

# TAISTEAL



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## NEWSLETTER

ed. S. Collins

### PRESIDENT'S NOTE

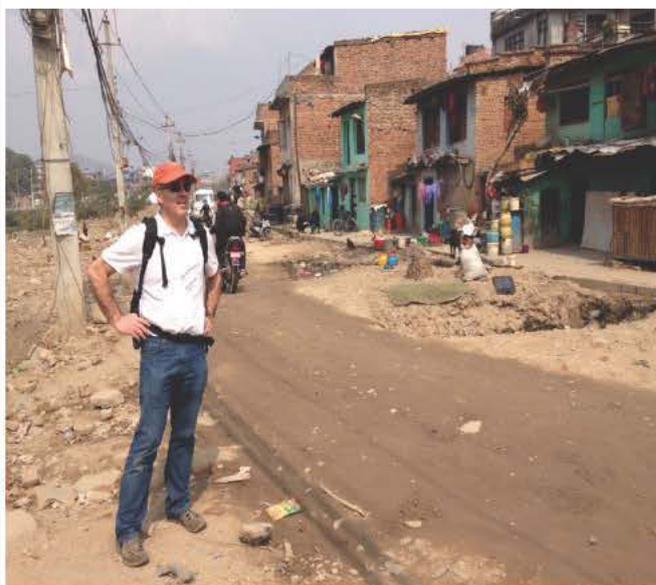
*I am deeply honoured to be elected President of TMSI. In Ireland, we now live in a multicultural and multiethnic society. According to CSO figures for 2014 only 77% of children born in Ireland have an Irish born mother. Every branch of medical care here, now deals with physical, psychological and social problems which have roots in another part of the world. As our health service contracts under repeated cuts and the loss of front-line personnel, those of us who still believe that Ireland deserves a world class health service struggle to meet new challenges. Travel Medicine is now an integral part of the delivery of health promotion and medical care at home and abroad. I am very proud to have played a part in bringing Travel Medicine into undergraduate medical training as well and postgraduate training for General Practice. The discipline now figures prominently in professional development for doctors and nurses. Your Society strives to meet those challenges and has done so repeatedly under the excellent stewardship of my predecessors John Gibbons, Ger Flaherty, Peter Noone and Dom Colbert, to name only a few. They had the untiring assistance of our Society secretary, Anne Redmond.*

*It is particularly poignant that a few days ago, WHO declared the world to be free of one of the three strains of Polio Virus, (type 2). You don't have to be a Tropical Medicine expert to appreciate the significance of this. All of us who participated in the National Immunisation programme in Ireland played a part in this historical victory. The remaining two strains will soon follow, but*

*not without cost. Seven Police officers were murdered in Pakistan in the same week. They were protecting healthcare workers who were administering Polio vaccine to children in an area where fundamentalists would rather keep people in disease, poverty and ignorance and therefore so much easier to intimidate and control.*

*Global Medicine brings us many new challenges, but also unites us in defeating disease and poverty in ways our predecessors could only dream of. I hope to see the society increase in numbers and influence. I am pleased to see that practice nurses, medical students and doctors in training are attending our regional meetings in increasing numbers. This is your society. You have a say in how it is run. Please come to our regional meetings and give me as much feedback as you can.*

*Conor Maguire.*



## ***TRAVELLERS DIARRHOEA – A REVIEW OF PREVENTION AND MANAGEMENT.***

Based on enquiries that come to me from colleagues, I'm conscious that some Travel Medicine practitioners struggle with the topic of diarrhoea associated with travel ('Travellers' Diarrhoea' or TD), particularly when it comes to managing cases post-travel. What follows is a summary of an OSKE that I delivered at the most recent TMSI meeting in Navan (27th February 2016) and while it does not attempt to cover all aspects of TD, it presents an overview of current thinking on the topic, drawn from some of the most interesting journal articles on the subject, some of which I have referenced, for those who are interested in pursuing more in-depth reading.

Diarrhoea related to travel is the most common travel-associated health problem (34% of travel-related illnesses)<sup>1</sup>. As a result, it's a topic of major interest to anyone practicing Travel Medicine, from the point of view of:

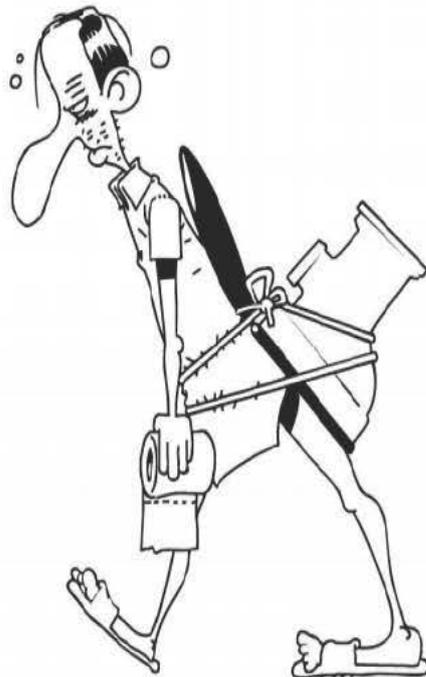
- Prevention
- Provision of standby treatment to some categories of patients
- Managing cases that present, post-travel

TD is usually defined as three or more unformed stools per 24-hour period, with one or more associated symptom (such as cramps, nausea, vomiting or tenesmus)<sup>2</sup>.

Causative organisms for TD fall into one of the following categories<sup>3</sup>:

- Bacteria (Enterotoxigenic E Coli – ETEC, Enteraggretive E Coli – EAEC, Shigella, Salmonella, Campylobater and others)
- Viruses (Norovirus and others)
- Protozoa (Giardia, Cryptosporidia, Dientamoeba Fragilis, Entamoeba Histolytica and others)
- Helminths (in practice, very few cases are attributable to this class of pathogen, which includes Schistosomiasis and Stronyloides Stercoralis)

Bacteria are the dominant cause of TD.



## Prevention of TD.

Several strategies exist:

1. Behaviour modification (frequent handwashing, the use of alcohol-based hand gels, avoidance of uncooked foods and upasteurised dairy products, avoidance of non-bottled water).
2. Use of probiotics i.e. the consumption of 'benign' bacteria orally in an effort to boost the immune functioning of the digestive tract. Probiotics have no proven efficacy.
3. Vaccines i.e. the use of oral Cholera vaccine; the efficacy of this intervention is 7% at most, as it covers only the heat-labile variant of E. Coli<sup>4</sup>
4. Antimicrobials (non-antibiotic) e.g. Bismuth Subsalicylate (Pepto-Bismol®); efficacy = 40% – 65% but this product, while on the market in the U.S. is not available in Europe
5. Antimicrobials (non-absorbed antibiotic) i.e. Rifaximin; efficacy = 60% - 70% but difficult to obtain in Ireland and not effective against invasive bacteria (e.g. Campylobacter and Shigella)

The option of getting some patients to take a continuous, low-dose absorbed antibiotic as a prophylactic while abroad has gone out of fashion because of concerns about increasing antibiotic resistance.



## Managing acute episodes of TD.

The majority of acute-onset cases that are accompanied by significant symptoms will be bacterial in origin. Many cases will self-resolve. Others can be managed purely by the use of oral fluids and if necessary, a dose or two of Loperamide. Where resolution of symptoms is not occurring, the option exists to equip patients with standby treatment pre-travel, which can be used in the event of a significant acute episode overseas. The most common self-treatment regimens are:

- Ciprofloxacin 750mg orally as a single dose or
- In the case of South or South-East Asia, Azithromycin 1g orally as a single dose (because in South and South-East Asia, resistance to Ciprofloxacin is common).

Arguments exist both for and against the practice of equipping patients pre-travel with antibiotic standby treatment. Some clinicians worry that patients will tend to over-use standby treatment if it is readily available to them. Others worry that as a result, patients are more likely to return home with their digestive tracts colonised by antibiotic-resistant bacteria<sup>5</sup>. Proponents of standby treatment argue that as a result, patients are less likely to develop persistent infections which might lead to either Irritable Bowel Syndrome-type situations (discussed later) or to hospital admissions in resource-poor settings with the attendance risk of mismanagement (depending on the country/setting) or nosocomial infections<sup>6</sup>.

## Differential diagnosis in chronic cases of TD.

Where TD cases persist for a couple of weeks or where symptoms show a low-grade, progressive onset (sometimes beginning only a week or two post-travel), the cause may be protozoal rather than bacterial. Protozoal infections will not respond to the therapies already described that are employed to treat bacterial infections. The differential diagnosis in

non-resolving cases of TD includes the following:

- Bacterial infection which has been inadequately treated (the wrong antibiotic has been used, an inadequate dose has been taken or the medicine was sourced overseas and was sub-standard or fake)
- Protozoal infection, which requires a treatment other than Ciprofloxacin or Azithromycin
- Co-infection (the patient has not one but two different pathogenic organisms in their digestive tract, only one of which has been treated by the initial therapy they have taken). This may involve two types of bacteria or a bacterial and a protozoal infection.
- A Clostridium Difficile infection is present in the digestive tract (most often seen in cases where the patient has been given multiple antibiotic therapies while abroad)
- A temporary post-infectious phenomenon has developed in the digestive tract e.g. the patient has developed a gluten intolerance as a result of an infection which was allowed to persist for a number of weeks
- Persistent cases, particularly in older patients, particularly where usual causes have been ruled out, should raise the need to rule out more sinister pathology.

