



JAPAN

Effect of HPH activities for tobacco control on smoking rate and perception of tobacco-smoking among hospital employees



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【INTRODUCTION】

- The adult smoking rate of Japan people is reported to be 27.8% for men and 8.7% for women (Japan Tobacco Industry 2018), and the current smoking rate of physicians is reported to be 10.9% for men and 2.4% for women (Japan Medical Association, 2016).
- A relatively new survey reported that the current smoking rate among nurses was 7.9% (29.5% for men and 7.2% for women)¹⁾, and the smoking rate among staff in nursing homes was reported to be 22.2%²⁾.
- In a meta-analysis of workplace smoking cessation interventions, smoking cessation rates were higher in multifactorial intervention programs aimed at quitting, alongside group therapy, individual counselling, and medication (odds ratio 1.55, 95% confidence interval: 1.13~2.13)³⁾.
- Hospitals that are members of the Health Promoting Hospitals and Health Services (HPH) advocated by the WHO are required to take more advanced anti-smoking measures in terms of improving the health of their staff.

【OBJECTIVE】

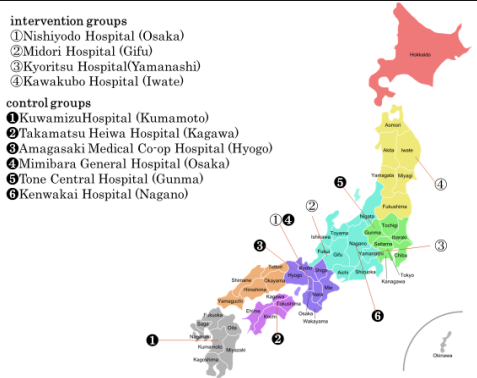
- To investigate whether HPH activities for tobacco control in hospitals reduce the smoking rate or improve perception of tobacco smoking among employees

【METHODS】

- Among the hospitals that are members of the J-HPH network in Japan.
- A request was made to four hospitals as the intervention group and six hospitals as the control group, and all the employees at these participating hospitals in 2019-2020 (n = 2,069) were included.
- In the intervention group, an HPH program for smoking cessation was implemented from January 2020 to March 2021 for patients, communities, and employees.
- The primary outcome was the change in smoking rate before the start of the study (December 2019) and at the end (April 2021).
- The secondary outcome was the score change on The Kano Test for Social Nicotine Dependence (KTSND).

KTSND (the Kano Test for Social Nicotine Dependence) questionnaire

- (1) I think people who smoke are not able to stop smoking.
- (2) I think it is adult to smoke cigarettes.
- (3) I think cigarettes are meant to enjoy taste and aroma like tea or coffee.
- (4) I think that it is better to cherish life to smoke cigarettes.
- (5) I think that smoking cigarettes can make life enjoyable.
- (6) I think that it may be good for the body and feelings to smoke cigarettes.
- (7) I think that you may feel refreshed when you smoke.
- (8) I think that the head will work well when I smoke a cigarette.
- (9) Doctors and school teachers think it's too good to smoke.
- (10) If you have an ashtray, you may want to smoke.



KTSND evaluates social nicotine dependence in 30 points using a questionnaire consisting of 10 questions, available with or without smoking.

activities	target	frequency
① Picking up cigarette butts around the hospital	staff	1 times a month
② Non-smoking class	Patients & Staff	1 time a month
③ Smoking cessation study session	staff	1 year back
④ Smoking Prevention Class	primary school student	2 times a year
⑤ Recommendation to quit smoking for inpatients	patient	Every time
⑥ Distribution of smoking cessation cards	patient	Every time
⑦ Publication of PR magazines	Patients, Communities and Staff	1 time a month



【RESULTS】

- A questionnaire was distributed to all staff of the target hospitals in 2019~2020 and collected from 4,394 people. Of these, 2,069 (508 men, 1,527 women, and 34 non-respondents) were collected both before and after the start.
- Of the 2,069 participants, 786 were in the intervention group (217 men, 556 women, 13 non-respondents). There were 1,283 controls (291 men, 971 women, 21 non-respondents).
- The smoking rate decreased slightly from 9.5% to 8.4% in the intervention group, and from 10.1% to 9.0% in the control group, but the difference was not significant.
- The KTSND score in the intervention group remained unchanged at 12 (median, interquartile range (IQR): 8-16), while the KTSND score in the control group increased significantly from 12 (median, IQR: 7-16) to 12 (median, IQR: 8-16) (P = 0.001)

		Before you start	After you finish	P
Intervention groups	Smoking rate (%)	9.5	8.4	P=0.48
	KTSND	11.8±5.9	11.8±5.8	P=0.83
Control group	Smoking rate (%)	10.1	9.0	P=0.35
	KTSND	11.8±6.0	12.2±6.0	P=0.001*

【DISCUSSION】

- Although the smoking rate among hospital staff has been decreasing, there was no change in awareness of smoking prevention (KTSND score), including among non-smokers.
- There was also no difference between the presence or absence of interventions in HPH activities.
- KTSND scores were not significantly different from previous studies of healthcare professionals^{4) 5)}.
- There are many reports that financial incentives for workplace smoking cessation interventions increase smoking cessation rates^{6) 7)}.
- Although no effect was seen before and after the intervention, it is thought that the planned HPH activities could not be sufficiently carried out due to the corona disaster.

【CONCLUSION】

- HPH programs for tobacco control did not change the smoking rate and perception of tobacco smoking among hospital employees.
- Although the smoking rate among hospital staff is declining, it is necessary to develop interventions to raise awareness of smoking prevention.

【Citations】

- 1) Survey on Nurses' Tobacco Conditions Report, Japan Nursing Association, 2013.
- 2) Japan Journal of Smoking Cessation 2018; 13: 4-12.
- 3) Cochrane Database Syst Rev. 2014 Feb 26.
- 4) lung cancer 2010; 50: 272-279.
- 5) Japanese Periodontal Magazine 2008; 50: 185-192.
- 6) BMJ 2020; 371: m3797
- 7) Lancet Public Health 2018; 3: e536-544.

【COI】

I declare I have not received any payment or services from a third party for the submitted work.