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Philip Morris International advertisements target the oral health field in Japan, contrary to the latest World Dental Federation Policy Statement

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There has been increasing commercial promotion of heated tobacco products (HTPs). The WHO has indicated that there is no conclusive scientific evidence that HTPs are less harmful than conventional cigarettes.^{1,2} However, cigarette smokers in Japan continue to take up and regularly use HTPs primarily due to the perception that they are less harmful.^{3,4} Moreover, the lack of a comprehensive and effectively enforced domestic ban on the advertisement, promotion and sponsorship of cigarettes and HTPs has led to pervasive public exposure to tobacco advertising in Japan.⁵ Currently, at least one multinational tobacco company has extended HTP promotions to the cosmetic dentistry field.

On 28 September 2021, the Japan Dental News (Nihon Shika Shinbun), which is a weekly medical newspaper focused on dental care, published a two-page advertisement by Philip Morris International (PMI) on IQOS, its HTP (figure 1). The Japan Dental News is read by dental professionals and has the largest circulation in the industry, with 21 000 copies in circulation (direct contact to the editorial office in January 2022). The advertisement presented four studies on heated tobacco in the oral hygiene field. The research was led by a PMI scientist and was partially funded by the company. It reported that although smoking causes discolouration of the enamel, dentin and composite resin, as well as colour mismatch between the hard tissue of teeth and composite resin, heated tobacco vapour causes less discolouration than smoke from combustible cigarettes.⁶ The advertisement included a reconstructed figure from the research paper (figure 2).⁷ Moreover, the advertisement included a reprint of a study conducted by Zanetti *et al* on the effect of exposure to aerosols or smoke on the cytotoxicity and tissue morphology of organotypical gingival cultures⁸ (data not shown). Additionally, the advertisement included excerpted quotes from dentists (unsourced and without any indication whether they received compensation) conveying positive impressions regarding the research results, which suggested that the dentists approved of the findings and might recommend the products. Further, this implied that the products had been evaluated and validated in the oral health field, with independent scientific evidence showing that these products caused less harm than cigarettes.

The aforementioned advertisement was not the first time PMI had used health professionals to advertise tobacco products. In 2018, Nikkei Medical, which is a monthly informational

medical magazine for clinicians across all specialties with 105 000 copies in circulation, published an advertisement containing a picture of extensive comments from a highly respected oral surgeon.^{9,10} Notably, at this time, the PMI-sponsored research was still ongoing. The highly technical interview-style advertisement claimed that HTPs may help reduce the risk of exacerbation of chronic periodontal disease, which offered a favourable view of the products.⁹ The advertisement likened the switch from cigarettes to HTPs to that from horse-drawn carriages to automobiles, that is, an advancement that should be embraced even though it still involves some risks, which foreshadowed the future announcements of the favourable study results.⁹ It is important to note that this interview implied, but did not explicitly state, that HTPs reduce periodontal disease.

According to the Japanese Ministry of Finance (MOF), a comprehensive advertising ban is not consistent with the country's constitutional principles, which justifies inaction toward enforcing Section 2 of Article 13 of the WHO Framework Convention on Tobacco Control. Accordingly, tobacco advertisement, promotion and sponsorship (TAPS) in Japan are self-regulated by the Tobacco Institute of Japan. Additionally, although there are regulations for medical care-related TAPS, regulations for uninsured medical treatment are relatively lax. Despite the tightening of the self-regulation in 2020, there remain loopholes, including the contents of newspapers and magazines such as publications for medical and dental professionals. Additionally, the Fair Trade Commission is not considered a watchdog in Japan given its close ties to the MOF despite the tobacco industry potentially having deceptive or exaggerated advertisements that mislead vulnerable consumers.¹¹ The tobacco industry is exploiting loopholes within regulations to promote HTPs using their own health claims. The aforementioned advertisements confirm that PMI is taking advantage of people's trust in aesthetic dentistry professionals to promote the switch from cigarettes to IQOS.⁷

In September 2021, the FDI (*Fédération Dentaire Internationale*) World Dental Federation's General Assembly held in Sydney, Australia, adopted the 2021 FDI Policy Statement, which indicated the appropriateness of promoting tobacco-free practices for oral health.¹² Furthermore, the statement asserted that oral health practitioners should not recommend the use of e-cigarettes or HTPs as an alternative to conventional



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近年、紙巻たばこの代替品として注目されている加熱式たばこ。日常診療の中で、喫煙患者さんへの禁煙指導も行う立場にある歯科医師は、加熱式たばこをどうみているのでしょうか。今回の記事では、加熱式たばこの開発背景や紙巻たばことの違いを、最新の口腔内での検証データを交えながらご紹介していきます。

(English translation)

From Dentists' Perspective

Evaluation of HTPs

In recent years, HTPs have attracted attention as alternatives to cigarettes.

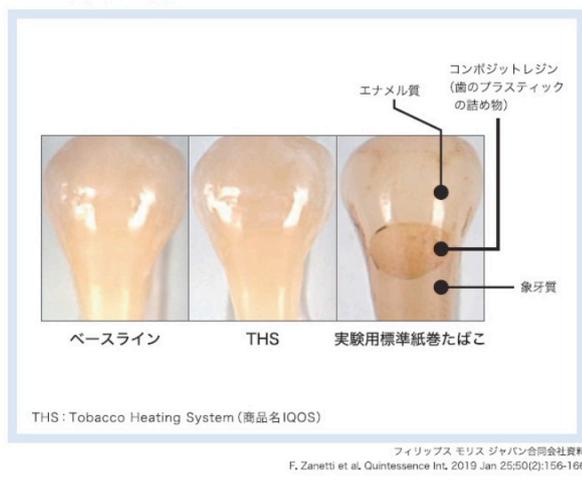
What do dentists, who provide smoking cessation advice to their patients, think about regular use of HTPs?

In this article, we provide a background of development of HTPs and the differences between HTPs and cigarettes, along with the latest data verifying the products for oral health.

Figure 1 Philip Morris International promotes heated tobacco products (HTPs) to dentists.⁷ This provides an intuitive impression that dentists have positive comments regarding HTPs as alternatives to cigarettes.

cigarettes or as a tobacco cessation tool since these products have not been proven to be safe and the recommendations may prompt young users to take up combustible cigarette smoking.¹² Dental

図3 THSの蒸気および紙巻たばこの煙に3週間曝露させた場合の歯の変色結果



(English translation)

Title: Tooth discoloration after 3 weeks of exposure to THS vapor and cigarette smoke

Explanatory note: baseline (left), THS (center), and reference cigarettes (right).

On the right, there are "enamel" (top), "composite resin (plastic filling for teeth)" (middle), and "dentin" (bottom).

Figure 2 Advertisement by Philip Morris International, showing tooth discoloration after 3 weeks of exposure to IQOS heated tobacco products (HTPs) and cigarettes.⁷ The image on the left is the control image, the image in the centre shows a tooth that was exposed to IQOS HTPs and the image on the right shows a tooth that was exposed to conventional cigarettes. These images show that cigarette smoking causes discoloration of the tooth enamel, dentin, composite resin, and colour mismatch between the hard tissue of teeth and composite resin.

professionals, as well as medical and dental journal editors, should be aware of the sophistication of PMI's TAPS and spread awareness about their tactical promotion of HTPs in the oral health field.

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