One other diagnosis which has emerged in recent years is that of ‘post-infectious irritable bowel syndrome (PI-IBS)’. This is a diagnosis of exclusion i.e. IBS-type symptoms are present, following on directly from a clearly-defined episode of digestive tract infection and other possible causes have been excluded.

### Investigating chronic cases of TD:

A long list of possible tests exists but the single most important investigation is obtaining a stool sample for both ova/parasites (mainly to check for protozoa) and culture/sensitivity (to check for bacteria). Any number of further tests can be done, depending on the cases and can include bloods (FBC, ESR, TFTs, Tissue Transglutaminase, HIV test) and advanced stool tests (Giardia antigen test, Amoebic antigen test, C. Diff test). A stool test is well worth doing, at least once, as it may uncover a specific causative organism. It is very important to remember however that the accuracy of stool testing is very ‘hit and miss’ and a negative result does not mean that a pathogen is absent – it simply means that the pathogen was not successfully identified. The patient should be managed on the basis of the overall clinical picture and not denied treatment on the basis of a negative stool exam i.e. if the case has the features of a particular diagnosis, then consider treating accordingly.

### Treating chronic cases of TD:

A number of possible options exist for managing cases that will not settle, particularly where they persist for more than two weeks. The list that follows is not exhaustive but covers the most common options in cases where diagnostic uncertainty exists because specific causative organisms are not being identified on stool testing. The following options are not intended to necessarily be followed in sequence and some may be omitted, depending on the context of the case:

- o Empiric treatment I: antimicrobial (e.g. Ciprofloxacin or Azithromycin)
- o Empiric treatment II: antiprotozoal (e.g. Metronidazole 400mg orally three times a day for 7 – 10 days)
- o Dietary gluten exclusion x 1 month minimum with gradual re-introduction
- o Dietary lactose exclusion x 1 month minimum with gradual re-introduction
- o Gastroenterology referral, before or after the above measures, depending on the type of case (this option will be more pressing in older patients if atypical symptoms are present which raises the possibility of sinister pathology being present).

<sup>1</sup>Leder et al. GeoSentinel Surveillance of Illness in Returned Travelers, 2007–2011 *Ann Intern Med.* 2013;158:456-468

<sup>2</sup>Hill D & Beeching NJ. Travelers’ diarrhea *Curr Opin Infect Dis.* 2010;23(5):481-487.

<sup>3</sup>Steffen R et al ‘Traveler’s Diarrhoea, A Clinical Review’ *JAMA* 2015 (313) 1; 71 – 80.

<sup>4</sup>Ahmed T et al, ‘Vaccines for Preventing Diarrhoea Caused by Enterotoxigenic E Coli’ *Cochrane Review* 5th July 2013 [http://www.cochrane.org/CD009029/INFECTN\\_vaccines-for-preventing-diarrhoea-caused-by-enterotoxigenic-escherichia-coli-bacteria](http://www.cochrane.org/CD009029/INFECTN_vaccines-for-preventing-diarrhoea-caused-by-enterotoxigenic-escherichia-coli-bacteria)

<sup>5</sup>Kantele A et al, Antimicrobials Increase Travelers’ Risk of Colonization by Extended-Spectrum Betalactamase-Producing Enterobacteriaceae. *Clin Infect Dis.* (2015) doi: 10.1093/cid/ciu957

<sup>6</sup>Connor B & Keystone J, Antibiotic Self-treatment of Travelers’ Diarrhea: Helpful or Harmful? *Clin Infect Dis.* (2015) DOI: 10.1093/cid/ciu961



# 6<sup>TH</sup> NORTHERN EUROPEAN CONFERENCE ON TRAVEL MEDICINE



**1ST — 4TH JUNE 2016**  
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We heard about many tourist destinations and their risks. Tandi Dorij told us about trekking in Bhutan and India. It seems that accidents, alcohol and stupidity still cause much injury and death. Any destination which includes remote trekking should include good travel insurance, Tetanus and Rabies shots.

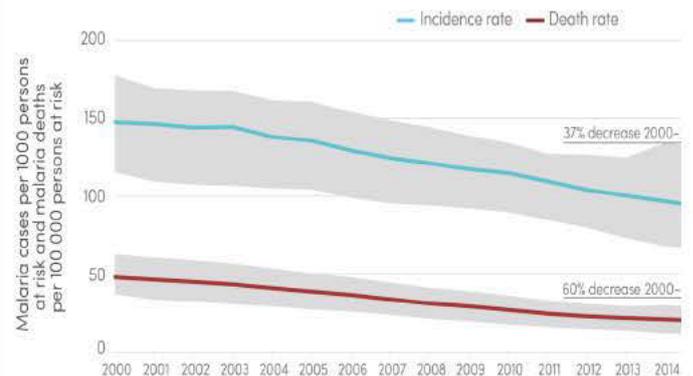
Ben Ayers told us about the disaster relief in Nepal following the earthquake. He was in Lukla and helped evacuate 70 victims of the earthquake. Using internet and volunteers, he helped to coordinate rescue efforts and the distribution of aid to remote communities. Materials used to build emergency shelter were very hard to source and everything has to be carried by porters or mules. He showed much improvisation in crowd surfing on social media. Some passing trekkers from Dublin's Facebook office helped set up a social network which proved invaluable in obtaining tarpaulins and roofing panels. They went on to rebuild many schools and homes. Schools seemed to have suffered some of the most severe damage. Poor construction and materials were identified more often in schools and corruption was blamed. Nepalese children attend school every day except Saturday. The earthquake happened on a Saturday at five minutes to noon. Any other day, and many thousands of children would have been killed or seriously injured. First responders who are on site and have local knowledge can be highly effective in getting aid quickly where it is needed.



Ten thousand tarps and 28 tons of rice being distributed by the "Yellow House" Team.



Kamini Mendis told us about the Global push to eradicate Malaria. The WHO team feels that the best way to control a disease is to eradicate it, and it is working! In the year 2000, Malaria was the leading cause of death in children under 5 in Africa. Today it is only the fourth! Efforts are concentrating on Africa, where Malaria control brings enormous economic benefit to communities.



In the past 15 years, four countries have eradicated Malaria, 20 more have all but eliminated it and 78 countries have substantially halted the disease and reduced the number of cases. In the same time, the cost of the eradication programme rose from 200 million dollars to 2.5 Billion. Global eradication is possible and with much effort, will happen.

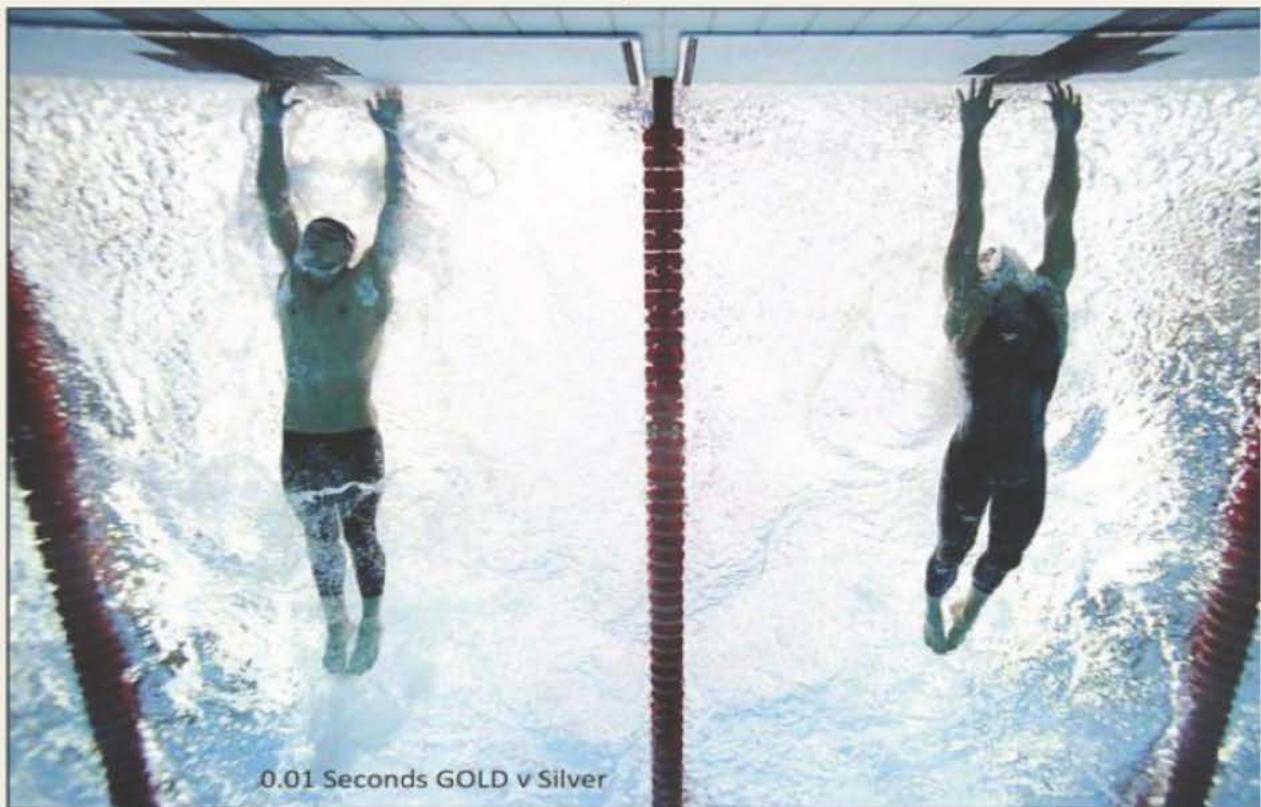
Nebojša Nikolić told us about preparations for the Rio de Janeiro Olympics Games this August. Half a million spectators and one hundred thousand organisers will watch ten thousand athletes perform. Ian Thorpe once took an

