

Tobacco and Non-Communicable Diseases Control in Japan

Tetsutaro Matayoshi, MD, PhD; Takahiro Tabuchi, MD, PhD;
Iwao Gohma, MD; Takahiro Shimizu, MD

The global burden of non-communicable diseases (NCDs) is increasing.¹ Smoking is one of the most important causes of NCDs,² and caused 11.5% (6.4 million) of the global deaths in 2015.³ In Japan, tobacco smoking causes 130,000 death annually and is also the leading cause of death from NCDs⁴ (Figure 1). Regarding the Japanese working-age population, Akter et al demonstrate in this issue of the Journal that smoking increases the risks of total and NCDs mortality and that 5 years' smoking cessation could cancel the risk.⁵ Therefore, smoking cessation could improve social productivity. Smoking in the working-age population not only increases healthcare expenses related to tobacco-related disease incidence and mortality, but also leads to reduced productivity because of discontinuation of work from illness,⁶ and interruption of work for smoking breaks,⁷ which is an economic burden to society. In developed countries, the smoking rate is

Article p3005

higher in the poor compared with the rich. Thus NCDs as results of smoking create a vicious circle, leading to further poverty and hindering the development of society.²

Against this backdrop, countermeasures against smoking are an urgent worldwide matter. The treaty “the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC)” came into effect in 2005, and Japan was a member of the parties.

The latest recorded adult smoking prevalence rates in Japan are the lowest ever (17.7%, 29.4%, 7.2% for overall, males and females, respectively).⁸ Though the male adult smoking rate declined by half during the 30 years of the Heisei era (1989–), the smoking rate in Japan is still sustained at a higher level than in other developed countries.

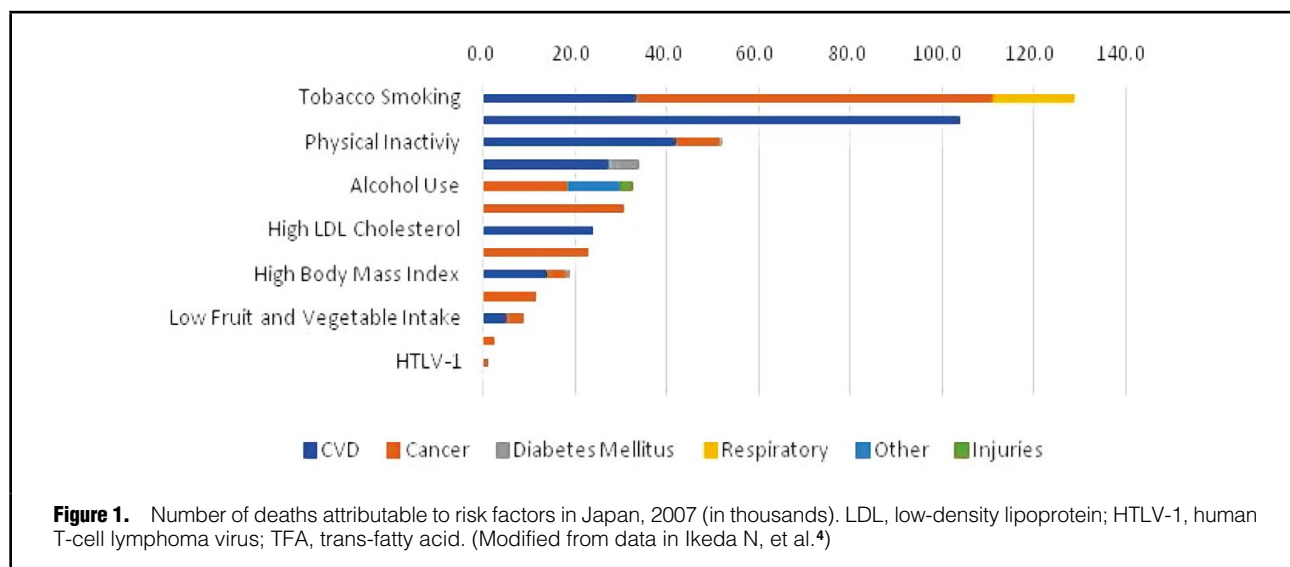


Figure 1. Number of deaths attributable to risk factors in Japan, 2007 (in thousands). LDL, low-density lipoprotein; HTLV-1, human T-cell lymphoma virus; TFA, trans-fatty acid. (Modified from data in Ikeda N, et al.⁴)

The opinions expressed in this article are not necessarily those of the editors or of the Japanese Circulation Society.

