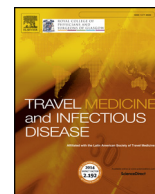




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Japanese tourists travelling in India have poor pre-travel preparedness

Dear Editor,

Illness or injury while travelling forces travellers to change or cancel their planned itinerary, and brings a range of other disadvantages. In Western countries, travel medicine is well recognised [1]. Tourists from those countries take more preventive measures before trips, such as seeking pre-travel health advice and pre-travel vaccinations than Asian travellers [2,3]. In contrast, travel medicine is less recognised in Japan, and the travel-related vaccination rate is much lower in Japanese travellers [4-7]. This situation may increase Japanese travellers' risk for contracting diarrhoea and other health problems during and after their trips. Therefore, we considered it was necessary to clarify possible risk factors for common traveller's illnesses and injuries, and provide evidence-based travel-related health information for the benefit of travellers, health authorities and health practitioners. Such information will help to prevent travellers' illness or injury while travelling, and enable them to travel safely according to their planned schedule. Thus, we preliminarily investigated the characteristics of Japanese backpackers travelling in India and their risk preparedness status against health problems.

We collected data at the guesthouse in Delhi, India. This guesthouse is located in Paharganj, in the centre of New Delhi and provides inexpensive accommodation for Japanese tourists. The survey was conducted from 2 February 2018 to 31 March 2018. Participants eligible for this study were Japanese tourists aged 18-80 years at the time of providing informed consent, who were staying at the guesthouse. We used a web-based questionnaire service (Questant, Macromill, Inc. Tokyo, Japan) to collect data from survey participants because the higher response rate than a paper-based questionnaire was expected from our preliminary surveys including interviews to the guesthouse staff and travellers. Participants accessed the questionnaire website using the tablet devices provided or their own device. The survey covered: participants' general information (e.g. age, sex, occupation); information on their present visit to India (e.g. date of entry); history of travelling overseas; history of travelling in India; and risk preparedness status against illness and injury in the present trip (i.e. collecting information on health and safety before departure, having travel-related vaccinations in the past and for the present trip, bringing anti-diarrhoeal medicines and antibiotics on the present trip). The sources of information covered were friends/acquaintances, travellers' blog/websites, travel agencies, guidebooks, websites of Ministry of Foreign Affairs, Japan, Websites of Ministry of Health, Labour and Welfare, Japan, and Websites of overseas official bodies. The vaccinations covered were hepatitis A, hepatitis B, tetanus, rabies, yellow fever, Japanese encephalitis, typhoid, polio, meningococcus, and others. We summarised participants' characteristics and risk preparedness status by descriptive statistics using Stata statistical software (Stata SE version 12.1, Stata Corp LP, TX, USA). Approval for this study was obtained from the Institutional Ethics Committee of Okayama University

Graduate School of Medicine, Dentistry and Pharmaceutical Sciences and Okayama University Hospital (No. Ken-1509-027).

There were 98 participants in the survey. The mean age (standard deviation, range) was 25.7 years (6.5 years, 19-50 years). The sex ratio was almost equal, although the proportion of males was a little higher (55.1%). Almost half of the participants were students (49.0%). Although most participants had experience of travelling overseas before their present trip (88.8%), most were visiting India for the first time (84.7%). Table 1 shows participants' risk preparedness status. In total 66.3% of participants had collected information related to health and safety before departure. Sources of information that were frequently used were travellers' blogs/websites, guidebooks and friends/acquaintances. Websites of official bodies were less used information sources: Ministry of Foreign Affairs, Japan (21.5%); Ministry of Health, Labour and Welfare, Japan (6.2%); and overseas official bodies such as US Centers for Disease Control and Prevention and the World Health Organization (7.7%). In total, 27.6% of participants had received vaccinations in the past and 11.2% had been vaccinated for their present trip. The vaccination received most frequently for the present trip was hepatitis A (9.2%). The proportions of participants who brought anti-diarrhoeal medicines and antibiotics were 34.7% and 16.3%, respectively. Overall, 82.7% of participants had taken any one of the above five measures.

In the present study, we found that Japanese travellers were travelling in India without sufficient risk preparation, especially in having travel-related vaccinations. Our result is consistent with previous studies [4-7], and confirms the lack of immunisation among Japanese travellers. About two-thirds of our participants had collected pre-travel information on health and safety. Commonly used information sources were traveller's blogs/websites, guidebooks and friends/acquaintances. In contrast, information from official bodies was less accessed. Some measures should be taken to inform travellers about the existence of reliable information for travelling (e.g. official bodies' websites) and encourage them to access this information.

The number of foreign tourists in India has continuously increased. Our study will contribute to improving the health and safety of travellers to India as well as other countries by identifying risk factors and disseminating preventive measures against illness and injury during travel.

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Conflicts of interest

None.

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Table 1
Participants' risk preparedness status.

	Participants	
	N = 98	
Collecting information on health and safety, n (%)		
No	33	(33.7)
Yes	65	(66.3)
Sources of information, n (%) ^a		
Friends/acquaintances	26	(40.0)
Travellers' blogs, websites, etc.	37	(56.9)
Travel agencies	6	(9.2)
Guidebooks	30	(46.2)
Websites of Ministry of Foreign Affairs, Japan	14	(21.5)
Websites of Ministry of Health, Labour and Welfare, Japan	4	(6.2)
Websites of overseas official bodies ^b	5	(7.7)
Having travel-related vaccination in the past, n (%)		
No	71	(72.5)
Yes	27	(27.6)
Types of vaccination, n (%)		
Hepatitis A	19	(19.4)
Hepatitis B	8	(8.2)
Tetanus	14	(14.3)
Rabies	13	(13.3)
Yellow fever	13	(13.3)
Japanese encephalitis	9	(9.2)
Typhoid	7	(7.1)
Polio	6	(6.1)
Meningococcus	1	(1.0)
Others	2	(2.0)
Having travel-related vaccination for the present trip, n (%)		
No	87	(88.8)
Yes	11	(11.2)
Types of vaccination, n (%)		
Hepatitis A	9	(9.2)
Hepatitis B	0	(0.0)
Tetanus	4	(4.1)
Rabies	4	(4.1)
Yellow fever	7	(7.1)
Japanese encephalitis	3	(3.1)
Typhoid	4	(4.1)
Polio	1	(1.0)
Meningitis	1	(1.0)
Others	0	(0.0)
Bringing anti-diarrhoeal medicines, n (%)		
No	64	(65.3)
Yes	34	(34.7)
Bringing antibiotics, n (%)		
No	82	(83.7)
Yes	16	(16.3)
Any of above five measures		
No	17	(17.4)
Yes	81	(82.7)

^a Percentage of participants among those who answered "Yes" to the question about whether they had collected information on health and safety.

^b Official bodies such as Centers for Disease Control and Prevention (US) and the World Health Organization.

Author's contribution

All authors contributed to the study.

The study protocol and the contents of the questionnaires were created by MY, TT and AT with the help of MH. Recruitment of participants and data collection on site was done by AT. Descriptive statistics was performed by AT. Interpretation of the results was done by all authors. All authors have read and approved the final manuscript for publication.

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