Olympic Gold Medal on a difference of one hundredth of a second. Imagine what a dose of gastroenteritis would do to an athlete's performance! Yellow Fever, Malaria, Dengue and Zika are a worry but Gastroenteritis is the biggest risk to those attending. Ireland is sending sailors to represent us in four different classes, but they will be launching their boats into a marina which receives raw sewerage discharges. This water will be splashing all over the boats, the ropes, equipment and the sailor's skin. Hepatitis A can be mitigated by vaccination, however strict hygiene must be enforced. Our athletes have challenging dietary requirements; I hope our medical team is on the case already. One trip to the local take away and dreams of Olympic glory are shattered.

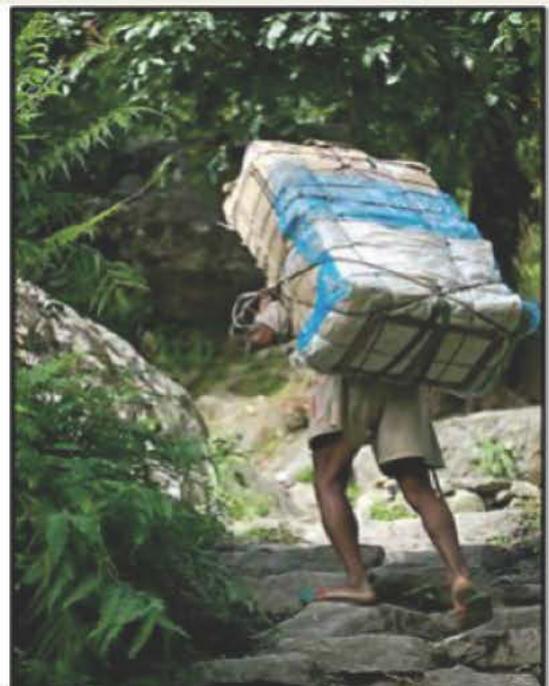
and shelter in camps.

The conference covered many other themes including, children, immune compromised travellers. We heard about the latest advances in vaccines for Hepatitis, Dengue, Malaria and Zika. Many destinations and political updates. My lasting memory is of a beautiful country and a hospitable and friendly people. The next APTHS conference will be in Bangkok in 2018.

Dr. Conor Maguire



Finally our own Gerard Flaherty spoke about taking the risk out of adventure travel. Everything was covered from preparation, equipment and health risks. Altitude is a significant threat, but it seems that accidents and injury, temperature variations and gastroenteritis are the recurring theme of all destinations and types of travel activity be they adventurous or sedate. Matching fitness to activity and stabilisation of pre-existing medical conditions are paramount. Gerard also reinforced the recurring theme of the entire conference, which was the role of the responsible traveller. We have a duty to protect the environment and those who live in it. That means doing much more than bringing home your litter. It means travelling with ethical companies who treat their guides and porters with respect, providing them with foot wear, clothing, food, shelter and honest remuneration. Throughout the week, we heard many anecdotes of porters being left behind when ill, carrying huge loads wearing open sandals and being charged for their food



# Foundation and Diploma Courses in Travel Medicine



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## Foundation Course in Travel Medicine

The Foundation Course in Travel Medicine is a **six month e-learning course** suitable for those working in the field of Travel Medicine.

The course includes:

- ⇒ Introductory educational training session in Glasgow (*two days, attendance required*)
- ⇒ Four e-learning units with assignments

Topics covered include:

- Pre-travel risk assessment
- Infections and epidemiology of infection
- Immunisation theory, practice and available vaccines
- Malaria

## Diploma in Travel Medicine (DipTravMed)

The Diploma Course is suitable for healthcare practitioners working in the field of Travel Medicine. It is delivered through a blended e-learning approach over one full calendar year.

The course includes:

- ⇒ An introductory residential week in Glasgow
- ⇒ Module 1: ten e-learning units with assignments
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- ⇒ Module 3: a project chosen by the student
- ⇒ A final written examination in Glasgow.  
*Overseas students can opt to sit this examination in their own country by arrangement.*

### Student support (applicable to both courses):

All students are allocated a personal advisor and access to the course website, TRAVAX and e-Library. Online staff/student communication is also provided.

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## ***DR. DOM COLBERT UNDERGRADUATE PRIZE IN TRAVEL MEDICINE***



The first winner of the Dr. Dom Colbert Undergraduate Prize in Travel Medicine was presented with her specially engraved gold medal by Dr. Colbert in a special ceremony at the recent TMSI AGM and Masterclass in Dublin.

Evelyn Fennelly is a third year medical student studying at the National University of Ireland, Galway. Evelyn, who hails from Laois, was introduced by Dr. Gerard Flaherty, who praised the high quality of essay entries received from several Irish medical schools. Each submission was independently assessed in blinded fashion by the executive committee. The mature, reflective, well researched, and very well written nature of Evelyn's work made her the unanimous choice of the judges for the prize.

Dr. Flaherty paid tribute to the enormous contribution of Dom Colbert to the Travel Medicine Society of Ireland, which he co-founded with Dr. Graham Fry, and to travel medicine education and scholarship internationally. Evelyn was invited to read her essay to the assembled audience before receiving her medal from Dr. Colbert, who praised the excellence of her presentation and wished her well in her medical career.

Evelyn has kindly agreed to allow her essay to be reproduced in full (with minor edits by GF) for our members.

Comhghairdeas leat, a Eibhlín!

Dr. Gerard Flaherty

## ***RESPONDING TO MIGRANT AND REFUGEE HEALTHCARE NEEDS IN IRELAND***

The number of international migrants resident in Ireland has increased substantially, from 350,600 in 2000 to 746,300 in 2015<sup>1</sup>. This reflects a worldwide trend of increasing migration<sup>2,3</sup>. Migrants have a number of specific health needs. The increase in the number of migrants resident in Ireland poses challenges for our health services which require adaptations and creative solutions.

The terms “asylum seeker”, “refugee” and “migrant” can be confusing. The 1951 Refugee Convention on the Status of Refugees defines asylum seekers as those fleeing persecution or conflict and therefore seeking international protection. A refugee is an asylum seeker whose claim has been approved, though some migrants fleeing war or persecution are considered by the UN to be refugees before they receive asylum and may enjoy *prima facie* refugee status. An economic migrant is someone whose primary motivation for leaving their home country is improved employment opportunities and economic gain. The term “migrant” is generally accepted as an umbrella term to encompass these three groups. For ease of discussion, the term “refugee” as used herein includes asylum seekers and refugees. This essay explores the health needs specific to refugees and to economic migrants, as well as health needs common to migrants in general.

The majority of migrants cross borders in search of better economic and social opportunities<sup>3</sup>. Others are forced to flee by war, economic, political, cultural, or environmental conditions<sup>4</sup>. Migrants may experience immediate and lifelong health repercussions due to moving across borders<sup>4</sup>. Ireland is currently experiencing a mixed-migration phenomenon – where economic migrants and refugees are arriving simultaneously. There is considerable diversity amongst migrants in Ireland, with the 2011 Census showing 199 countries of origin<sup>5</sup>. The most common countries of origin in the 2011 Census were Poland, UK, Lithuania, Latvia, and Nigeria<sup>5</sup>. It is expected that Middle Eastern countries will rank more highly in the 2016 Census figures, due to the large efflux of refugees fleeing violence.

