5	1.8	7	1.2	16	1.7		5	6.3	8	1.6	13	1.4	26	1.7	
No opinion	16	19.3	37	13.6	63	11.2	116	12.6		26	32.5	91	17.9	132	14.3	249	16.5	
No answer	0	0.0	1	0.4	3	0.5	4	0.4		0	0.0	3	0.6	5	0.5	8	0.5	
Use of the tobacco tax for health care																		
Agree	58	69.9	216	79.1	456	80.9	730	79.3	0.15	51	63.8	396	78.0	763	82.7	1210	80.1	<0.01
Disagree	7	8.4	13	4.8	19	3.4	39	4.2		8	10.0	20	3.9	27	2.9	55	3.6	
No opinion	18	21.7	44	16.1	86	15.2	148	16.1		21	26.3	88	17.3	129	14.0	238	15.8	
No answer	0	0.0	0	0.0	3	0.5	3	0.3		0	0.0	4	0.8	4	0.4	8	0.5	
Providing information on tobacco and health																		
Agree	60	72.3	229	83.9	456	80.9	745	81.0	0.05	43	53.8	396	78.0	768	83.2	1207	79.9	<0.01
Disagree	1	1.2	2	0.7	7	1.2	10	1.1		5	6.3	5	1.0	10	1.1	20	1.3	
No opinion	22	26.5	40	14.7	96	17.0	158	17.2		32	40.0	103	20.3	140	15.2	275	18.2	
No answer	0	0.0	2	0.7	5	0.9	7	0.8		0	0.0	4	0.8	5	0.5	9	0.6	
Smoking cessation support for people wishing to quit smoking																		
Agree	54	65.1	219	80.2	454	80.5	727	79.0	<0.05	40	50.0	387	76.2	754	81.7	1181	78.2	<0.01
Disagree	2	2.4	4	1.5	7	1.2	13	1.4		10	12.5	11	2.2	15	1.6	36	2.4	
No opinion	27	32.5	48	17.6	100	17.7	175	19.0		30	37.5	107	21.1	147	15.9	284	18.8	
No answer	0	0.0	2	0.7	3	0.5	5	0.5		0	0.0	3	0.6	7	0.8	10	0.7	
Education on the risks of tobacco use at elementary school																		
Agree										50	62.5	384	75.6	739	80.1	1173	77.6	<0.01
Disagree										6	7.5	19	3.7	19	2.1	44	2.9	
No opinion										24	30.0	102	20.1	161	17.4	287	19.0	
No answer										0	0.0	3	0.6	4	0.4	7	0.5	
Raising the price of tobacco**																		
Agree	20	24.1	179	65.6	387	68.6	586	63.7	<0.01	29	36.3	384	94.1	727	78.8	1140	75.4	<0.01
Disagree	30	36.1	14	5.1	17	3.0	61	6.6		27	33.8	10	2.5	22	2.4	59	3.9	
No opinion	33	39.8	80	29.3	158	28.0	271	29.5		24	30.0	11	2.7	170	18.4	305	20.2	
No answer	0	0.0	0	0.0	2	0.4	2	0.2		0	0.0	3	0.7	4	0.4	7	0.5	
Regulations restricting the sale of tobacco (restrictions on tobacco vending machines)																		
Agree	34	41.0	180	65.9	403	71.5	617	67.1	<0.01	39	48.8	324	63.8	637	69.0	1000	66.2	<0.01
Disagree	15	18.1	16	5.9	26	4.6	57	6.2		20	25.0	31	6.1	40	4.3	91	6.0	
No opinion	34	41.0	77	28.2	131	23.2	242	26.3		21	26.3	150	29.5	241	26.1	412	27.3	
No answer	0	0.0	0	0.0	4	0.7	4	0.4		0	0.0	3	0.6	5	0.5	8	0.5	

Table 2. (continued)

