



Is climate change the biggest threat of the 21st century?

This case was written by **Stefi Barna and Aditya Vyas, Medact** (United Kingdom). It was edited by Charlotte Butler, Project Consultant. The case is intended to be used as the basis for group work and class discussion rather than to illustrate either effective or ineffective handling of a Medical Peace Work situation.

© 2016, medicalpeacework.org and the authors

All rights reserved. Permission is granted for non-commercial reproduction, translation and distribution of the case study, as long as medicalpeacework.org and the authors are given credit.

medicalpeacework.org and the authors do not guarantee that the information in this case study is complete and correct and shall not be liable for any damages incurred as a result of its use.



Erasmus+

This case study was funded with support from the European Commission. It reflects only the authors' view. Erasmus+ and the Commission are not responsible for any use that may be made of the information it contains.

Part 1: Refugees and infections

 **Tahmina** @drtahmina · Jan 4

Excited to start my first ever placement as a doctor at Norton General Hospital! Volunteering on a refugee community outreach project too. Can't wait to help out. [#givingback](#) [#NHSnewbie](#)



Meeting to discuss local refugee health

 **Dr Tahmina Patel**
to Gervais M Chol

4 January 19:21

Dear Mr Chol

I hope this email finds your well. I was provided your contact details by the Tuberculosis Clinic to discuss what we can do to improve refugee health in our town of Norton, particularly regarding the high number of TB cases recently. I appreciate the hardships that many refugees must have endured and I am certain that we will all do our best to help improve the health of your people. Could you kindly indicate when you might be free for a meeting?

Yours sincerely,
Dr Tahmina Patel

 **Gervais M Chol**
to Tahmina

5 January 08:27

Dr Patel –

I'm sorry but I don't have time for you right now. I am busy with the UNHCR refugee resettlement programme and many of my fellow migrants are struggling to cope with destitution, detention or deportation under this government's asylum system. It seems to get worse every week. Good luck with your course.

 **Tahmina** @drtahmina · Jan 5

I want to go back to med school! :- (Had to insert 15 cannulas, got shouted at by the chief nurse, and even my refugee contact doesn't have time for me.

Part 2: Refugees and the environment

8 January 19:00 [Gervais is online]

T

Hello Gervais. I know you've been very busy this week. Thank you for taking the time to chat with me. I would like to know your suggestions for managing tuberculosis in our refugee population.

G

Yes it has been busy. Seems politics follows me wherever I go! But I fear you have misunderstood a root cause of ill health in my community. You talk about TB control but I do not think you understand that human health depends on the ecological context we live in – the air, the water, and stable climate. It seems all they have taught you about in med school is how to treat bugs.

T

It's true that the environment plays an important role in health and in our country we have worked to control standards of hygiene, sanitation and waste. I understand that these issues are still a problem in your country and these can affect TB rates. However, [typing...]

G

I am not talking about sewage in slums! There are much bigger things going on, and they are affecting both rich and poor countries. Do you know why I came to this country? Why I had to leave Kenya?

T

I presume it was because of the war?

G

No! It was not. Please, Doctor Tahmina, do you ever read the newspapers?

T

I'm sorry, I know very little about Africa. Was it because of your political views? Or maybe you were persecuted for religious views?

G

No, doctor, no! Of course there are many ongoing issues like politics, religion, violence, etc, etc. But in the end it boils down to one thing: I am an 'environmental refugee'. My story is here in the UNHCR newsletter.

UNHCR



Newsletter

Gervais, could you tell us how you came to Norton?

I will tell you my story with the hope that it will help you understand the absolutely desperate plight of my people. My family were subsistence farmers near Lake Turkana for many generations. We treated the land with respect and the land gave back. But with each generation it gave less and less. Some years there was no rain season at all. We do not have irrigation systems – we rely on the river. Otherwise? Drought. And what follows? Famine. Then it got worse. One end of the country got drought. Next year, the other end got floods. In my district there were wildfires. In another district, mosquitos that spread dengue fever. My grandfather, and his grandfather before him – they had known hardship, but nothing like this. Why were these zig-zag changes taking place?

What did your family do?

Not just my family – my village, the whole district! We were trapped. Anyone who had some connections went to the capital in search of work, but it was already full. It was hard to find a room, hard to find work, because so many people had come. Farmers who were already desperate – they became refugees in their own countries. At UNHCR we call them IDPs – “internally displaced people”.