Both economic migrants and refugees have complex health needs including addressing infectious diseases, malnourishment, gender-specific issues, cultural adaptation and mental health. While voluntary migrants may experience positive repercussions such as improved income or better employment opportunities in their new country, they are also frequently subject to racism, psychological stress, poor working conditions, and loss of family and social support<sup>4</sup>. Guest workers resident temporarily in a country are often precluded from

forming stable long-term relationships. This is related to increased casual and commercial sex contacts, which increase the risk of sexually transmitted infections (STIs) markedly<sup>6</sup>. Economic migrants often face precarious and exploitative working conditions which increase susceptibility and exposure to ill health<sup>4</sup>. Legislative protections for economic migrants and guest workers are required to safeguard their rights and health.

Refugees often face immiseration, marginalisation, unstable housing situations, loss of family and support networks, and discrimination – with their resultant health consequences<sup>4</sup>. Refugees displaced due to armed conflict suffer among the worst mix of unhealthy societal determinants and associated health conditions<sup>4</sup>. While the current mass movement of refugees has given rise to xenophobia and calls for tightening borders<sup>3</sup>, it should be noted that Ireland had an estimated net migration flow of -11,600 in 2015<sup>7</sup>.

Migrants can experience serious health consequences, including high rates of infectious disease and malnutrition<sup>4</sup>. There are several factors that influence the incidence of infectious diseases among migrants, including exposures in the country of origin, the migration journey itself, and living conditions in the destination country<sup>8</sup>. The recommended assessment programme for migrants in Ireland includes varicella zoster virus, Hepatitis B, Hepatitis C, HIV, intestinal parasites, malaria, measles, polio, rubella, STIs and tuberculosis (TB)<sup>5</sup>. Health care workers (HCWs) must remember their responsibility to notify their area’s Director of Public Health of not only listed notifiable diseases, but also any clusters of presentations<sup>9</sup>.

The majority of cases of TB, malaria and enteric fever are diagnosed in migrants<sup>8</sup>. TB, HIV, and enteric fever are communicable, which makes the rapid screening of migrants upon arrival to Ireland an important matter of concern for public health officials. The unregulated use of anti-tuberculosis drugs in many countries has led to the emergence of multi drug-resistant TB (MDRTB) strains<sup>4</sup>. MDRTB is difficult to treat and carries a high case-fatality rate when not treated<sup>10</sup>; 86% of cases of MDRTB occur in migrants<sup>8</sup>. Migrants account for the majority of heterosexual HIV diagnoses<sup>8</sup>. All sexually active migrants from countries with HIV rate >1% should be offered a full sexual health assessment<sup>5</sup>. HCWs can play a role in reducing further transmission of HIV by promoting health literacy and countering misinformation, for example, the high-profile denial that HIV is the cause of AIDS<sup>6</sup>. There can be significant cultural barriers to seeking treatment for HIV which contributes to late diagnoses being more likely in migrants<sup>8</sup>. Country of

origin is an important consideration: clinical suspicion of TB should be higher in migrants from the Indian subcontinent, and of HIV in migrants from Sub-Saharan Africa<sup>8</sup>. While migrants comprise the vast majority (70-88%) of malaria cases, the Health Protection Surveillance Centre (HPSC) recommends that only symptomatic migrants should be offered testing<sup>5,8</sup>. 62-65% of enteric fever diagnoses occur in migrants<sup>8</sup>. Migrants returning to their home countries to visit friends and family are the main risk group of those travelling abroad for malaria and enteric fever<sup>8</sup>. These patients should be advised on chemoprophylaxis for malaria and vaccination against typhoid, TB, HIV, malaria, and enteric fever may present in non-specific ways initially. It is important that HCWs, particularly in primary care, consider these diseases in the differential diagnosis for at-risk migrant patients presenting with compatible symptoms<sup>8</sup>. HPSC recommends that new migrants should be assumed unimmunised in the absence of information/documentation to the contrary<sup>5</sup>. Children and adults should immediately begin a “catch-up” immunisation schedule<sup>5</sup>. When children are back on schedule, they can resume routine scheduled vaccines.

Migrants are at risk of malnutrition, which can manifest itself in many ways, including skin problems, poor vision, anaemia, tinnitus, and joint pain<sup>11</sup>. Migrants who have dealt with chronically low level of nutrition are at increased risk of obesity and glucose intolerance and their associated health risks following migration to a richer country<sup>6</sup>. In addressing malnutrition in migrants, a societal determinants of health approach is a necessary counterpart to the biomedical approach<sup>4</sup>. Hunger and malnutrition cannot be addressed exclusively through clinical approaches; the structural factors of food and distribution must be addressed at a societal and political level<sup>4</sup>.

While all refugees are highly vulnerable to physical trauma and illness, this vulnerability is heightened for women and children<sup>4</sup>. The most vulnerable are unaccompanied children, who have been separated from their parents during the process of war or refugee flight<sup>4</sup>. Family reunification is essential in minimising these harms. Under Section 18 of the Refugee Act, 1996, refugees under the age of 18 can apply for their parents to join them in Ireland.

Women now form a small majority (51.3%) of international migrants resident in Ireland<sup>1</sup>. This population has specific needs and concerns. Many female migrants have been victims of physical or sexual violence<sup>4</sup>. A significant proportion of children involved with armed groups globally are girls<sup>4</sup>. They have usually been abducted from their families and often have been subjected to years of sexual violence, abuse, and unwanted pregnancy<sup>4</sup>. Education of women and girls is

not valued in the country of origin of many migrants. A lack of education exacerbates the vulnerability of a female migrant<sup>6</sup>. This may affect the utilisation of health services and communications between HCWs and female patients<sup>12</sup>.

The number of female genital mutilation (FGM) survivors living in Ireland was estimated from 2011 Census statistics to be 3,780<sup>13</sup>. As migration to Ireland from FGM-practising countries is an increasing trend, it is likely that this number is now higher than the estimates from the 2011 Census<sup>13</sup>. FGM has many long-term sequelae including dyspareunia, menstrual problems, psychological trauma, and obstetric complications<sup>13</sup>. Therefore, it is vital that HCWs – especially GPs and obstetricians – inquire about FGM, particularly in patients who come from countries where FGM is widely practised such as Djibouti, Egypt, Guinea, Mali, Sierra Leone, Somalia, and Northern Sudan. It is essential that HCWs are aware of the prevalence of FGM among migrants in Ireland and are able to provide appropriate medical care and to refer FGM survivors to the support services available through AkiDwA – an advocacy group representing African and migrant women in Ireland – and the specialised FGM survivor clinic in Dublin. HCWs should be aware that migrant families may travel to their country of origin to have FGM performed on their daughters, which is an offence under the Criminal Justice (Female Genital Mutilation) Act, 2012.

Refugees resettled in Western countries are approximately ten times more likely to have post-traumatic stress disorder (PTSD) than age-matched populations in those countries<sup>14</sup>. Language and cultural differences can make these patients difficult to treat. Cross-cultural psychiatry is now a growth area in Western countries. One helpful solution is the use of cross-cultural diagnostic tools, such as the Harvard Trauma Questionnaire, a simple and reliable screening instrument for PTSD that is well received by refugee patients and staff<sup>15</sup>.

Cultural beliefs influence the ways in which health and illness are defined and understood and what actions may be taken to prevent or treat illness, and which healing authorities to consult<sup>4</sup>. Anthropologists can be helpful in ascertaining how health programs and policies can be more effective or acceptable in particular contexts. For example, there may be value in integrating traditional medicinal practices in health campaigns or in highlighting protective aspects of certain cultural values, such as cooperativism<sup>4</sup>. Individuals who are members of a cultural group in contact with another group (such as migrants interacting with the dominant group in the destination country) will experience various psychological changes, referred to as psychological acculturation<sup>16</sup>. Melding of cultures can erase the distinction between groups, resulting in integration

assimilation<sup>16</sup>. This can sometimes be perceived as cultural demise, which may lead migrants to experience cultural bereavement<sup>6</sup>. Cultural bereavement can be viewed as a healthy reaction and natural consequence of migration. However, if symptoms are persistent or cause significant distress, psychiatric intervention may be warranted<sup>17</sup>. Dr. Maurice Eisenbruch has developed a framework for the identification of cultural bereavement in refugees which takes into account the language and cultural constructs of the bereaved individual<sup>17</sup>.

Linguistically and culturally accessible care for migrants is essential in developing trust in and respect for Western medicine<sup>18</sup>. There are now many modern solutions to this challenge. The advent of mobile technology provides several aids to patient-HCW communication, with many medical translation apps now available which provide comprehensive translations in a wide variety of languages. While some brochures from the Health Service Executive are available in a small number of languages, there is a lack of diagnostic tools available in the languages most commonly spoken by migrants – Polish, French, and Lithuanian<sup>19</sup>. Here, there is scope to adapt solutions initially created for Irish language speakers. For example, Dr. Shaun O’Keeffe and colleagues developed a Mini Mental State Exam in the Irish language for use in Galway University Hospitals<sup>20</sup>. Providing linguistically accessible care can reduce possible errors which negatively impact migrants’ health such as patients’ non-compliance due to incomprehension of instructions<sup>18</sup>.