	2006 (n = 920)								P-value*	2010 (n = 1511)								P-value*
	Current smokers		Former smokers		Never smokers		Total			Current smokers		Former smokers		Never smokers		Total		
	n	%	n	%	n	%	n	%		n	%	n	%	n	%	n	%	
Health warnings on tobacco packaging																		
Agree	24	28.9	172	63.0	381	67.6	577	62.7	<0.01	18	22.5	323	63.6	652	70.6	993	65.7	<0.01
Disagree	12	14.5	11	4.0	18	3.2	41	4.5		20	25.0	27	5.3	32	3.5	79	5.2	
No opinion	47	56.6	89	32.6	161	28.5	297	32.3		42	52.5	156	30.7	232	25.1	430	28.5	
No answer	0	0.0	1	0.4	4	0.7	5	0.5		0	0.0	2	0.4	7	0.8	9	0.6	
Bans on tobacco advertisements (magazines, billboards)																		
Agree	45	54.2	180	65.9	380	67.4	605	65.8	0.27	39	48.8	330	65.0	607	65.8	976	64.6	<0.01
Disagree	5	6.0	11	4.0	22	3.9	38	4.1		10	12.5	20	3.9	28	3.0	58	3.8	
No opinion	33	39.8	81	29.7	157	27.8	271	29.5		31	38.8	156	30.7	283	30.7	470	31.1	
No answer	0	0.0	1	0.4	5	0.9	6	0.7		0	0.0	2	0.4	5	0.5	7	0.5	
Antismoking campaigns or events by the government																		
Agree	35	42.2	190	69.6	394	69.9	619	67.3	<0.01	21	26.3	328	64.6	623	67.5	972	64.3	<0.01
Disagree	7	8.4	8	2.9	25	4.4	40	4.3		21	26.3	32	6.3	46	5.0	99	6.6	
No opinion	41	49.4	72	26.4	141	25.0	254	27.6		38	47.5	146	28.7	249	27.0	433	28.7	
No answer	0	0.0	3	1.1	4	0.7	7	0.8		0	0.0	2	0.4	5	0.5	7	0.5	

*P-values when the χ^2 -test with six degrees of freedom was used to examine the difference between smoking statuses. **Significant differences ($P < 0.05$) between 2006 and 2010 using the χ^2 -test with three degrees of freedom.

Table 3. Health professionals' self-reporting of their own and patients' smoking, according to surveyed members of the Japanese Cancer Association, 2006 and 2010

	2006								P-value*	2010								P-value*
	Current smokers		Former smokers		Never smokers		Total			Current smokers		Former smokers		Never smokers		Total		
	n	%	n	%	n	%	n	%		n	%	n	%	n	%	n	%	
Do you agree medical staff members should not be allowed to smoke?																		
Yes	27	38.6	185	77.1	408	85.4	620	78.7	<0.01	20	31.7	359	80.3	642	85.4	1021	80.9	<0.01
No	28	40.0	27	11.3	36	7.5	91	11.5		28	44.4	46	10.3	65	8.6	139	11.0	
No opinion	12	17.1	22	9.2	22	4.6	56	7.1		15	23.8	36	8.1	36	4.8	87	6.9	
No answer	3	4.3	6	2.5	12	2.5	21	2.7		0	0.0	6	1.3	9	1.2	15	1.2	
How do you think about your patients' smoking?																		
Should not smoke	12	17.1	106	44.2	257	53.8	375	47.6	<0.01	12	19.0	224	50.1	392	52.1	628	49.8	<0.01
Patients' choice	25	35.7	83	34.6	129	27.0	237	30.1		30	47.6	142	31.8	232	30.9	404	32.0	
May smoke	28	40.0	36	15.0	63	13.2	127	16.1		19	30.2	65	14.5	96	12.8	180	14.3	
No opinion	1	1.4	4	1.7	13	2.7	18	2.3		1	1.6	5	1.1	16	2.1	22	1.7	
No answer	4	5.7	11	4.6	16	3.3	31	3.9		1	1.6	11	2.5	16	2.1	28	2.2	
Do you advise your patients to quit smoking if treatment required it?***																		
Yes	61	91.0	203	89.4	399	89.5	663	89.6	0.64	52	88.1	382	93.4	623	94.5	1057	93.8	<0.05
No	0	0.0	3	1.3	4	0.9	7	0.9		1	1.7	6	1.5	4	0.6	11	1.0	
No opinion	1	1.5	9	4.0	14	3.1	24	3.2		4	6.8	7	1.7	12	1.8	23	2.0	
No answer	5	7.5	12	5.3	29	6.5	46	6.2		2	3.4	14	3.4	20	3.0	36	3.2	

*P-values when the χ^2 -test with six degrees of freedom was used to examine the difference between smoking statuses. **Significant differences ($P < *0.01$) between 2006 and 2010 when the χ^2 -test with three degrees of freedom was used.

Table 4 shows that more than half of health professionals working in clinical capacities believed that the length of time it took to provide smoking cessation support was a barrier to their providing smoking cessation treatment to their patients. Approximately 30% of health professionals believed resistance of their patients to smoking cessation advice, lack of education on tobacco control, and no health insurance coverage for smoking cessation medication were barriers. However, the percentage of health professionals who reported no coverage for smoking cessation medication as a barrier significantly decreased from 36.4% in 2006 to 27.8% in 2010.

