

Original Article

Medical and Psychological Problems Faced by Young Australian Gap Year Travellers

Running title: Gap year travellers

Luis Furuya-Kanamori^{1*} *MBBS, MEpi, MPH, PhD*; Deborah Mills^{2*} *MBBS, MPHTM*; Sarah Sheridan³ *BMed, MAppEpid*; Colleen Lau^{2,3} *MBBS, MPH&TM, PhD*

¹ Department of Public Health, College of Health Sciences, Qatar University, Doha, Qatar

² Travel Medicine Alliance Clinics, Brisbane, Australia

³ Research School of Population Health, Australian National University, Canberra, Australia

* Authors contributed equally

Meeting presentation: Preliminary results of the study were presented at the 15th Conference of the International Society of Travel Medicine in Barcelona (14-18 May 2017).

Funding: None

Post-publication corresponding author:

Dr. Colleen Lau

Department of Global Health, Research School of Population Health, Australian National University
Building 62 Mills Road, Canberra, ACT 2601, Australia

E: colleen.lau@anu.edu.au

Phone: +61 402134878

Abstract

Background: Gap year travellers can potentially be exposed to many infectious diseases and other travel-related health problems including injuries and psychological problems. Currently, there is little information on health and wellbeing of this particular group of travellers.

Methods: Participants were recruited from an organisation that specialised in organising international gap year placements. Gap year travellers were asked to complete a pre-departure survey on demographics, placement destination and duration, previous travel experience, hobbies, risk taking behaviour, anticipated problems during the placement, and pre-travel preparations. After the placement, participants were asked to complete a post-trip survey on their experiences, problems, health issues, and medical treatment required.

Results: 88 and 34 gap year travellers aged 17–23 years completed pre- and post-placement surveys respectively. The duration of placements ranged from 3–12 months. Psychological stressors were frequently reported (n=26 [76.5%] felt home sick; n=18 [52.9%] experienced culture shock; n=17 [50.0%] had difficulty communicating with the locals). The majority of participants (91.2%) tried to work out a solution for the stressor on their own. Twenty-eight (82.4%) participants reported medical problems during their placement; the most common problems were sunburn (n=19; 55.9%), respiratory infections (n=15; 44.1%), weight change (n=14; 41.2%), and diarrhoea/food poisoning (n=13; 38.2%). Three participants (3.4%) were admitted to hospital; for a muscle injury, head injury, and skin infection after getting a tribal tattoo.

Conclusions: Psychological stressors were common, but most did not seek help. Some medical problems encountered during their placement may have been preventable with improved pre-departure preparation.

Introduction

Gap years are becoming increasingly popular worldwide, with travellers taking a few months to a year off after high school before they embark on tertiary education or employment.¹ Many gap year travellers venture overseas and engage in a wide range of activities including work, volunteering, community service, language studies, home stays, and cultural immersion.^{1,2} In Australia, a number of organisations are set up to specifically facilitate international volunteering opportunities for young people and offer placements in both developed and developing countries around the world.

The number of gap year travellers going to developing countries has gradually risen over the years.¹ Depending on their destination, gap year travellers could be exposed to a wide range of travel-related infectious diseases (e.g. food and water-borne illnesses such as hepatitis A, typhoid, and travellers' diarrhoea; mosquito-borne infections such as dengue and malaria; and rabies from animal bites)³⁻⁶ and other travel-related health problems including injuries, culture shock, and psychological problems.^{7,8}

Despite the increasing popularity in this particular form of travelling, there is currently little information available on health and wellbeing of gap year travellers. Therefore, the current study was conducted to improve current knowledge of common health problems encountered by gap year travellers undertaking volunteer placement to provide more targeted pre-travel advice for this specific group of travellers.

Materials and methods

Study setting and participants

Participants were recruited from an international youth development non-profit organisation specialised in gap year activities, including diverse, challenging and structured international volunteering placements. Many gap year travellers embark on placements in communities and cultures different to their own, including in developing countries. Gap year travellers are supported both pre-departure and whilst on placement. Before departure, all the participants undergo medical screening by a Medical Advisor. All participants are invited to a pre-departure briefing event where workshop sessions cover culture shock, safety and security, practical preparation and common challenges as well as have access to e-learning modules before departure. Whilst on placement gap year travellers attend an orientation on arrival and then are supported by in-country staff. Volunteers have a dedicated mentor at their placement to support them with day to day issues and guidance. Volunteers are also visited by the staff to check on their progress and they have access to a 24/7 emergency number manned by experience staff in Australia.