Migrant groups in Ireland are a diverse population with varied health needs. If the rights and health of migrants are to be effectively protected in Ireland, it is vital that health policies are based on data and research findings, not personal preferences, prejudices, or political pressure. Integration of migrants and multiculturalism as a national policy has many benefits for the health of migrants and society at large<sup>16</sup>.

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Evelyn Fennelly

## UPDATE ON ZIKA VIRUS

- ✿ Zika virus is new to the Americas and there is no immunity within the American population.
- ✿ Potentially competent mosquito vectors (*Aedes albopictus*) exist in North America and southern Europe.
- ✿ There have been about 1.5 million cases of Zika virus infection in Brazil in this outbreak, with 19 of 26 states affected.
- ✿ The Zika virus circulating in Bahia, Brazil is similar in phylogenetic lineage to that which caused the French Polynesian outbreak in 2014.
- ✿ WHO declared the recent cluster of cases in Brazil a public health emergency of international concern on 1 February 2016.
- ✿ Colombia has reported more than 25,000 suspected cases since October 2015.
- ✿ The associations with congenital microcephaly and Guillain-Barré syndrome, while plausible, are currently unproved and being investigated.
- ✿ Between November 2015 and 13 February 2016, 5280 suspected cases of microcephaly have been reported by Brazil, 41 with confirmed Zika virus infection.
- ✿ Zika virus RNA has been detected in semen 62 days after onset of symptoms, in amniotic fluid and in paired blood samples from neonates and mothers.
- ✿ Approximately 13 Zika-related deaths have been reported in adults
- ✿ Serum IgM is detectable 4-7 days after symptoms appear and persists for 2-12 weeks.
- ✿ Definitive diagnosis depends on detecting Zika virus RNA in blood and other bodily fluids by PCR, typically <5 days from onset of symptoms.
- ✿ The WHO is currently considering trials of the release of irradiated sterile mosquitoes.

50% of humans live in *Aedes*-infested regions. Countries with active Zika virus transmission are listed below (Source: CDC).

### Americas (highlighted countries are frequently visited by Irish travellers)

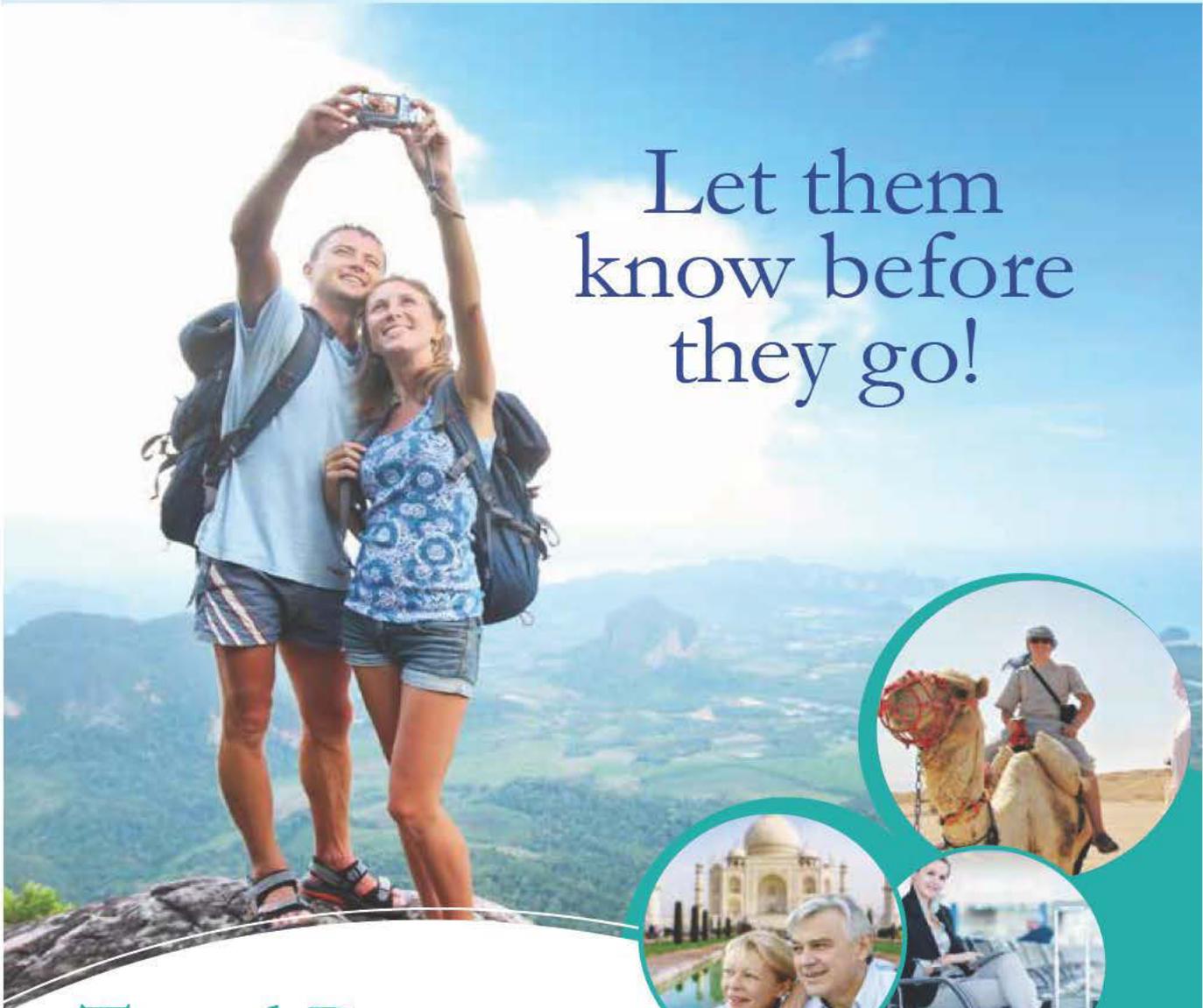
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|---------------|----------------------|------------------------------------|
| • Aruba       | • Dominican Republic | • Mexico                           |
| • Barbados    | • Ecuador            | • Nicaragua                        |
| • Bolivia     | • El Salvador        | • Panama                           |
| • Bonaire     | • French Guiana      | • Paraguay                         |
| • Brazil      | • Guadeloupe         | • Saint Martin                     |
| • Colombia    | • Guatemala          | • Saint Vincent and the Grenadines |
| • Puerto Rico | • Guyana             | • Saint Maarten                    |
| • Costa Rica  | • Haiti              | • Suriname                         |
| • Cuba        | • Honduras           | • Trinidad and Tobago              |
| • Curacao     | • Jamaica            | • U.S. Virgin Islands              |
| • Dominica    | • Martinique         | • Venezuela                        |

### Oceania/Pacific Islands

- American Samoa
- Fiji
- Kosrae, Federated States of Micronesia
- Marshall Islands
- New Caledonia
- Samoa
- Tonga

### Africa

- Cape Verde



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## WHAT'S NEW IN 2015?

We now know:

Terrorism is now commonest cause of air accidents.

- Murder-suicide by the pilot in the case of the German Wings crash and the Malaysia Air disappearance over the Indian ocean,
- Surface to air missiles over the Ukraine,
- Suspected bomb in the cargo hold over Egypt.

### Natural Disasters

There were two major earthquakes in Nepal. Many people died. The population proved resilient and is working to rebuild their lives. Nepal is currently in a border dispute with India and supplies are not getting through, including fuel and cooking gas. Nevertheless this beautiful country is back again and open for business.

Changes to Immunisation Schedule:

**Two will Do!** The second Men C at six months is dropped. A single Men C vaccine provides protection for the first year of life.

**One will do!** If you are over 65 a single pneumococcal vaccine provides lifelong cover in healthy individuals, booster only needed if immune suppressed.

National primary immunisation rates in Ireland are well below target.

Only 93% of Irish children received the MMR, 92% received Hib and PCV and 88% received MenC

There are 7 new drugs to treat Hepatitis C.

**It's OK to have a brother or sister.** On the 29th of October, China abolished its single child policy introduced in 1978. Authorities there realised that a young workforce is needed to sustain a growing economy and an aging population.