Received September 28, 2018; revised manuscript received September 29, 2018; accepted October 3, 2018; released online October 20, 2018

Career Support Center, University Hospital of the Ryukyus, Okinawa (T.M.); Cancer Control Center, Osaka International Cancer Institute, Osaka (T.T.); Center for Respiratory Diseases, Sakai City Medical Center, Osaka (I.G.); and Health Care Center, Chibana Clinic, Okinawa (T.S.), Japan

Mailing address: Tetsutaro Matayoshi, MD, PhD, Department of Cardiovascular Medicine, Nephrology and Neurology, Graduate School of Medicine, University of the Ryukyus, 207 Uehara, Nishihara-cho, Nakagami-gun, Okinawa 903-0215, Japan.
E-mail: b987741@med.u-ryukyu.ac.jp

ISSN-1346-9843 All rights are reserved to the Japanese Circulation Society. For permissions, please e-mail: cj@j-circ.or.jp

	Japan	UK	Australia	Thailand
M: Monitor tobacco use and prevention policies	1 (Best)	1 (Best)	1 (Best)	1 (Best)
P: Protect people from tobacco smoke	4 (Worst)	1 (Best)	1 (Best)	1 (Best)
O: Offer help to quit tobacco use	2	1 (Best)	1 (Best)	2
W¹: Warn about dangers of tobacco (Warning label)	3	1 (Best)	1 (Best)	1 (Best)
W²: Warn about dangers of tobacco (Anti-tobacco media campaign)	4 (Worst)	1 (Best)	1 (Best)	1 (Best)
E: Enforce bans on tobacco advertising, promotion and sponsorship	4 (Worst)	2	2	2
R: Raise taxes on tobacco products	2	1 (Best)	2	2

Figure 2. Evaluation of MPOWER measures by the MPOWER report 2017: Japan, UK, Australia, and Thailand. Four grades evaluation: 1 (Best) to 4 (Worst); details are available in the MPOWER report 2017.

On the other hand, regulation of tobacco in Japan is behind the FCTC's recommendations (**Figure 2**). Warnings on the risk of smoking displayed in cigarette packages comprise only text; neither photographs of disease nor plain packaging is implemented. Tobacco smoking is also allowed indoors; Japan Tobacco Inc., the largest shareholder of which is the Ministry of Finance, is persistently resisting the regulation, and an amendment to the Health Promotion Act, which has made a new policy for restricting secondhand smoking to come into force in 2020, leaves many exceptions. For example, restaurants with the floor area of $\leq 100\text{m}^2$, the number of which is more than half of all restaurants, are exempt from the regulation.

Protection of tobacco control policies from tobacco companies' commercial and other vested interests is given an important position in the FTCT (Article 5.3). To illustrate how diverse the tobacco industry's advertising activities are, we reported an unnatural letter on tobacco, which a non-existent elementary school girl posted on the local newspaper in Okinawa Prefecture of Japan.⁹ The letter was published on the very day before the brand name of MILD SEVEN was changed to MEVIUS.

The FCTC has created guidelines that set particular methods and specific ways for each tobacco control policy. Akter et al's study found that loss caused by smoking in workers can be restored by smoking cessation.⁵ With a guideline for smoke-free policy and smoking cessation, we can create an environment in which young people are unlikely to start smoking and smokers with an intention to cease smoking are more likely to quit smoking. To avoid NCDs and to reduce social losses caused by smoking, we hope that the Japanese government will further promote

tobacco control in line with the FCTC guidelines.

Funding

This article is not supported by any funding source.

References

1. Preventing chronic diseases: A vital investment. World Health Organization, 2005.
2. The Lancet NCD Action Group and the NCD Alliance. Priority actions for the non-communicable disease crisis. *Lancet* 2011; **377**: 1438–1447.
3. GBD 2015 Tobacco Collaborators. Smoking prevalence and attributable disease burden in 195 countries and territories, 1990–2015: A systematic analysis from the Global Burden of Disease Study 2015. *Lancet* 2017; **389**: 1885–1906.
4. Ikeda N, Inoue M, Iso H, Ikeda S, Satoh T, Noda M, et al. Adult mortality attributable to preventable risk factors for non-communicable diseases and injuries in Japan: A comparative risk assessment. *PLoS Med* 2012; **9**: e1001160.
5. Akter S, Nakagawa T, Honda T, Yamamoto S, Kuwahara K, Ozaki H, et al; for the Japan Epidemiology Collaboration on Occupational Health Study Group. Smoking, smoking cessation, and risk of mortality in a Japanese working population: Japan Epidemiology Collaboration on Occupational Health Study. *Circ J* 2018; **82**: 3005–3012.
6. Goodchild M, Nargis N, d'Espaignet ET. Global economic cost of smoking-attributable diseases. *Tobacco Control* 2018; **27**: 58–64.
7. Halpern MT, Shikier R, Rentz AM, Khan ZM. Impact of smoking status on workplace absenteeism and productivity. *Tobacco Control* 2001; **10**: 233–238.
8. Ministry of Health Labor and Welfare of Japan. The National Health and Nutrition Survey 2017. The Ministry (in Japanese).
9. Nishi A, Matayoshi T, Shimizu T, Kinokozan M, Kawachi I. Smoking in Japan: Deadly social norms behind a 'warm-hearted' story. *BMJ Opinion [Blog]* 2013; Apr 4 blogs@bmj.com (accessed October 15, 2018).