Gap year travellers were prospectively recruited before their departure to their placement between December 2013 and April 2014. All travellers aged 17 to 25 years with an assigned overseas placement were invited to participate in the study. The study received the approval of the Human Research Ethics Committee at The University of Queensland (2013001575). All participants provided written informed consent for their inclusion in the study.

Data collection

Two online self-administered surveys were used to collect information. The pre-departure survey was used to obtain demographic data, previous travel experience, placement destination and duration, personal hobbies and self-management, anticipated travel and health issues, and pre-travel preparation. Upon their return from the overseas placement, a post-trip survey was sent to the

participants to collect information regarding their experiences overseas, issues around health and wellbeing, and challenges encountered. For participants who returned before the full duration of their placement, the reasons for non-completion were also ascertained. Reminders were sent to those participants who did not respond the online surveys.

Statistical analyses

All data were de-identified before statistical analyses. Descriptive statistics (i.e. frequency and central tendency distribution) were conducted using Stata MP 14 (StataCorp, College Station, TX, USA).

Results

Between December 2013 and April 2014, 185 young gap year travellers were invited to participate, 88 (47.6%) of them agreed and completed the pre-departure survey. The majority of the participants were females (72.7%) and the median age was 18.3 years (interquartile range [IQR] 17.9-18.7 years). All participants were Australians except for two, who were New Zealander and American. Although the vast majority of the participants reported having financial responsibilities (e.g. managed their own budget); nearly half of them reported that they have never been involved in household chores such as doing the laundry, shopping for groceries, cooking meals or washing dishes (Table 1). The main motivations to volunteer were to visit new places, contribute something to the community, and gain new skills. The placement details are reported in Table 2. The most common destination was United Kingdom (n=22; 25%) followed by Canada (n=15; 17.1%) and China (n=10; 11.4%). Only 18 participants (20.5%) reported having travelled previously to their placement destination. The median scheduled duration of the placement was 6 months (IQR 5-8 months). Most participants reported that they planned to stay at school owned apartment/houses (n=25; 24.0%), cabin/outdoor education centre (n=22; 21.2%) and/or within school boarding houses (n=18; 17.3%). Among the types of work assigned to the participants for the placement, teaching (n=35; 39.8%), outdoor activities instructor (n=22; 25.0%) and school assistant (n=20; 22.7%) were the most commonly reported; yet only 20 participants (22.7%) indicated having previous experience in the type of work allocated.

In preparation for their travel, the majority of the participants reported reading the information provided by the gap year organiser [n=71; 80.7%], contacting the manager in their designated placement location [n=64; 72.7%], or speaking to previous gap year participants [n=59; 67.0%]). Although, pre-departure medical screening (often done by a general practitioner) is compulsory, only a few of them sought specialised travel medicine advice (attended a travel medicine clinic [n=24; 27.3%], received a travel medicine/first aid kit [n=23; 26.1%], or accessed information about how to deal with common health problems [n=40; 45.5%]).

After the placement, 34 participants completed the post-travel survey. The majority (82.5%) participated in outdoor activities during their placement. All participants travelled to rural areas in their placement country and 22 (64.7%) also travelled to other countries after the placement. The majority of the participants travelled with friends (n=32; 94.1%), and independently (n=30; 88.2%) rather than with organised tour groups. Twenty-two (64.7%) and three (8.8%) participants reported drinking excessively and using illicit drugs during the placement, respectively. All except for one tried new foods (Table 3).

Psychological stressors were common during the placement. The majority of the participants (91.2%) tried to work out a solution for the stressor on their own. Talking to fellow volunteers or team members and calling home to talk to friends/family were also frequent coping mechanisms (Table 4). Twenty-eight (82.4%) participants reported falling ill at some stage of their placement. Nineteen participants sought medical attention, of which 10 visited a doctor or a medical centre on three or more occasions. The most common medical problems were sunburn (n=19; 55.9%), respiratory infections (n=15; 44.1%), weight change (n=14; 41.2%), diarrhoea/food poisoning (n=13; 38.2%) and dehydration (n=13; 38.2%). Three participants were admitted to hospital, one for a muscle injury, one for a head injury, and one for skin infection following a tribal tattoo (Table 5).