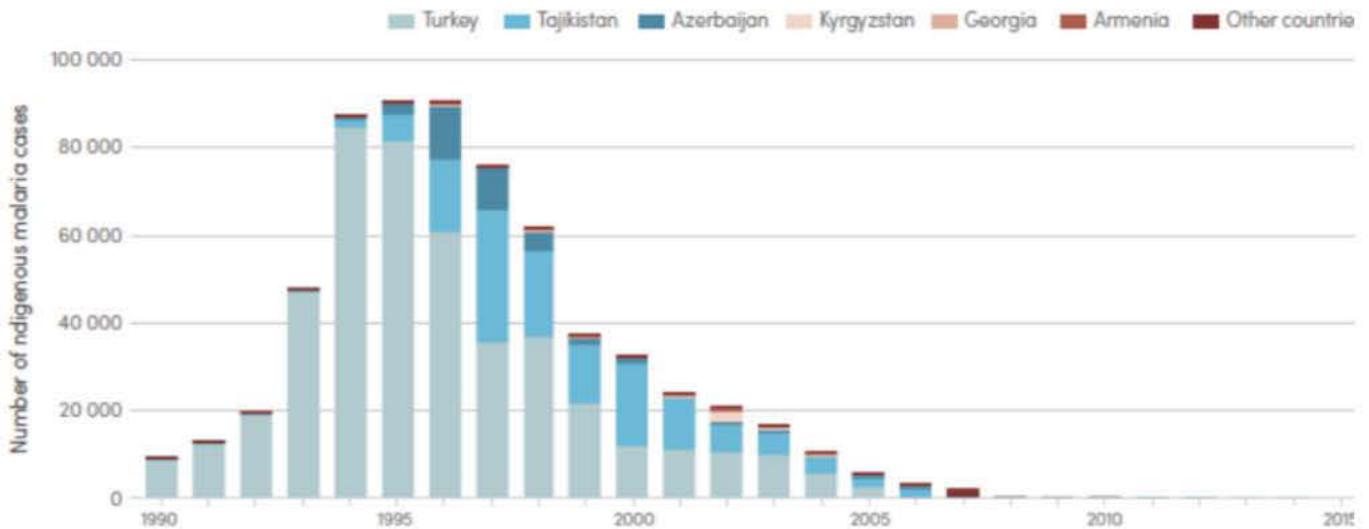
### We have lost

Dr Nancy Gallagher, former president of The Travel Medicine Society of Ireland.

Dr Alan Magill, former president of the International Society of Travel Medicine and head of the Gates foundation Malaria eradication programme.

### On the Way out:

Malaria numbers worldwide are falling rapidly. 2015 was the first year in which the WHO European Region reported Zero indigenous Malaria cases.



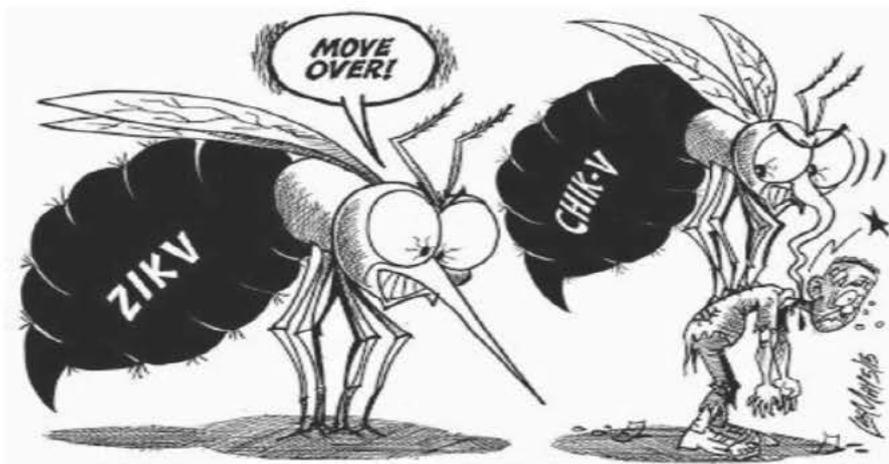
Source: National malaria control programme reports and WHO estimates

Guinea Worm is about to become the second human disease to be eradicated, after Smallpox. In 1986, there were 3.5 Million cases in 21 countries. Thanks to the efforts of the Carter foundation, there were only 22 cases reported in 2015: Chad (9), Ethiopia (3), Mali (5), South Sudan (5). No drugs were used. Contracted from drinking contaminated water, the adult female worm emerges from a lesion in the lower extremity. It can be slowly wound out with a twig but sufferers must be prevented from bathing in the local water supply, which must be filtered before drinking. Education and improvement of water supply has worked.

ref: Lancet Inf Diseases [Volume 16, No. 2, p131, February 2016](#).

### Emerging Disease of 2015

Zika virus has suddenly spread around the globe. What was thought to be a trivial flu like illness is now thought to be a major threat to neurological development of unborn children. I never thought a travel consultation would include being asked if it is safe for women and girls to visit an entire continent. We hope to have many more answers in 2016.



**Polio Eradication** is within sight. Wild circulating Polio was only reported in two countries in 2015. There were 54 cases in Pakistan and 20 cases in Afghanistan. Under the current WHO plan, we expect the world to be declared Polio free in 2018.

The Ebola Outbreak was contained after 26,646 confirmed cases and 11,323 deaths. Much remains to be done to prevent further outbreaks and rebuild communities. A vaccine is still two to three years away.

The conference in Travel Medicine of 2015 was the CISTM in Quebec. Several TMSI members travelled and presented research. Next CISTM will be in Barcelona in September 2017.

Dr. Conor Maguire

## WHAT'S IN THE PAPERS?

Reproduced below are abstracts from recent articles published by TMSI members in international peer-reviewed journals in travel medicine. If you have a good idea for a research project or manuscript and would like help in preparing it for submission to a high quality journal, please contact Dr. Gerard Flaherty, TMSI Research Director, at gerard.flaherty@nuigalway.ie.

### **The Pregnant Traveller with Schistosomiasis**

J Travel Med. 2015 Mar-Apr;22(2):94-8. doi: 10.1111/jtm.12165. Epub 2014 Oct 13.

*Schistosomiasis in pregnant travelers: a case series.*

Ben-Chetrit E, Lachish T, Mørch K, Atias D, Maguire C, Schwartz E.

### **BACKGROUND**

Travel-related acquisition of schistosomiasis in Africa is well established. Data concerning *Schistosoma* infection in pregnant travelers are lacking and treatment derives from studies in endemic regions.

### **METHODS:**

This study was a retrospective case-series of pregnant patients who were infected with *Schistosoma* species. Data regarding exposure history, clinical presentation, diagnosis, treatment, and fetal outcomes were collected and analyzed. Diagnosis of schistosomiasis was based on serology tests and/or ova recovery.

### **RESULTS:**

Travel-related schistosomiasis during pregnancy was diagnosed in 10 travelers (with 20 pregnancies). Of the 10 women, 4 pregnant travelers with recent exposure were treated during their pregnancy with praziquantel (PZQ). The course and outcome of pregnancy in these patients was uneventful, and treatment had no apparent adverse effects on either the mothers or their babies. Six asymptomatic women were diagnosed years after exposure. During this period, they gave birth to 13 babies. They were never treated with PZQ. Birth weights of their infants were significantly smaller as compared with those of the infants of the women who were treated during their pregnancy (median 2.8 vs 3.5 kg). One baby was born preterm. One patient had three miscarriages.

### **CONCLUSION:**

This is the first case-series of pregnant travelers with schistosomiasis. Although a small case-series with possible confounders, it suggests that schistosomiasis in pregnant travelers can be treated. A trend of lower birth weights was observed in the infants of the pregnant travelers who were not treated. PZQ therapy during pregnancy was not associated with adverse pregnancy or fetal outcomes in those four cases. Our results emphasize the importance of screening female travelers of childbearing age with a relevant history of freshwater exposure. Further studies are needed to reinforce these recommendations.

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### **The Traveller with Chronic Illness**

J Travel Med. 2015 Sep-Oct;22(5):312-7. doi: 10.1111/jtm.12221. Epub 2015 Jun 22.

*Profile of Travelers With Preexisting Medical Conditions Attending a Specialist Travel Medicine Clinic in Ireland.*

Han CT, Flaherty G.

### **BACKGROUND:**

Patients with complex medical comorbidities travel for protracted periods to remote destinations, often with limited access to medical care. Few descriptions are available of their preexisting health burden. This study aimed to characterize preexisting medical conditions and medications of travelers seeking pre-travel health advice at a specialized travel medicine clinic.

**METHODS:**

Records of travelers attending the Galway Tropical Medical Bureau clinic between 2008 and 2014 were examined and information relating to past medical history was entered into a database. Data were recorded only where the traveler had a documented medical history and/or was taking medications.

**RESULTS:**

Of the 4,817 records available, 56% had a documented medical history and 24% listed medications. The majority of travelers with preexisting conditions were female. The mean age of the cohort was 31.68 years. The mean period remaining before the planned trip was 40 days. Southeast Asia was the most popular single destination, and 17% of travelers with medical conditions were traveling alone. The most frequently reported conditions were allergies (20%), insect bite sensitivity (15%), asthma (11%), psychiatric conditions (4%), and hypertension (3%). Of the 30 diabetic travelers, 14 required insulin; 4.5% of travelers were taking immunosuppressant drugs, including corticosteroids. Half of the female travelers were taking the oral contraceptive pill while 11 travelers were pregnant at the time of their pre-travel consultation.