Discussion

This study on smoking prevalence and beliefs toward antismoking among members of the JCA carried out in 2010, was the third of a series of studies carried out in 2004 and 2006.⁽⁵⁾ We observed a statistically significant decline in the prevalence of smoking among male JCA members between 2006 and 2010. The JCA members reported a much lower prevalence of smoking (6.2% for males; 1.4% for females) in the 2010 survey compared to the general prevalence in Japan of 32.2% for males and 8.4% for females from the National Health and

Table 4. Barriers to antismoking support reported by members of the Japanese Cancer Association, surveyed 2006 and 2010

	2006 (n = 740)		2010 (n = 1127)	
	n	%	n	%
Time-consuming task	385	52.0	638	56.6
Resistance of the patients to smoking cessation advice	209	28.2	349	31.0
Lack of education on tobacco control	192	25.9	316	28.0
No health insurance coverage for smoking cessation medication*	269	36.4	313	27.8
Indifference to the issue of patients' smoking	25	3.4	40	3.5
No successful quit attempt	12	1.6	30	2.7

*Significant difference ($P < 0.01$) between 2006 and 2010 using the χ^2 -test with single degrees of freedom.

Nutrition Survey in 2010. Surveys on smoking prevalence among medical professionals have been done in other countries, with smoking rates reported to range from 2 to 7% in the USA to 40% in Bosnia and Herzegovina, according to a review.⁽⁸⁾ Compared to smoking prevalence of 15.0% for males and 4.6% for females among Japanese physicians, according to the similar survey carried out in 2008 by the Japan Medical Association,⁽⁹⁾ the prevalence of smoking was lower among JCA members. These findings suggest that most JCA members acting in the promotion of health and patient care develop a stronger sense of leadership in health promotion. However, our findings might have been influenced by the lower response rate than that of the Japan Medical Association study. It is usual with questionnaire surveys about smoking that fewer smokers than non-smokers respond.

Most of the JCA members indicated that they agreed with antitobacco actions such as bans on smoking in the workplace, walking in the streets and in public spaces, providing an environment where tobacco is unavailable to children, education on the risks of tobacco use, use of the tobacco tax for health care, providing information on tobacco, and supporting people wishing to quit smoking. Approximately 30% of responders answered “disagree” or “no opinion” regarding actions to raise the price of tobacco, place restrictions on tobacco purchases,

print warnings on tobacco packaging, banning tobacco advertisements, and antitobacco campaigns. In comparison with the 2006 survey, there was a significant increment in the percentage of responders who agreed in the 2010 survey only with the antismoking action of raising the price of tobacco. A similar survey carried out in Turkey found that the rates of general practitioners who agreed with antismoking actions regarding tobacco packaging, purchase of tobacco by children, advertising of tobacco products, and the price of tobacco were higher than those of Japanese physicians.⁽¹⁰⁾

Approximately 80% of JCA members agreed with the statement “medical staff should not smoke” and <50% agreed that “patients should not smoke.” These percentages were similar to those in previous studies targeting physicians in Japan.^(9,11) The percentage of medical staff members who advised their patients to stop smoking if they needed to do so for medical reasons was over 90% in the 2010 survey, which was an increase from approximately 85% in surveys carried out in 2000 and 2004.⁽¹¹⁾ Compared with an international study done in 2006 that included 16 countries, more physicians who smoked advised patients to stop smoking in our study, although non-smoking physicians did so in equal measure.⁽¹²⁾ As to barriers to smoking cessation treatment, responders felt that major barriers were the staff time required to provide cessation programs. Fewer health professionals reported no health insurance coverage for smoking cessation medication as a barrier in the 2010 survey than in the 2006 survey. Coverage for smoking cessation medication was only introduced in 2006 and the change in response in 2010 might be due to the respondents' increased familiarity with the coverage. In the international survey, physicians identified patients' lack of willpower, addiction/dependency, and social environment/peers as the most frequent barriers.⁽¹²⁾ Lack of time, perceived ineffectiveness of treatment, and lack of external support for specialist referrals were identified as physician-level barriers to the delivery of cessation interventions.⁽¹²⁾ In Japan, to provide effective smoking cessation treatment, not only the development of more effective and short-term smoking cessation programs but also the introduction of education programs on smoking cessation treatment for doctors and medical students are needed.

Disclosure Statement

The authors have no conflicts of interest with any financial organization in this study.

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