

Lifestyle Habits among Physicians Working at Hospitals in Japan

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Abstract

Purpose Physicians are required to have favorable lifestyle habits as professionals who guide patients in improving their lifestyle habits, as well as for the health of physicians themselves. The present study aimed to clarify the actual status of lifestyle items, particularly smoking, drinking, exercise and dietary habits, of hospital-employed physicians in Japan.

Method A questionnaire survey was sent by mail to 10,000 individuals randomly extracted from among about 80,000 hospital-employed physicians who are members of the Japan Medical Association. We received 3,879 responses.

Results The smoking rate was 16% for men and 5% for women. As for drinking, 31% of men and 12% of women drank alcohol almost every day. The percentages of persons who were not exercising regularly were 60% for men and 73% for women. As for dietary habits, 24% of men and 22% of women reported “eating rather too much” or “always eating until full.”

Discussion It became apparent that, excluding smoking, there was an unfavorable trend in many lifestyle items of Japanese physicians as compared with the general Japanese population and physicians in other countries. It is desirable that physicians voluntarily strive to have a favorable lifestyle, and that medical institutions actively enlighten physicians working at their institutions about this issue.

Key words Physician, Smoking, Diet, Exercise, Alcohol

Introduction

It is desirable that physicians lead a favorable lifestyle not only for their own health but also in view of their role in providing guidance for patients. It has been pointed out that physicians tend to turn a blind eye to their own unfavorable lifestyle habits, and to be less assertive and proactive about providing patients with guidance for a

better lifestyle if they are not practicing it themselves.¹ Against this background, enlightening activities have been actively pursued by national medical associations in various overseas countries, as part of an effort to promote physicians leading a favorable lifestyle in order to protect their own health.²

As an aspect of the lifestyle of physicians in Japan, smoking status has been surveyed regu-

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larly by the Japan Medical Association (JMA). However, other aspects of lifestyle have yet to be fully clarified.³ Hospital-employed physicians being chronically overworked has recently become an issue. Under such circumstances, unfavorable lifestyle items may emerge. This study aimed to clarify the actual lifestyle status of hospital-employed physicians, particularly as regards smoking, drinking, exercise and dietary habits.

Method

This study was based on a questionnaire survey carried out by the Project Committee Concerning Health Support for JMA Members Working in Hospitals. In February 2009, a questionnaire was sent by mail to 10,000 individuals (8,000 men and 2,000 women) randomly selected from among about 80,000 JMA members categorized as hospital-employed physicians.⁴

The questionnaire included the following questions about smoking, drinking, exercise and dietary habits.

In regard to smoking, respondents were requested to answer “yes,” “no,” or “past smoker” to the question “Do you currently smoke?”

As for drinking, respondents were requested to answer “never,” “1 or 2 days a week,” “at least 3 days a week,” or “almost every day” to the question “How often have you drunk alcohol over the past year?”

In regard to exercise, the question was “Have you exercised for at least 30 minutes, with sufficient intensity to induce perspiration, regularly over the past year?”, and the answer choices were “never,” “1 or 2 days a week,” “at least 3 days a week,” and “almost every day.”

The question regarding meal size was “How large are your meals?”, and the answer choices were “quite small,” “always moderate,” “not excessive,” “rather too much,” and “always eat until full.” Concerning dietary balance, the question was “Do you have a balanced diet consisting of a principal food (rice, bread, etc.), a main dish (meat, fish, egg, soybeans, etc.) and side dishes (vegetables, seaweed, etc.)?”, and the answer choices were “have a balanced diet at every meal,” “have a balanced diet at 2 meals a day,” “have a balanced diet at 1 meal a day,” and “never have a balanced diet.”

The implementation of this survey was ap-

Table 1 The attributes of the respondents (n=3,879)

	No. of respondents	(%)
Gender		
Male	3,027	(78.0)
Female	837	(21.6)
Unknown	15	(0.4)
Age (yr)		
24–29	89	(2.3)
30–39	716	(18.5)
40–49	1,147	(29.6)
50–59	1,115	(28.7)
60–69	522	(13.5)
70+	286	(7.4)
Unknown	4	(0.1)
Working status		
Full time	3,476	(89.6)
Part time	385	(9.9)
Not attending	11	(0.3)
Unknown	7	(0.2)
Type of medical institution in service		
Hospital	3,722	(96.0)
Primary clinic	54	(1.4)
Others	92	(2.4)
Unknown	11	(0.3)

proved in advance by the Ethics Committee of the Institute for Science of Labour.

Results

In total, 3,879 individuals responded to the questionnaire, and 176 reported that they would not answer (sum total, 4,055 individuals; effective response rate, 40.6%).