How did you end up in this country working with UNHCR?

I was lucky that my family knew someone abroad who sponsored me to come here. I was able to bring my wife and daughters to this lucky country. But the rest of my family, my parents, my cousins... they are struggling in the slums of our capital city. I send money to them. But this will not solve the problem. The cost of climate change on our communities is so great and our way of life is being lost, as is our independence and our dignity.

T

I'm so sorry Gervais, I had no idea... I don't know what to say...

Dr Tahmina, THIS is how we need to understand health – by looking at its underlying causes. There are changes that we've already made that are now out of our control. Climate change intensifies the environmental variation that has always made rural life so delicate. We can control infectious diseases with vaccines and antibiotics – you doctors have been doing that for a hundred years! But to manage the health impacts of climate change – that is going to be the challenge of this century. If you don't understand that, then there's not much you can do to help.

G



Tahmina @drtahmina · Jan 8

Wow. Eye-opening discussion with a refugee. @WHO estimates additional 250,000 deaths per year between 2030 & 2050 – due to climate change! More here: <http://www.who.int/mediacentre/factsheets/fs266/en/>



Tahmina @drtahmina · Jan 8

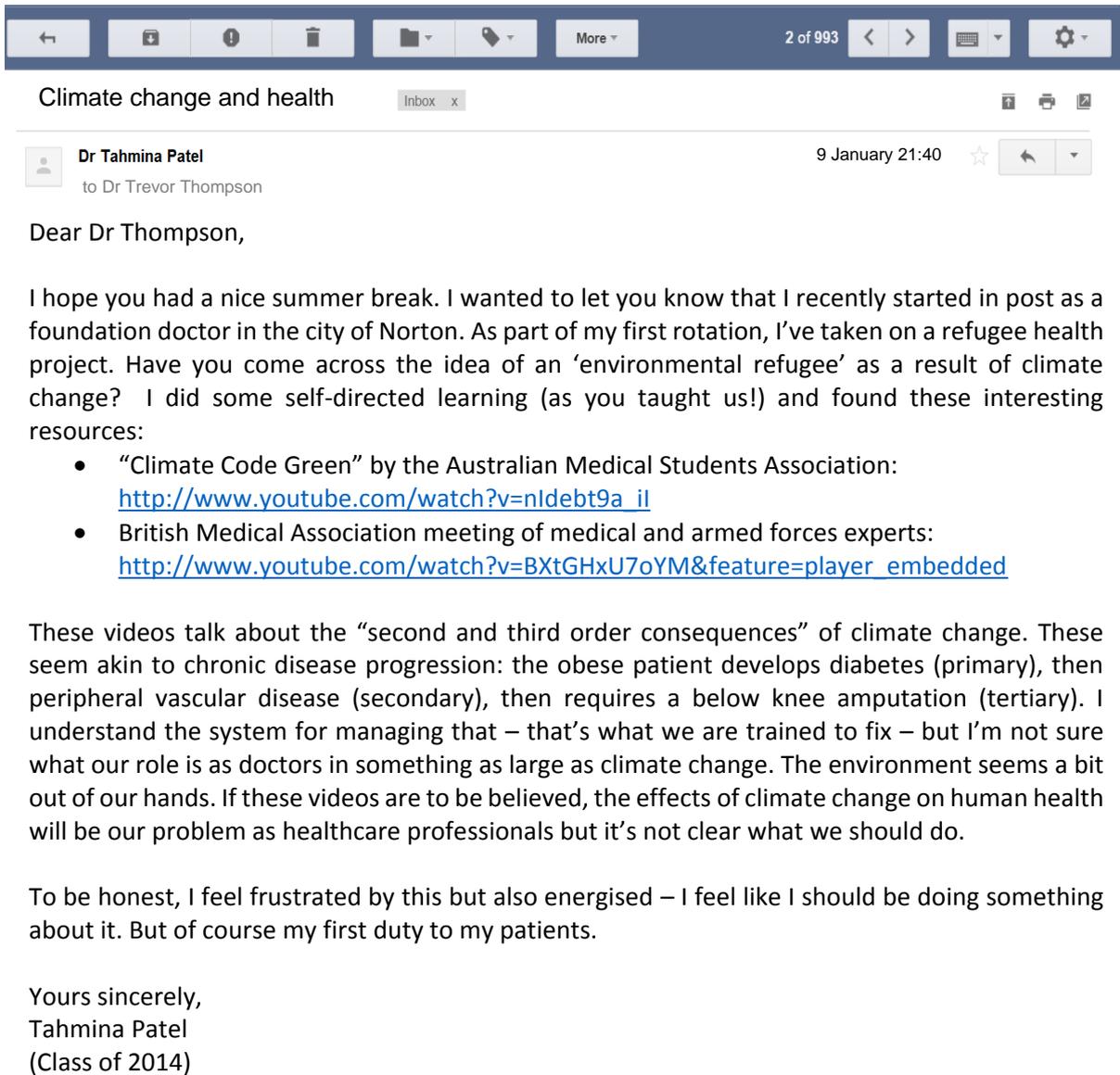
It all seems so complicated: <http://climatemigration.org.uk/moving-stories-the-sahel/> and this video: <https://www.youtube.com/watch?v=Bg9GXLolpiQ> Hard to know where to start... and I need to read up on glomerulonephritis before grand rounds tomorrow!



