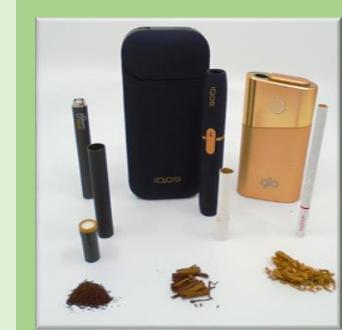


BACKGROUND

- Alternative tobacco products (ATPs), including heated tobacco products (HTPs) & electronic nicotine delivery systems (ENDS), has gained substantial popularity in recent years.
- Many smokers may switch to ATPs driven by the marketing claims of potential health risk reduction. Non-smokers may also be more susceptible to try ATPs if they believe that these products are harmless.
- Little is known about perceived relative harm of different ATPs among tobacco users and non-users who live in countries with different ATP regulations.



Heated Tobacco Products



Electronic nicotine delivery systems

Photo credits: www.ecigclick.co.uk

METHODS

- Data from the ITC Japan-Canada Project, a web survey with 643 respondents (aged ≥20) conducted in two countries, Japan (JP; only HTPs are legal) and Canada (CA; both HTPs and ENDS are legal), from September 2018 to February 2019.
- Harm perceptions of ATPs (relative to cigarettes) were estimated for different user groups:
 - Non-users: Never use or has stopped use of any tobacco product for the past 12 months
 - Exclusive smokers: daily use of cigarettes for past 3 months
 - Exclusive ENDS users: daily use of ENDS for past 3 months
 - Exclusive HTP users: daily use of HTPs for past 3 months
 - Concurrent cigarette-ENDS users: daily use of both cigarettes and ENDS for past 3 months or daily use of ENDS and weekly use of cigarettes for past 3 months
 - Concurrent cigarette-HTP users: daily use of both cigarettes and HTPs for past 3 months
- Multivariable logistic regression assessed association between perceiving any ATPs (combined HTPs and ENDS) as equally or more harmful than combustible cigarettes and sociodemographic, country of origin, and tobacco product use status.