**CONCLUSIONS:**

This study provides an insight into the medical profile of travelers attending a travel health clinic. The diverse range of diseases reported highlights the importance of educating physicians and nurses about the specific travel health risks associated with particular conditions. Knowledge of the effects of travel on underlying medical conditions will inform the pre-travel health consultation.

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**The Uncertain Traveller**

J Travel Med. 2016 Jan 18;23(1). pii: tav010. doi: 10.1093/jtm/tav010. Print 2016 Jan.

*Travel itinerary uncertainty and the pre-travel consultation--a pilot study.*

Flaherty G, Md Nor MN.

Risk assessment relies on the accuracy of the information provided by the traveller. A questionnaire was administered to 83 consecutive travellers attending a travel medicine clinic. The majority of travellers was uncertain about destinations within countries, transportation or type of accommodation. Most travellers were uncertain if they would be visiting malaria regions. The degree of uncertainty about itinerary potentially impacts on the ability of the travel medicine specialist to perform an adequate risk assessment, select appropriate vaccinations and prescribe malaria prophylaxis. This study reveals high levels of traveller uncertainty about their itinerary which may potentially reduce the effectiveness of their pre-travel consultation.

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**Travellers Who Take Selfies**

J Travel Med. 2016 Feb 8;23(2). pii: tav026. doi: 10.1093/jtm/tav026. Print 2016 Feb.

*The 'selfie' phenomenon: reducing the risk of harm while using smartphones during international travel.*

Flaherty GT, Choi J.

**BACKGROUND:**

Photography is an integral component of the international travel experience. Self-photography is becoming a mainstream behaviour in society and it has implications for the practice of travel medicine. Travellers who take selfies, including with the use of selfie sticks, may be subject to traumatic injuries associated with this activity. This review article is the first in the medical literature to address this emerging phenomenon.

**METHODS:**

Articles indexed on PubMed and Scopus databases through 2015 were retrieved, using the search terms 'travel', combined with 'selfie', 'self-photography', 'smartphone', 'mobile phone' and 'social media'. The reference lists of articles were manually searched for additional publications, and published media reports of travel-related self-photography were examined.

**RESULTS:**

The lack of situational awareness and temporary distraction inherent in selfie-taking exposes the traveller to potential hazards. A diverse group of selfie injuries has been reported, including injury and death secondary to selfie-related falls, attacks from wild animals, electrocution, lightning strikes, trauma at sporting events, road traffic and pedestrian accidents. Public health measures adopted by the Russian Federation in response to over 100 reported selfie injuries in 2015 alone are presented. The review also discusses the potential for direct trauma from the use of selfie sticks. Travel-related scenarios where selfies should be avoided include photographs taken from a height, on a bridge, in the vicinity of vehicular traffic, during thunderstorms, at sporting events, and where wild animals are in the background. Recommendations exist which discourage use of mobile phones in drivers and pedestrians.

**CONCLUSIONS:**

The travel medicine practitioner should routinely counsel travellers about responsible self-photography during international travel and should include this advice in printed material given to the patient. The travel and mobile phone industries should reinforce these health promotion messages. Future research should offer greater insights into traveller selfie-taking behaviour.

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**The Elite Athlete at Altitude**

Travel Med Infect Dis. 2016 Mar 31. pii: S1477-8939(16)30007-2. doi: 10.1016/j.tmaid.2016.03.015. [Epub ahead of print]

*Altitude training for elite endurance athletes: A review for the travel medicine practitioner.*

Flaherty G, O'Connor R, Johnston N.

High altitude training is regarded as an integral component of modern athletic preparation, especially for endurance sports such as middle and long distance running. It has rapidly achieved popularity among elite endurance athletes and their coaches. Increased hypoxic stress at altitude facilitates key physiological adaptations within the athlete, which in turn may lead to improvements in sea-level athletic performance. Despite much research in this area to date, the exact mechanisms which underlie such improvements remain to be fully elucidated. This review describes the current understanding of physiological adaptation to high altitude training and its implications for athletic performance. It also discusses the rationale and main effects of different training models currently employed to maximise performance. Athletes who travel to altitude for training purposes are at risk of suffering the detrimental effects of altitude. Altitude illness, weight loss, immune suppression and sleep disturbance may serve to limit athletic performance. This review provides an overview of potential problems which an athlete may experience at altitude, and offers specific training recommendations so that these detrimental effects are minimised.

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Dr. Gerard Flaherty

## IRAN

Iran formerly known as Persia is one of the oldest nations in the world, with a history dating back tens of thousands of years. The country's first great city "Susa" was built around 3200 BC. It has always been a crossroad between East and the West. Thus, historically, Iran has been in the juncture of cultural, intellectual and political manifestation of both the East and the West, while preserving its unique identity.

Iran has a population of 80,000,000' million, covering and area of 1,648,000 Square kilometers with 2,800 kilometres of coastline. Its area equals the area of seven countries, namely; England, Ireland, Germany, Austria, Belgium, Holland and Luxembourg. Tehran is the capital of Iran, with population of 13,000,000.

Iran is situated at the heart of Middle East, at the cross road of central Asia, South Asia and the rich Arab states of the middle east. This Strategic position and its access to the Persian Gulf in the South, that is the most strategic energy throat of the world, called the Strait of Hormuz, has made Iran an important country throughout its history, and it links to the narrow, fertile strip borders of the Caspian Sea in the North, the largest land-locked body of water in the world.



Mount Damavand

The most important summits in Iran are Damavand [5,671 m] in the north of the country, on the southern coast of the Caspian Sea. Zagros mountain with a highest point of 4,419 m extends for 1500 km from northwest to south west direction from Turkey, Iraq and ending at the Straight of hormoz in the south of the country. Eastern Iran is covered by salty desert.

There are many significant characteristics in the vast land of Iran. High mountains as well as flat plains, deserts, rivers and lakes contribute to the unique geographical conditions in which, at any time of the year, and in each section of the country, one of the four seasons is visible. Thus in winter, swimming and water skiing are possible in the warm waters of Persian Gulf and at the same time winter sports, like skiing are possible in the northern and western mountains of the country, while one can enjoy the pleasant spring weather along the shores of the Caspian Sea at the same time of the year.

In the last four decades, the main source of income of the country has been oil and gas. Iran has the 5th largest world oil reserves and the second largest gas reserves. Iran's economy and tourism was affected due to sanction. These have been partially lifted over the last few months, and this has resulted in a large influx of business ventures from the foreign countries. These changes have had a positive effect on the country's tourism industry. Iran also has a large steel and copper production industry. It ranks first in the world in terms of exports of hand woven carpets, caviar and dates. Its active agriculture has played a major role in the economy and development.

Due to its historical background and sustainable social and cultural evolution, Iran has a rich diversity and sites and attractions for every type of tourist. Historical monuments, which belong to different periods of human settlements in the plateau of Iran, along with diverse natural coastal, mountainous and nomadic landscapes, makes Iran an attractive destination for every tourist.



Isfahan

The city of Isfahan has a long history with beautiful mosques and bridges. The ancient city of Shiraz located in the south of Iran has fantastic pre and post Islamic monuments.



Kerman Bazaar

The historic city of Kerman is well known for its beautiful historical Bazaar (historical markets). Yazd is one of the ancient cities in the desert with beautiful Badgir on the roof, against the wind direction for ventilation and air-conditioning in the summer.

Dr. Hakha Nikookam

## ***SHOULD I SIT THE ISTM CERTIFICATE IN TRAVEL HEALTH™ EXAMINATION?***

The Certificate in Travel Health (CTH™) examination is a 4 hour 45 minute written multiple choice examination (MCQ) comprising 200 single-best-of-4 MCQ questions which assess the Body of Knowledge for the practice of travel medicine. The examination is delivered at the CISTM conference every two years and at the regional CISTM conference and sometimes other major travel medicine conferences in intervening years. It will be next held at the 6th NECTM conference in London in June 2016. ISTM members who receive the CTH™ designation are listed on the ISTM website along with their nationality. TMSI members who have successfully passed this examination include Dom Colbert, Astrid Weidenhammer, Simon Collins, Gerard Flaherty, and Conor Maguire. Passing the examination demonstrates that the candidate has achieved a basic level of competence in travel medicine, the standard of which has been agreed by experts in the field.<sup>1</sup> Those who pass the examination are eligible to apply directly for Part 2 of the Membership of the Faculty of Travel Medicine examination from the Faculty of Travel Medicine at the Royal College of Physicians and Surgeons of Glasgow.<sup>2</sup>

Candidates are not notified of their actual score but receive a Pass/Fail result only within 6 weeks of the examination being held. While the content of the examination will vary between sittings, it is set to a high standard and reflects the full breadth of the Body of Knowledge syllabus listed on the ISTM website. It is necessary to have a solid factual knowledge of all aspects of travel medicine and it helps significantly if the candidate gives pre-travel health advice on a regular basis. The ISTM<sup>3</sup> offers update revision courses and many candidates study the CDC Health Information for International Travel 'yellow book' carefully in preparation for the examination. Our own Dr. Dom Colbert's popular book 'MCQs in Travel Medicine' is also an excellent way to prepare for the examination and it lists questions in the same format you can expect in the actual examination.