Nineteen gap year travellers from the same organising company did not complete the placement in 2014. Among the eight participants that reported reasons for returning earlier than planned, family reasons and homesickness (n=3) were the most common. Two participants that travelled to Japan reported culture shock and decided to return. The other reasons for not completing the placement were infection after getting a tribal tattoo that required multiple hospitalisations (n=1), not liking the accommodation and placement arrangements (n=1), and being asked to leave after being involved in a fight (n=1).

Discussion

In recent years, taking a gap year has become a recognised, institutionalised and professionalised phenomenon.⁹ The number of gap year travellers is likely to continue to rise and improved understanding about their special needs is required to provide clinicians, travellers and placement organisers with added confidence when preparing gap year travellers for their placements.

One of the objectives of gap year programmes is to improve cross-cultural understanding of the local culture and to contribute in positive ways to the community in which the travellers are living.¹⁰ However, it has been questioned whether the gap year travellers have sufficient skills to accomplish these objectives.² In the current study, we found that most of the gap year travellers were not properly prepared for their placements. Nearly 80% of the participants reported not having the skills or prior experience for the job that they were assigned to during their placement. Furthermore, less than half of them had experience in common household chores – a likely source of stress in adapting to the home environment during the placement. Gap year travellers' lack of skills and psychological experience in the work and home environments can have negative impact on both the community and the traveller, leading to cross-cultural misunderstanding and the reinforcement of cultural stereotypes.^{11,12} The negative impact on the travellers was reflected by the high prevalence of psychological stressors observed among the participants, as well as by the participants who decided to return before the end of their placement due to culture shock. Evidence based pre-travel preparation and mechanisms to deal with psychological stressors are needed to minimise the negative impact of failure on gap year travellers.

Medical conditions experienced by participants during their placement were preventable. Common problems such as sunburn, dehydration and skin infections could be prevented or reduced by improving pre-trip education about environmental risks, and improving skills in basic first aid such as wound management. Two participants engaged in outdoor and risky activities that led to hospital admissions for muscle/joint and head injury. Accidents and injuries are known to be leading causes of

hospitalisations and deaths in travellers,⁸ and gap year travellers could potentially be at even higher risk because of their extended travel and exposure to more local conditions. Furthermore, one participant did not complete the placement due to skin infection following a tribal tattoo that required multiple hospital admission. Gap year travellers should be advised about the risk of tattoos and body piercing, not only in relation to skin infections but also to blood-borne diseases such as hepatitis B and C, and HIV. Therefore, as part of the pre-departure preparation, it is recommended that gap year travellers, particularly those travelling to developing countries, attend travel medical consultations for medical advice, vaccinations, prophylactic medications (e.g. malaria prophylaxis if required), and a medical/first aid kit, as well as receiving information about common health problems they may face during the placement.

Our findings should be considered in light of the study's limitations. Given the small sample size of the study, statistical analyses of factors such as sex, age, country of destination (high-income vs middle-/low-income country) or language spoken in the country of destination and volunteers requiring medical assistance, developing psychological stressors, or failing to complete the overseas placement and returning home early were not possible. Despite the organizers of the gap year programme sending the surveys on multiple occasions and offering small incentives such as gift cards, the participation rate was only 48%. Furthermore, only about 40% of participants who completed the pre-trip questionnaire also completed the post-trip questionnaire, and it was therefore difficult to make accurate comparisons between the travellers' pre-trip expectations and their actual experiences. Previous studies that investigated medical problems among volunteers working in international social projects had even lower response rates;^{13,14} which may have contributed with the very little literature currently available on the health and wellbeing of this group of travellers. Gap year travellers were recruited from one organization in an Australian city, thus the results may not be representative of the general population of gap year travellers globally.

In this exploratory study, we identified that common health problems that participants encountered during their placements (e.g. sunburn, dehydration) can be prevented with adequate pre-departure preparation. Future studies need to investigate the best strategies for implementing pre-departure preparation to ensure that gap year travellers are physically, mentally, and emotionally prepared for their placements.

Competing interests: All the authors report no conflicts of interest relevant to this article.