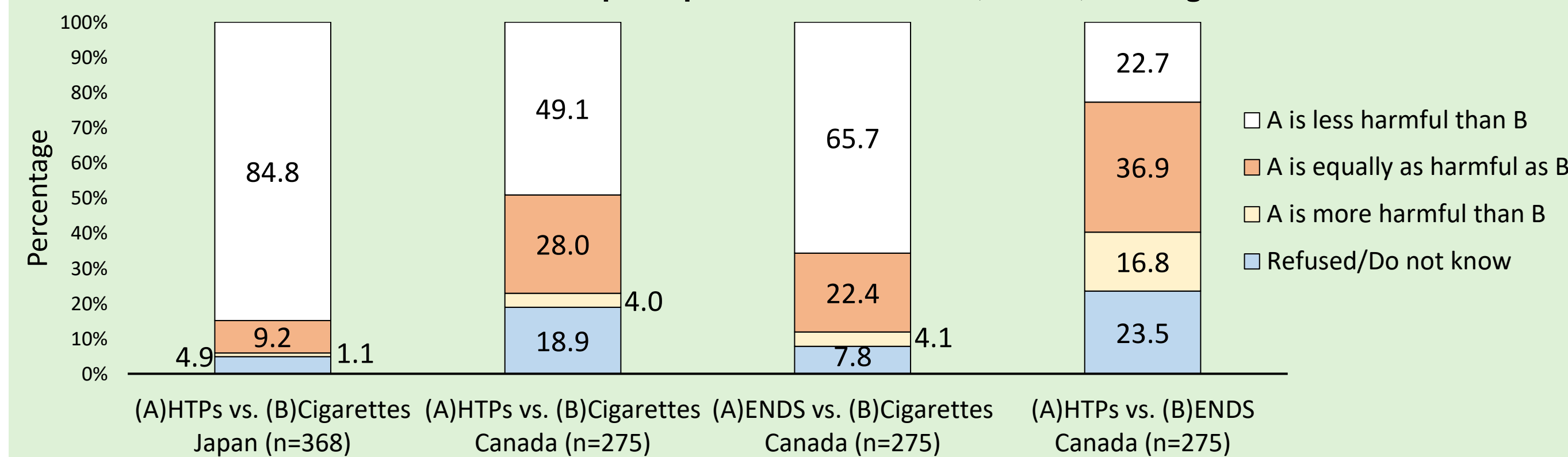
DISCLOSURES

KMC has received payment as a consultant to Pfizer, Inc., for service on an external advisory panel to assess ways to improve smoking cessation delivery in health care settings. KMC also has served as paid expert witness in litigation filed against the tobacco industry. GTF has served as an expert witness on behalf of governments in litigation involving the tobacco industry. MLG has received a research grant from Pfizer and served as a member of scientific advisory board to Johnson & Johnson. All other authors have no conflicts of interest to declare.

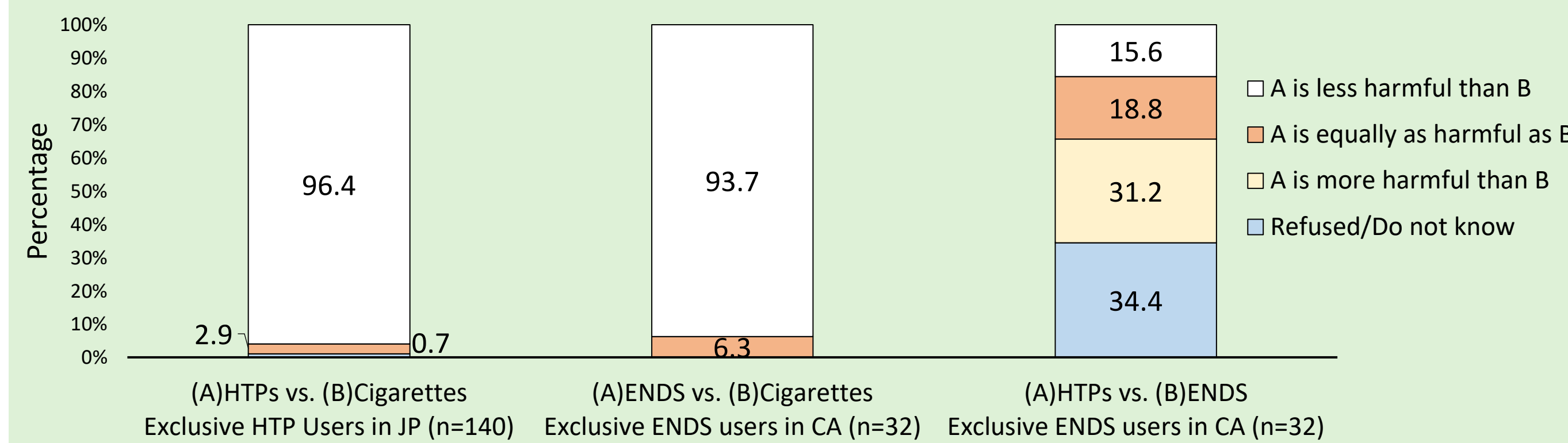
Presented at the Society for Research on Nicotine and Tobacco (SRNT) Annual Meeting March 11-14, 2020, New Orleans, US
Contact: Edward Sutanto (edward.sutanto@roswellpark.org)

