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Contents lists available at ScienceDirect

Clinical Microbiology and Infection

journal homepage: www.clinicalmicrobiologyandinfection.com



Letter to the Editor

Coronavirus disease 2019 experts appearing on Japanese television: their characteristics and financial conflicts of interest with pharmaceutical companies

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ARTICLE INFO

Article history:
Received 28 September 2020
Received in revised form
27 November 2020
Accepted 1 December 2020
Available online 11 December 2020

Editor: L. Leibovici

To the Editor,

Global efforts to regulate financial conflicts of interest (FCOI) between pharmaceutical companies and health-care sectors have gained popularity over the past decade. This arose primarily over concerns of the inappropriate influence FCOI may have on delivery of patient-centred care [1]. However, regulatory practices involving FCOI between pharmaceutical companies and the media industry attract little attention. Coronavirus disease 2019 (COVID-19) is currently the centre of attention among global and domestic mass media, with numerous daily reports. Among them, television in particular is influential [2], and various academic experts appear to offer advice, suggestions and personal comments concerning COVID-19. We aimed to elucidate the characteristics of those medical experts who were appearing frequently on television discussing COVID-19, and to investigate their FCOI with pharmaceutical companies in Japan.

Nihon Monitor Co., Ltd, identified the medical experts featured on all televised programmes related to COVID-19 by six nation-wide non-satellite television channels based in Tokyo. All broadcasts occurred between 1 January and 30 June 2020. Using 2017 FCOI data disclosed by pharmaceutical companies belonging to the Japan Pharmaceutical Manufacturers Association (JPMA), we identified payments for lectures, manuscript preparation and consultations, as described previously [3]. We also collected demographic data on medical experts, including gender, specialty, and whether they provided medication using web-accessible information. Finally, we accessed PubMed for academic papers related to COVID-19 written by them as of 14 August 2020.

We performed a descriptive analysis of the number of television programmes, payments received and academic articles associated with each expert. Based on the JPMA report [4], we calculated the total payment amount made by each pharmaceutical company and compared the means of these payments between those companies pursuing the manufacture of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) test-kits, therapeutics or vaccines, against those that were not (see Supplementary material, Table S1). We converted Japanese yen to US dollars using the 2017 average monthly exchange rate of 112.1 yen per dollar.

Table 1 shows the rankings and characteristics of the 11 most frequently appearing medical experts on Japanese television. The participants were overwhelmingly male (90.9%), and 54.5% of these experts provided medical care in hospitals or clinics. Only one expert had published a single academic paper on COVID-19. Financially, seven (63.6%) received a combined \$317 324 in payments during 2017 made by 19 (26.0%) of the 73 pharmaceutical companies belonging to the JPMA. Companies with SARS-CoV-2 products made average (standard deviation) payments to the seven experts of \$19 850 (\$22 871). For those companies lacking SARS-CoV-2 products, the average (standard deviation) payment was \$12 371 (\$9706). Notably, three experts received more than \$10

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Table 1Demographic and financial characteristics of the ten most featured COVID-19 medical experts on television between January and June of 2020

Ranking of the most common experts	Name	Gender	Clinician	Position	Specialty	Number of television appearances ^a , $n(%)$	Total payment, \$	Fees for lecture, \$	Number of pharmaceutical companies related to SARS-CoV-2 products	Total received from pharmaceutical companies related to SARS-CoV-2 products, \$	Top paying pharmaceutical companies		Number of published
											Company name	Payment value	articles related to COVID-19
1	Yoshihito Niki	Male	Yes	Visiting professor	Infectious diseases	285 (20.8)	88 848	60 897	7	63 854	Pfizer, Inc.	25 547	0
2	Harue Okada	Female	No	Professor	Infectious diseases	267 (19.5)	0	0	0	0	None	0	0
3	Yasutaka Mizuno	Male	Yes	Clinic director	Infectious diseases	161 (11.8)	1689	1689	2	1689	Daiichi Sankyo Co., Ltd.	993	0
4	Tetsuya Matsumoto	Male	Yes	Professor	Microbiology	129 (9.4)	57 158	48 134	4	42 423	MSD K.K.	23 844	0
5	Intetsu Kobayashi	Male	No	Professor	Infectious diseases	106 (7.7)	0	0	0	0	None	0	0
6	Takeshi Terashima	Male	Yes	Professor	Pulmonology	90 (6.6)	6237	5740	4	4783	Novartis Pharma K.K.	2300	0
7	Yoshihiro Kitamura	Male	No	Specially appointed professor	Haematology	80 (5.8)	0	0	0	0	None	0	0
8	Hiroshige Mikamo	Male	Yes	Professor	Infectious diseases	67 (4.9)	154 679	106 915	8	102 783	FUJIFILM Toyama Chemical Co., Ltd.	30 798	0
9	Satoshi Hori	Male	No	Professor	Infectious diseases	62 (4.5)	2761	1913	1	847	Taisho Pharma Co., Ltd.	993	0
10	Eiji Kusumi	Male	Yes	Clinic director	Haematology	61 (4.5)	5952	3568	1	1970	Otsuka Pharmaceutical Co., Ltd.	3568	1
10	Yoshiaki Katsuda	Male	No	Professor	Psychiatry	61 (4.5)	0	0	0	0	None	0	0
Total			6			1369	317 324	228 857	11	218 350			1