Table 1 shows the attributes of the respondents. Those in their 40s and 50s accounted for about 30% each. The percentage of full-time employed physicians was 90%, and 96% were working in hospitals.

Table 2 shows the percentages of respondents by gender and age in relation to smoking, drinking, exercise, and dietary habits.

Smokers accounted for 16.2% of men. The percentage of men who used to smoke increased with age. In women, 4.8% were smokers, and 2.9% were ex-smokers.

As to alcohol consumption, 31.4% of men reported drinking almost every day. The percentage of men who were drinking almost every day increased with age, peaking in men in their

Table 2 Smoking, drinking, exercise and dietary habits of Japanese hospital-employed physicians (%)

Do you currently smoke?

	Yes	No	Past smoker
Male [Age (Yr)]			
24–29	28.9	68.4	2.6
30–39	18.6	72.5	8.9
40–49	16.4	71.1	12.5
50–59	15.7	69.2	15.1
60–69	17.0	65.8	17.2
70+	10.0	67.3	22.7
Overall	16.2	69.5	14.3
Female [Age (Yr)]			
24–29	3.9	96.1	0
30–39	4.3	92.7	3.0
40–49	5.6	91.0	3.4
50–59	5.8	91.4	2.9
60–69	1.9	96.2	1.9
70+	5.0	90.0	5.0
Overall	4.8	92.3	2.9

How often have you drunk alcohol over the past year?

	Never	1–2 days a week	At least 3 days a week	Almost every day
Male [Age (Yr)]				
24–29	21.1	42.1	26.3	10.5
30–39	24.2	38.2	16.2	21.5
40–49	21.0	30.0	22.9	26.2
50–59	21.1	21.0	23.6	34.2
60–69	18.1	19.6	16.8	45.6
70+	29.5	22.9	15.5	32.2
Overall	21.7	26.2	20.7	31.4
Female [Age (Yr)]				
24–29	50.0	40.0	2.0	8.0
30–39	49.2	32.8	9.7	8.4
40–49	47.6	29.7	9.3	13.4
50–59	44.9	28.3	9.4	17.4
60–69	45.3	28.3	11.3	15.1
70+	55.0	35.0	0	10.0
Overall	47.9	31.2	8.9	11.9

Have you exercised for at least 30 minutes, with sufficient intensity to induce perspiration, regularly over the past year?

	Never	1–2 days a week	At least 3 days a week	Almost every day
Male [Age (Yr)]				
24–29	73.7	21.1	5.3	0
30–39	70.1	22.9	5.1	1.9
40–49	62.4	27.9	6.8	2.9
50–59	59.5	30.4	6.8	3.3
60–69	49.0	39.8	8.2	3.0
70+	54.1	33.2	8.1	4.6
Overall	59.9	30.2	6.9	3.0
Female [Age (Yr)]				
24–29	84.3	15.7	0	0
30–39	74.3	23.0	1.7	1.0
40–49	72.4	19.4	5.6	2.6
50–59	64.7	27.3	5.8	2.2
60–69	75.5	20.8	3.8	0
70+	65.0	30.0	5.0	0
Overall	72.6	22.1	3.7	1.6

(Table continued on next page)

Table 2 Smoking, drinking, exercise and dietary habits of Japanese hospital-employed physicians (%) (continued)

How large are your meals?					
	Quite small	Always eat moderately	Do not eat too much	Eat rather too much	Always eat until full
Male [Age (Yr)]					
24–29	0	2.6	55.3	36.8	5.3
30–39	1.9	11.4	55.1	25.6	6.0
40–49	3.1	15.6	54.9	23.5	2.9
50–59	4.2	15.6	56.0	22.0	2.3
60–69	5.6	23.2	53.8	17.0	0.4
70+	8.8	28.8	56.2	5.8	0.4
Overall	4.1	17.2	55.2	20.9	2.6
Female [Age (Yr)]					
24–29	2.0	9.8	56.9	25.5	5.9
30–39	2.0	13.0	60.3	21.0	3.7
40–49	3.0	15.2	59.5	18.6	3.7
50–59	1.4	15.8	66.9	13.7	2.2
60–69	1.9	15.1	71.7	9.4	1.9
70+	10.0	40.0	45.0	5.0	0
Overall	2.4	14.8	61.3	18.1	3.4
Do you have a balanced diet consisting of a principal food (rice, bread, etc.), a main dish (meat, fish, eggs, soybeans, etc.), and side dishes (vegetables, seaweed, etc.)?					
	Have a balanced diet at every meal	Have a balanced diet at 2 meals a day	Have a balanced diet at 1 meal a day	Never have a balanced diet	
Male [Age (Yr)]					
24–29	7.9	26.3	23.7	42.1	
30–39	13.5	33.6	34.1	18.8	
40–49	21.8	38.9	28.6	10.8	
50–59	30.5	36.5	23.8	9.3	
60–69	40.1	35.8	18.3	5.8	
70+	49.2	32.3	16.5	1.9	
Overall	28.4	36.2	25.1	10.3	
Female [Age (Yr)]					
24–29	3.9	31.4	39.2	25.5	
30–39	15.7	34.3	36.7	13.3	
40–49	22.4	40.7	26.9	10.1	
50–59	18.7	49.6	22.3	9.4	
60–69	35.8	35.8	26.4	1.9	
70+	60.0	15.0	25.0	0	
Overall	20.0	38.4	30.3	11.3	