You should give yourself 3-6 months to prepare for the examination depending on your prior knowledge of travel medicine. TMSI members who read our newsletter Taisteal, attend our regional educational seminars and register for our occasional master classes will be in a good position to take this examination. I would encourage TMSI members who practise travel medicine clinically and wish to advance their training in the discipline to consider registering for the CTH™ examination. There will be a great sense of accomplishment for passing the examination and you will receive a very well respected post-nominal credential and certificate for your office wall, both of which will identify you to your colleagues and patients as a knowledgeable practitioner of travel medicine.

Please visit the ISTM website for details about how to apply for the upcoming CTH™ examination. The current fees for the examination (correct as at 25 April 2016) are as follows:

### Fees paid on or before 29 February 2016

ISTM Members:

Doctoral Level USD 450.00

Non Doctoral Level USD 300.00

Non-Members: USD 650.00

### Fees paid beginning 1 March 2016

ISTM Members:

Doctoral Level USD 550.00

Non Doctoral Level USD 400.00

Non-Members: USD 750.00

### **Declaration of interest**

Dr. Flaherty currently sits as an unpaid Counselor on the 9-person ISTM Executive Board. The ISTM Examination Committee administers and promotes the CTH™ examination.

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3. International Society of Travel Medicine. ISTM Certificate of Knowledge. <http://www.istm.org/certificateofknowledge#upcomingcth> (accessed 25 April 2016).

Dr. Gerard Flaherty

## GLOBAL ROUND-UP

**EBOLA VIRUS:** May 2016- The 21-day follow-up period for all contacts of the recent Ebola Virus Disease (EVD) cases in Guinea was completed on 27 April 2016.

The last EVD case tested negative for Ebola virus for the second time on 19 April 2016. The 42-day (2 incubation periods) countdown phase began on 19 April, and is due to end on 31 May 2016; the outbreak can then be declared over in Guinea. *Source: <http://www.who.int>*

May 2016 - The 21-day follow-up period for all contacts of the recent EVD cases in Liberia was completed on 27 April 2016.

A 2-year-old boy remains in hospital and is reported to be healthy, however, a second consecutive negative test for Ebola virus is required before discharge. The 42-day (2 incubation periods) countdown phase must be completed before the outbreak can be declared over in Liberia; it will begin following the second negative test of the last case. *Source: <http://www.who.int>*

**ZIKA VIRUS:** Peru: The Ministry of Health in Peru has confirmed autochthonous cases of Zika virus (ZIKV) infection in the country. Imported cases (9) have previously been identified in travellers returning to Peru from Brazil, Colombia, Ecuador and Venezuela. Four autochthonous cases have been confirmed as ZIKV by the National Institute of Health in Loreto and a further 3 suspected cases are under investigation.

The cases were identified in the regions of Cajamarca in the northern Andes of Peru bordering Ecuador and Loreto in the northeast of the Amazon bordering Ecuador, Colombia and Brazil.

*Source: <http://www.minsa.gob.pe>*

On 28 April 2016, the European Centre for Disease Prevention and Control (ECDC) added Saint Barthélemy to the list of countries or territories with reported confirmed autochthonous cases of Zika virus infection in the past 3 months. Transmission in Saint Barthélemy is classed as sporadic.

*Source: <http://www.ecdc.europa.eu>*

**YELLOW FEVER:** On 8 April 2016, the National IHR Focal Point of Uganda notified WHO of an outbreak of Yellow Fever (YF) in Masaka district, south of Kampala. From 26 March to 18 April, 30 cumulative suspected cases, including 7 deaths, were reported from Masaka, Rukungiri, Ntungamo, Bukumansimbi, Kalungu, Lyantonde, and Rakai. Of these, 6 cases and 2 deaths were confirmed in Masaka district (5 cases), and Rukungiri district (1 case). The mean age of the cases is 23 years old. The majority of cases are male. The cases do not have any history of travel outside of Uganda. *Source: WHO*

On 22 March 2016, the National IHR Focal Point of the Democratic Republic of Congo (DRC) notified WHO of cases of Yellow Fever (YF) in connection with the outbreak currently occurring in Angola.

From early January to 22 March, a total of 453 suspect cases of YF, including 45 deaths were reported by the national surveillance system. Further investigations identified 41 cases potentially related to the Angola outbreak.

*Source: WHO*

The Pan American Health Organization (PAHO) published a yellow fever (YF) Epidemiological Alert on 22 April 2016. In the Americas region, Peru is the only country in 2016, to report confirmed human cases of yellow fever. In the first 3 months of the year, a total of 25 suspected YF cases (including 2 deaths) were reported. Of those, 9 were confirmed as YF, 11 were classed as probable and 5 were discounted. The departments with the highest number of cases were Junin (8) and San Martin (6).

*Source: [www.paho.org](http://www.paho.org)*

**MEASLES:** The media has reported on the measles outbreak in Waikato region in New Zealand, located south of Auckland, in the North Island. A further 15 measles cases have been confirmed and 12 suspected cases are under investigation.

The health authorities have issued an alert advising the general public to ensure that their measles vaccinations are current, following the report that one of the measles cases had attended a festival in Hamilton on 16 April 2016.

Around 5000 individuals had attended the Kapa Haka festival at the Claudelands Event Centre, with 17 groups competing from several areas of the country including: Coromandel, Waikato, Hauraki, Maniapoto and Raukawa.

*Source: [www.newshub.co.nz](http://www.newshub.co.nz)*

## *Travel Medicine Conference Calendar*

### 6TH NORTHERN EUROPEAN CONFERENCE ON TRAVEL MEDICINE

Date: 1 - 4 June, 2016

Location: Queen Elizabeth II Centre, London.

For further information, please contact: [nectm6@in-conference.org.uk](mailto:nectm6@in-conference.org.uk) or: [www.nectm.com](http://www.nectm.com)

### 7TH REGIONAL CONFERENCE OF THE INTERNATIONAL SOCIETY OF TRAVEL MEDICINE

Date: 28 September - 1 October 2016

Port Elizabeth, South Africa

Web: [www.istm.org](http://www.istm.org)

### TRAVEL MEDICINE SOCIETY OF IRELAND - HALF-DAY MEETING

Date: 3 September, 2016

Location: Rochestown Park Hotel, Douglas, Cork

Time: 9:00am - 1:00pm. Places limited

For further information, please contact Anne at 045 890 127 or [annehredmond@eircom.net](mailto:annehredmond@eircom.net)

### TRAVEL MEDICINE SOCIETY OF IRELAND - FULL-DAY MASTERCLASS

Date: 5 November, 2016

Location: Clarion Hotel, Liffey Valley, Lucan, Dublin

Time: 9:00am - 5:00pm

Fee: Members €45.00, Non-members €65.00. Places limited

For further information, please contact Anne at 045 890 127 or [annehredmond@eircom.net](mailto:annehredmond@eircom.net)

### 4TH TROPICAL MEDICINE EXCURSION

Date: 30 November – 10 December 2016, to

Ghana, West Africa. In collaboration with various teaching hospitals in Ghana and Kay Schaefer (MD, PhD, MSc, DTM&H), Cologne, Germany. 11 days round-trip excursion. Includes individual on-site bedside teaching, laboratory manuals (hands-on microscopy on parasites in the blood, stool, urine and skin), field excursions and lectures. Accreditation: 60 CME contact hours by the Medical Association, Düsseldorf, Germany. Official language: English. [www.tropmedex.com](http://www.tropmedex.com)

#### TRAVEL MEDICINE SOCIETY OF IRELAND EXECUTIVE COMMITTEE AND OFFICERS

<b>PRESIDENT:</b>	<b>CONOR MAGUIRE</b>	
<b>PRESIDENT-ELECT:</b>	<b>SIMON COLLINS</b>	
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	<b>HAKHA NIKOOKHAM,</b>	<b>PATRICIA BRADY</b>
<b>RECORDING SEC.:</b>	<b>ANNE REDMOND</b>	

Items for the newsletter can be forwarded to:

[annehredmond@eircom.net](mailto:annehredmond@eircom.net)

#### NOTICE

If you have changed your e-mail address or your postal address recently please let us know for our records.

A few e-mails have been returned stating "no longer at this address"

As you are missing out on updates etc. it is important that we have your more recent email addresses on file.