Jessica @drjess · Jan 8

@drtahmina I often wonder if it's just fear mongering. But if the mainstream media is reporting it... This seems legit, right? <http://www.theguardian.com/sustainable-business/2015/jan/15/climate-change-fatal-health-disease-global-warming>

Part 3: Health and the climate



The screenshot shows an email client interface. At the top, there is a navigation bar with icons for back, forward, search, and other functions. Below this, the email title is "Climate change and health" and it is in the "Inbox". The sender is "Dr Tahmina Patel" and the recipient is "to Dr Trevor Thompson". The date and time are "9 January 21:40". The email content starts with "Dear Dr Thompson," followed by a paragraph about the sender's new role as a foundation doctor and their interest in environmental refugees. Two YouTube links are provided. The email concludes with a paragraph about the sender's frustration and a sign-off: "Yours sincerely, Tahmina Patel (Class of 2014)".

Climate change and health Inbox x

Dr Tahmina Patel 9 January 21:40

to Dr Trevor Thompson

Dear Dr Thompson,

I hope you had a nice summer break. I wanted to let you know that I recently started in post as a foundation doctor in the city of Norton. As part of my first rotation, I've taken on a refugee health project. Have you come across the idea of an 'environmental refugee' as a result of climate change? I did some self-directed learning (as you taught us!) and found these interesting resources:

- "Climate Code Green" by the Australian Medical Students Association:
http://www.youtube.com/watch?v=nIdebt9a_il
- British Medical Association meeting of medical and armed forces experts:
http://www.youtube.com/watch?v=BXtGHxU7oYM&feature=player_embedded

These videos talk about the "second and third order consequences" of climate change. These seem akin to chronic disease progression: the obese patient develops diabetes (primary), then peripheral vascular disease (secondary), then requires a below knee amputation (tertiary). I understand the system for managing that – that's what we are trained to fix – but I'm not sure what our role is as doctors in something as large as climate change. The environment seems a bit out of our hands. If these videos are to be believed, the effects of climate change on human health will be our problem as healthcare professionals but it's not clear what we should do.

To be honest, I feel frustrated by this but also energised – I feel like I should be doing something about it. But of course my first duty to my patients.

Yours sincerely,
Tahmina Patel
(Class of 2014)



Re: Climate change and health

Inbox x



Dr Trevor Thompson

10 January 11:03

to Tahmina



Dear Tahmina,

How nice to hear from you, and I'm delighted that you were able to secure a post in Norton – that was your first choice, wasn't it? How interesting that you are involved in refugee health. You may remember a first year lecture on environment and health in which some of this was discussed?

Climate change is indeed an area of growing concern in global health. The direct and indirect effects of climate change on health are summarised quite well here:

http://dea.org.au/resources/file/climate_change_and_health_poster. You can see that the main issues include changes in disease vectors, exposure to extreme weather events, reduced food security due to extreme weather and changes in weather patterns, migration, and conflict over resources (esp. water and arable land).

As for what you should do, a good place to start is by reflection. Why do you think you respond as you do, why does this problem seem to matter to you, or not? Is it because of your values? Where do your values come from – your family, your education, your life experiences? I have given you more questions than answers, but do think about them. I will be at Norton City Hospital for grand rounds next week, so let's catch up for a coffee then.