60s. In women, 11.9% reported that they drank almost every day, and the age group with the highest percentage of individuals who drank almost every day was the 50s. Approximately half of female respondents reported that they did not drink.

As to the question about engaging in exercise of at least 30 minutes in duration, of sufficient intensity to induce perspiration, over the past year, 59.9% of men and 72.6% of women reported that they were not exercising at this frequency or intensity. The percentage of men who exercised at least one day a week increased with advancing

age, and peaked in the 60s. Approximately 27% of women were exercising at least one day a week.

Concerning meal size, 24% of men and 22% of women reported “eating rather too much” or “always eating until full.” In both men and women, the percentage of those who were eating rather too much was highest in those in their 20s, and decreased with advancing age.

The percentage of individuals consuming a balanced diet (principle food, main dish, and side dishes) at every meal was highest in those in their 70s or older, and decreased as age decreased. The percentage of respondents not consuming a

balanced diet was highest in those in their 20s, and decreased with advancing age. The percentage of women in their 20s or 30s consuming a balanced diet for 1 or 2 meals a day was higher than that for men in the same age groups.

Discussion

The lifestyle of physicians needs to be favorable not only because it is important for maintenance of the health of physicians themselves but also because it influences guidance of patients for improving their lifestyles. The results of this survey suggest that enlightening hospital-employed physicians as to favorable lifestyle items is desirable.

The smoking rate among male physicians was highest in those in their 20s. The percentage of current and past smokers among male physicians was about 30% in all age groups. On the other hand, there was a tendency for more men to quit smoking with advancing age. The third survey of attitudes toward smoking among the JMA members carried out in 2008 revealed a smoking rate of 15%.³ There was a trend for decreased smoking rate, because the corresponding rate was 27.1% in 2000, and 21.5% in 2004. In comparison with the general population, the smoking rates in these three surveys were low, as the 2008 National Health and Nutrition Survey by the Ministry of Health, Labour and Welfare showed a smoking rate among men of 40–50%.⁵ However, the reported smoking rate among male physicians is 8% in Canada and 12.6% among male primary care physicians in Switzerland. Thus, a further decrease in the smoking rate is awaited in Japan.^{6,7}

In the present survey, smokers accounted for 4.8% of female physicians. The 2008 National Health and Nutrition Survey showed the smoking rate in the general female population to be 9.1%, and the highest rate, 18%, was in women in their 30s. In comparison with these figures, the smoking rate among female physicians is low.⁵ In Canada, 8% of female physicians smoke regularly. In the US, 3.7% of female physicians were smokers, and 18.6% used to smoke.^{6,8} The smoking rate among female physicians in Japan is comparable to or somewhat lower than the corresponding rates in other countries.

Our survey revealed that 52% of male physicians were drinking alcohol at least 3 days a week

or almost every day. The frequency of drinking was lower in male physicians in younger age groups possibly because younger physicians are more often on duty at night and thus are more often required to be abstinent. Although further investigation is necessary to determine whether decreases in the number of on-duty or on-call services with increasing age actually correlate with increases in the frequency of drinking, an educational approach designed to prevent increases in drinking frequency along with a decreased frequency of on-duty services is necessary. In the general male population, according to the 2008 National Health and Nutrition Survey, the percentages of daily drinkers were 9.0%, 25.6%, 35.8%, 46.3% and 40.3% for those in their 20s, 30s, 40s, 50s and 60s, respectively.⁹ Although data on the amount of drinking were not collected in our survey, the percentage of male physicians who reported daily drinking was similar to or slightly higher than that in the general male population. Among Canadian male physicians, 52% reported drinking at least 2 days a week, similar to Japanese male physicians, but the percentage of daily drinkers was 9%. Although direct comparison is not possible because of differences in questions, the percentage of male physicians consuming alcohol every day may be higher in Japan.