Authors' contribution: DM and CL designed the study and collected the data. LFK and SS conducted the statistical analyses. LFK drafted the manuscript. DM, SS and CL critically revised the manuscript. LFK, DM, SS and CL read and approved the final version of the manuscript.

LFK and DM contributed equally to this article and both should be considered first authors.

Financial disclosure: CL is funded by an Australian National Health and Medical Research Council Early Career Fellowship (1109035).

References

1. Tourism Research and Marketing. Volunteer tourism : a global analysis : a report. Arnhem, The Netherlands: ATLAS; 2008.
2. Callanan M, Thomas S. Chapter 15 - Volunteer tourism: Deconstructing volunteer activities within a dynamic environment A2 - Novelli, Marina. Niche Tourism. Oxford: Butterworth-Heinemann; 2005.
3. Boggild AK, Yohanna S, Keystone JS, Kain KC. Prospective analysis of parasitic infections in Canadian travelers and immigrants. *J Travel Med* 2006; 13: 138-44.
4. Freedman DO, Weld LH, Kozarsky PE, et al. Spectrum of disease and relation to place of exposure among ill returned travelers. *N Engl J Med* 2006; 354: 119-30.
5. O'Brien DP, Leder K, Matchett E, Brown GV, Torresi J. Illness in returned travelers and immigrants/refugees: the 6-year experience of two Australian infectious diseases units. *J Travel Med* 2006; 13: 145-52.
6. Sung V, O'Brien DP, Matchett E, Brown GV, Torresi J. Dengue Fever in travelers returning from southeast Asia. *J Travel Med* 2003; 10: 208-13.
7. Koyama A, Niki M, Matsuoka H, et al. Psychological Problems for Non-Japanese Speaking Patients in Japan. *J Travel Med* 2012; 19: 324-6.
8. Tonellato DJ, Guse CE, Hargarten SW. Injury Deaths of US Citizens Abroad: New Data Source, Old Travel Problem. *J Travel Med* 2009; 16: 304-10.
9. Simpson K. 'Doing development': the gap year, volunteer-tourists and a popular practice of development. *J Int Dev* 2004; 16: 681-92.
10. Matthews A. Negotiated selves: exploring the impact of local-global interactions on young volunteer travellers in Lyons (Ed), Wearing (Ed). *Journeys of discovery in volunteer tourism: International case study perspective*. Wallingford: CABI; 2008.
11. Raymond E.M., Hall C.M. The Development of Cross-Cultural (Mis)Understanding Through Volunteer Tourism. *J Sustainable Tour* 2008; 16: 530-43.
12. Guttentag DA. The possible negative impacts of volunteer tourism. *Int J Tour Res* 2009; 11: 537-51.

13. Kupper T, Rieke B, Neppach K, Morrison A, Martin J. Health hazards and medical treatment of volunteers aged 18-30 years working in international social projects of non-governmental organizations (NGO). *Travel Med Infect Dis* 2014; 12: 385-95.
14. Bhatta P, Simkhada P, van Teijlingen E, Maybin S. A questionnaire study of Voluntary Service Overseas (VSO) volunteers: health risk and problems encountered. *J Travel Med* 2009; 16: 332-7.

Table 1. Participants' characteristics

	N (%)*
Demographic	
Females	64 (72.7)
Age (in years)	
17	19 (21.6)
18	57 (64.8)
19	5 (5.7)
20	3 (3.4)
21 or over	4 (4.5)
Nationality	
Australian	86 (97.7)
New Zealander	1 (1.1)
American	1 (1.1)
Financial responsibilities	
Manage their own finances/budget	65 (73.9)
Pay their own bills (e.g. credit card, phone)	49 (55.7)
Never had financial responsibilities	20 (22.7)
Household chores they have never done	
Do the laundry	51 (58.0)
Shop for groceries	42 (47.7)
Cook meals	41 (46.6)
Wash dishes	40 (45.5)
Clean the house	39 (44.3)
Make their own bed	22 (25.0)
Care for young children/siblings	18 (20.5)

* 88 participants completed the pre-departure survey.