Abbreviations: COVID-19, coronavirus disease 2019; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2; \$, US dollars (at 112.1 yen per dollar).

^a We included the following six nationwide non-satellite television channels in the calculation: the Japan Broadcasting Corporation (NHK General TV but not NHK Educational TV), TV Asahi Corporation, Fuji Television Network, Inc., Tokyo Broadcasting System Television, Inc., Yomiuri Telecasting Corporation and TV Tokyo Corporation.

000 each from Fujifilm Toyama Chemical Co., MSD K.K. and Pfizer, Inc., all of which are developing potential COVID-19 therapeutics and vaccines

Seven of the 11 most frequently cast medical experts on Japanese television during the first 6 months of the COVID-19 pandemic had financial relationships with pharmaceutical companies dating back to 2017. Medical experts on television play a vital role in Japanese society for effectively conveying information to the general public about COVID-19. However, the FCOI between these experts and pharmaceutical companies, especially those with COVID-19 products, warrants caution in interpreting their comments. Although lecture or public-speaking fees paid by pharmaceutical companies are not intrinsically corrupt, such financial ties may lead to socially and politically problematic situations, including biased statements. Importantly, concern over FCOI stems from a lack of transparency as media-related entanglements are rarely disclosed on television programmes or related websites.

Interestingly, academic achievement on COVID-19 contributed little to the casting of experts. Although scholarly works do not necessarily guarantee an excellent ability to communicate with the general public, the absence of distinguished experts probably compromised the general public's understanding and uptake of newly published, peer-reviewed research findings on COVID-19.

Notably, just over half of the medical experts appearing on television were practicing clinicians and predominantly male. Consequently, there were no practicing female clinicians, reflecting how the male dominance in Japanese medical society also extends to television programming. This finding suggests that the voices of females working for COVID-19-related care may be underrepresented in media outlets, though medical care is delivered mainly by a female workforce. Although the number of female researchers has been consistently increasing each year in Japan, in 2018, the proportion of female physicians ranked the lowest, at 21.8%, among the 34 countries belonging to the Organization for Economic Cooperation and Development [5]. Despite expanding roles of the internet, television remains the most reliable and important means of acquiring information for the public worldwide [2]. Given the impact of television on the public [2], fair and equal casting of medical experts could be significant in establishing effective and unbiased health communication in television programmes, not only in Japan but also in other countries.

A limitation of this study is that we could not evaluate experts' actual comments in the television programmes or consider financial relationships between pharmaceutical and television companies. Nor could we include the payments from 2018 onwards because the 2017 payment information was the latest available for analysis. In addition, we do not know whether the experts disclosed any potential conflicts to the media organizations that booked them to appear.

Authors' contributions

Conceptualization and methodology were by AM, AO, HS, TS, RS and TT. Software, data curation, formal analysis and investigation were by AM. Visualization was by AM, AO and TT. The original draft was written by AM, AO and TT, who also reviewed and edited the article. The study was supervised by AO and TT, who also performed the project administration.

Transparency declaration

Outside the scope of the submitted work, personal fees were received by Dr Saito from Taiho Pharmaceutical Co., Ltd, from Medical Network Systems by Drs Ozaki and Tanimoto, and from Bionics Co., Ltd, by Dr Tanimoto. The remaining authors declare no conflicts of interest. This study was funded in part by the Medical Governance Research Institute, a nonprofit enterprise that receives donations from pharmaceutical companies, including Ain Pharmaciez, Inc, other organizations, and private individuals. This study also received support from the Waseda Chronicle, an independent nonprofit news organization dedicated to investigative journalism. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Acknowledgements

The authors wish to thank Erika Yamashita for collecting data and Professor Andy Crump and Dr Derek Hagman for constructive advice for this study.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.cmi.2020.12.002.

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