Among female physicians, the percentage of individuals who reported drinking almost every day increased with age, peaking in the 50s. According to the 2008 National Health and Nutrition Survey, the percentages of individuals who reported drinking at least 3 days a week in the general female population were 17.7%, 21.5%, 17.5%, and 12.9%, respectively, for those in their 30s, 40s, 50s and 60s.⁹ In our survey, female physicians who reported drinking “at least 3 days a week” or “almost every day” accounted for 18.1% of those in their 30s, 22.7% in their 40s, 26.8% in their 50s, and 26.4% in their 60s. The frequency of drinking among female physicians tended to be slightly higher than in the general female population and after the 30s. According to the survey of Canadian physicians, female physicians who reported drinking at least 2 days a week accounted for 40%, and those who reported drinking every day accounted for 3%.⁶ Thus, the percentage of female physicians who drink every day may also be slightly higher in Japan than in Canada.

Respondents who reported not exercising over the past year were predominant among those in their 20s and 30s, regardless of gender. As age increased, the percentage of individuals who reported exercising at least 1 day a week increased, peaking in the 60s in men, and in the 50s in women. According to the 2008 National Health and Nutrition Survey, the percentage of individuals who reported exercising for at least 30 minutes a day at least twice a week was 25.0% in men and 17.1% in women in their 20s, 17.5% in both men and women in their 30s, 22.1% in men and 20.9% in women in their 40s, 19.5% in men and 28.0% in women in their 50s, and 40.8% in men and 38.8% in women in their 60s.⁹ Although direct comparison is not possible because our survey included the answer choice “1 or 2 days a week,” it has been suggested that the amount of exercise in hospital-employed physicians in Japan is not adequate in comparison with the general population. Canadian physicians reportedly exercise of 225 minutes per week on average.⁶ Although the frequency of exercise has not been reported, Japanese physicians may exercise less than Canadian physicians. The questionnaire of the standard medical check-up and guidance program devised for the Japanese specific medical check-up and health guidance systems includes the item “to engage in exercise of at least 30 minutes in duration, of sufficient intensity to induce perspiration, over the past 1 year or more.”¹⁰ To provide such guidance, it is desirable that hospital-employed physicians exercise for their own benefit as well.

In both male and female respondents, the percentage of individuals who reported “eating rather too much” or “always eating until full” was highest in those in their 20s, and decreased with advancing age. Data on the amounts of dietary intake in the general population or in other countries for comparison were not available. Further researches have been needed on this issue.

In regard to dietary balance, younger physicians tended to have meals lacking a balance of the principal food, main dish, and side dishes. In particular, physicians in their 20s included a greater proportion of individuals who were not paying sufficient attention to a balanced diet, although the sample size of this age group was relatively small. The percentage of individuals who were careful about consuming a balanced diet was slightly higher in female than in male

physicians. The dietary balance guide devised by the Ministry of Health, Labour and Welfare, and the Ministry of Agriculture, Forestry and Fisheries recommends a preferable dietary balance to the general public.¹¹ For adults, although there are variations according to gender and the amount of daily activity, a balanced daily diet for sedentary persons is recommended to be a combination of 4–7 servings of a principal food, 3–5 main dish servings, and 5–6 side dish servings. In our survey, 35% of men and 42% of women reported having one balanced meal per day or no balanced meals, and it is possible that the balanced meals recommended by the aforementioned dietary balance guide might not be achieved. It is difficult for hospital-employed physicians to ensure a balanced diet as a result of on-duty services at night and their busy work status. It is necessary for each physician to be aware of the need for balanced meals, and medical institutions are also required to physicians working at their facilities consuming balanced meals, e.g., through institutional restaurants for personnel.

In various other countries, national medical associations take the lead in activities for promoting physician health. In particular, the Canadian Medical Association Code of Ethics states in article 54 that physicians should: “Protect and enhance your own health and wellbeing by identifying those stress factors in your professional and personal lives that can be managed by developing and practicing appropriate coping strategies,” stipulating that protecting one’s own health is part of a physician’s ethical behavior.¹² In addition, the Canadian Medical Association and the British Medical Association regularly provide information about coping with stress and lifestyle improvement via their websites.^{2,13} In Japan, enlightening activities aimed at better lifestyles should be carried out by medical associations and medical institutions in the future.

Our present study has some limitations, e.g., only restricted lifestyle data in view of frequency, etc. were collected. Future surveys should include data on amounts of alcohol and exercise. It is also possible that respondents tended to choose better answers to give the impression of a better lifestyle than they were actually practicing. However, even if there was such a trend, the lifestyles of respondents were not necessarily favorable in comparison with those of the general population.

Conclusion

The present study revealed the actual lifestyle status of hospital-employed physicians in Japan, particularly with regard to smoking, drinking, exercise and diet. Excluding smoking, the lifestyle of physicians in Japan was not necessarily favorable in comparison with that of the general Japanese population or physicians in other countries. Enhanced consciousness of physicians about better lifestyles for themselves and organi-

zational enlightenment activities promoted by medical institutions are awaited.

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