RESULTS

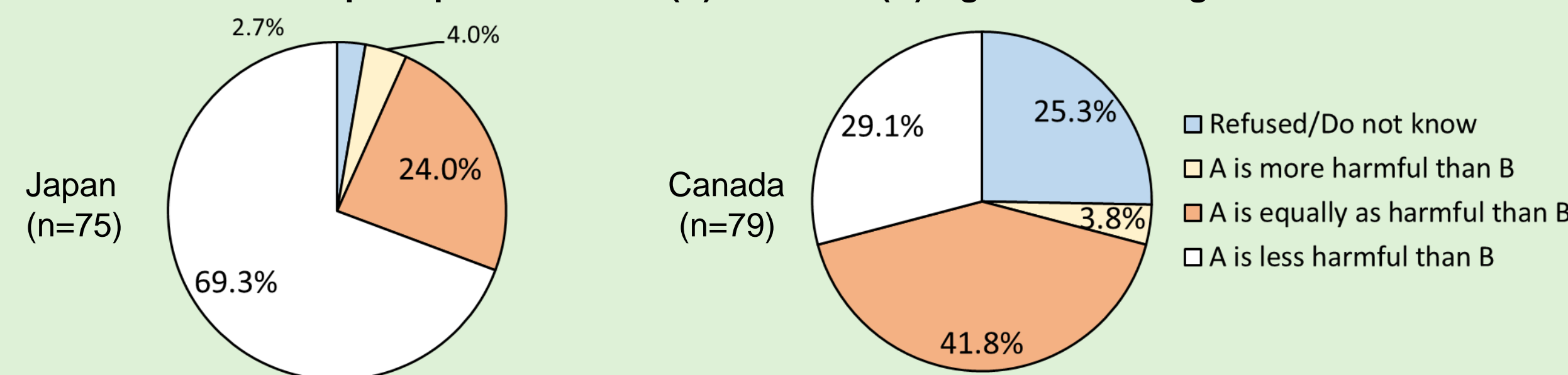
Overall relative harm perception between HTPs, ENDS, and cigarettes



Relative harm perception between HTPs, ENDS, and cigarettes among exclusive ATP users



Relative harm perception between (A)HTPs and (B)Cigarettes among non-users



RESULTS

Adjusted logistic regression analyses of harm perception that alternative tobacco products (ATPs) are equally or more harmful than cigarettes, N=643.

	n (% total sample)*	%†	Alternative Tobacco Products (ATPs) are equally or more harmful than cigarettes		
			Adjusted OR (95% CI)	p	
Country	Japan Canada	368 (57.2) 275 (42.8)	17.9 33.4	Ref 1.42 (0.86-2.35)	0.164
Tobacco Use Status	Non-user Exclusive smoker Exclusive ENDS user Exclusive HTP user Concurrent cigarette-ENDS user Concurrent cigarette-HTP user	154 (24.0) 153 (23.7) 32 (5.0) 141 (21.9) 79 (12.3) 84 (13.1)	40.9 30.7 12.5 7.1 29.1 13.1	Ref 0.65 (0.40-1.06) 0.16 (0.05-0.49) 0.14 (0.06-0.30) 0.50 (0.26-0.96) 0.27 (0.13-0.58)	0.083 0.001 0.039 0.001
Gender	Male Female	388 (60.3) 255 (39.7)	22.2 28.2	Ref 1.07 (0.71-1.61)	0.727
Age (years old)	20-29 30-39 40-59 60 and older	63 (9.8) 204 (31.7) 332 (51.6) 44 (6.9)	25.4 24.0 24.1 29.5	Ref 0.90 (0.45-1.79) 1.08 (0.55-2.11) 1.12 (0.44-2.84)	0.765 0.825 0.810
Education	Low Moderate High Refused/do not know	172 (26.7) 197 (30.6) 273 (42.5) 1 (0.2)	18.0 28.9 25.6 0.0	Ref 1.51 (0.88-2.61) 1.21 (0.71-2.06) -	0.138 0.476
Income	Low Moderate High Refused/do not know	88 (13.7) 250 (38.9) 277 (43.1) 28 (4.3)	20.4 24.0 27.8 10.7	Ref 1.06 (0.56-2.02) 1.03 (0.53-1.99) 0.56 (0.14-2.23)	0.838 0.926 0.417

Abbreviation: CI: confidence interval; HTP: heated tobacco product, ENDS: electronic nicotine delivery systems, OR: odds ratios, Ref: reference category. * represents column percentages; † represents row percentages.

CONCLUSION

- Overall, respondents in Japan perceived HTPs to be less harmful than cigarettes compared to Canada.
- Similar proportions of exclusive HTP users in Japan & exclusive ENDS users in Canada perceived their respective ATPs as less harmful than cigarettes.
- Perceived relative harms of using HTPs among non-users appears to differ between Japan and Canada.

ITC Project Research Organizations



ITC Project Research Support



Core support provided by the U.S. National Cancer Institute (P01 CA200512)

Core support provided by a Canadian Institutes of Health Research Foundation Grant