Table 2. Placement details

	N (%)*
Country of placement	
United Kingdom	22 (25.0)
Canada	15 (17.1)
China	10 (11.4)
Poland	8 (9.1)
Malawi	7 (8.0)
Japan	6 (6.8)
Vanuatu	6 (6.8)
Vietnam	6 (6.8)
Fiji	5 (5.7)
India	3 (3.4)
Planned duration of placement (in months)	
≤ 3	3 (3.4)
4-6	48 (54.5)
7-9	20 (22.7)
10-12	17 (19.3)
Accommodation	
School owned apartment/house	25 (24.0)
Cabin/outdoor education centre	22 (21.2)
Within school boarding house	18 (17.3)
Homestay	12 (11.5)
Own house/hut in village	10 (9.6)
Private room onsite host facility	9 (8.7)
Other	8 (7.7)
Type of work during the placement	
Teacher	35 (39.8)
Outdoor activities instructor	22 (25.0)
School assistant	20 (22.7)
Caring assistant	5 (5.7)
Medical assistant	4 (4.6)
Community worker	1 (1.1)
Sports coach	1 (1.1)

* 88 participants completed the pre-departure survey.

Table 3. Activities during the placement

	N (%)*
Outdoor activities	
Swimming in the ocean	21 (61.8)
Rock climbing	13 (38.2)
Rode a motorbike or quad bike	7 (20.6)
Horse riding	2 (5.9)
Bungee jumping and/or skydiving	2 (5.9)
Scuba diving	1 (2.9)
Travel	
Visited rural areas in their placement country	34 (100.0)
Visited urban areas in their placement country	33 (97.1)
Travelled to countries other than their placement country	22 (65.7)
Risky behaviours	
Excessive drinking	22 (64.7)
Smoking cigarettes or tobacco	8 (23.5)
Engaged in a "one night stand"	4 (11.8)
Use of illicit drugs (e.g., marijuana)	3 (8.8)

* 34 participants completed the post-travel survey.

Table 4. Psychological stressors and coping mechanisms during the placement

	N (%)*
Psychological stressor	
Feeling Homesick	26 (76.5)
Experiencing culture shock	18 (52.9)
Having difficulty communicating with the local people	17 (50.0)
Encountering difficulty with assigned work	15 (44.1)
Having difficulty communicating with fellow volunteers	15 (44.1)
Having difficulty communicating with Mentor/Manager/other team members at placement	15 (44.1)
Coping mechanism	
Trying to work it out and manage it myself	31 (91.2)
Talking to fellow volunteers or other team members	26 (76.5)
Calling home to talk to friends/family	20 (58.8)
Talking to placement mentor/manager	10 (29.4)
Talking to locals	9 (26.5)
Talking to gap year provider staff members	5 (14.7)

* 34 participants completed the post-travel survey.

Table 5. Medical problems and medications used during the placement

	N (%)*	N (%)*
Medical problems	Did not seek medical attention	Sought medical attention
Sunburn	19 (55.9)	1 (2.9)
Respiratory infections (e.g. cold, flu, chest infection)	15 (44.1)	7 (20.6)
Weight change (loss or gain)	14 (41.2)	
Diarrhoea/food poisoning	13 (38.2)	2 (5.9)
Dehydration	13 (38.2)	
Skin wound/infection	10 (29.4)	3 (8.8) [‡]
Stress/Anxiety/Depression	9 (26.5)	1 (2.9)
Fatigue/Exhaustion	7 (20.6)	
Muscle/joint injury	3 (8.8)	6 (17.6) [§]
Animal bite/sting	3 (8.8)	
Malaria	1 (2.9)	1 (2.9)
Head injury	1 (2.9)	1 (2.9) [¶]
Medications	Own supply	Sourced in other country
Analgesics	14 (41.2)	6 (17.6)
Pre-existing medications	9 (26.5)	3 (8.8)
Antimalarials (including doxycycline)	7 (20.6)	0 (0.0)
Antidiarrhoeal	4 (11.8)	0 (0.0)
Antibiotics (doxycycline not included)	3 (8.8)	7 (20.6)
Oral rehydration therapy	3 (8.8)	0 (0.0)
For cold and flu	2 (5.9)	1 (2.9)
Antihistamines	2 (5.9)	1 (2.9)
Antinausea	2 (5.9)	0 (0.0)
Antifungal	0 (0.0)	1 (2.9)

* 34 participants completed the post-travel survey.

[‡] One participant was admitted to a hospital for skin infection following a tribal tattoo

[§] One participant was admitted to a hospital overseas and two participants sought medical attention in Australia.

[¶] The participant was admitted to a hospital.