Best wishes,
Trevor Thompson



Tahmina @drtahmina · Jan 10



Thinking about medical ethics & Hippocratic Oath. At graduation we recited it with carefree abandon. Can't believe how much responsibility there is on us...

http://www.ukcen.net/index.php/ethical_issues/ethical_frameworks/the_four_principles_of_biomedical_ethics



Jessica @drjess · Jan 11



@drtahmina You must have a lot of time on your hands. At my hospital we're so pressed for time that I just want to go home and sleep! What's the science behind your world-saving ambitions anyway? #ClimateSceptic





Tahmina @drtahmina · Jan 11



@drjess It's time to stop questioning the facts. This explains everything doctors need to know about climate science:

<http://www.medact.org/resources/climate-science-health-professionals-first-briefing/> #TheScienceIsIn

Part 4: The doctor's dilemma



Re: Meeting to discuss local refugee health issues



Gervais M Chol

11 January 2015 08:45



to Tahmina

Tahmina, I appreciate that you are someone who truly cares and I would like to invite you to help us with an upcoming event. There is the national climate change rally next month and we need a doctor to explain climate change from a health perspective. I can meet with you later this week to discuss the details. We can do this, together!

Gervais

Dr Tahmina Patel

11 January 2015 13:51



to Gervais M Chol

Dear Gervais

I am just stealing a few moments to reply – I'm on a ten minute lunch break! Thank you very much for your kind invitation. I would very much like to help but I don't really have expertise in this area and I'm not sure that I would be the appropriate person for this.

Sincerely,
Tahmina

Gervais M Chol

11 January 2015 14:45



to Tahmina

Doctor Tahmina,

We really need your assistance. Don't worry about being an expert! There are many different people involved who have become aware of the magnitude and seriousness of the situation and no one of us is an expert. Your position as a doctor would be invaluable.

Gervais



Tahmina @drtahmina · Jan 12



At last, a day off after an overtime shift yesterday on top of a full week! Time to chillax...



Tahmina @drtahmina · Jan 12



Why did I tempt fate! Called to assist with emergency procedures all day – no surgical assistants available so of course pick on the intern >:-)



Tahmina @drtahmina · Jan 12



Argh. Why have we designed a system like this? Five people running a hospital of a couple of hundred patients?? Time to sit, and eat, and treat my own oliguria.

12 January 14:39 [Tahmina is online]

Doctor, are you busy? I thought you might be able to chat for a few moments.

G

T

Just for a few moments, yes. I'll have to leave if I get paged. We should speak about the TB programme soon.

We urgently need a letter to The Times in time for the United Nations meeting next month. Could you please write it for us? We need to have a health perspective.

G

T

Gervais, I'm really not a very good writer. My training hasn't covered anything like this.

Also I have appointments set up with the city Council – please could you explain to them about the importance of reducing carbon emissions in Norton? It needs to be in medical language.

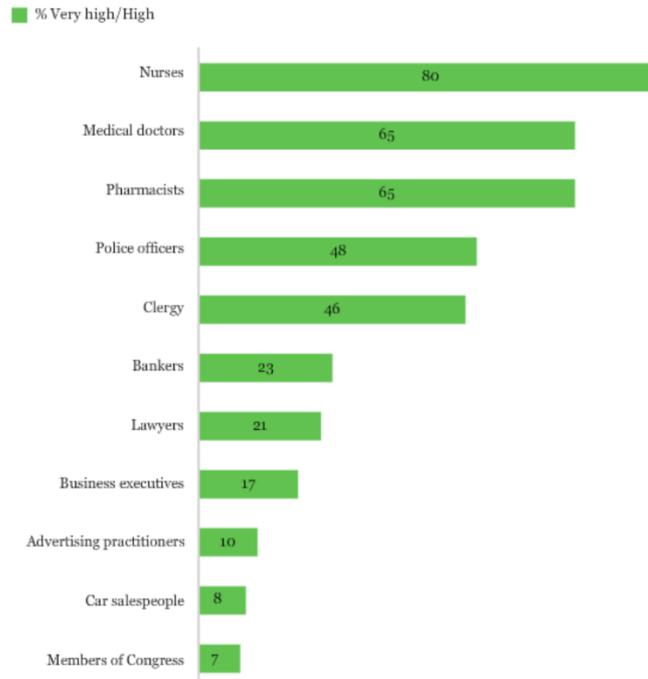
G

T

I have already spoken to a few people about this already but I don't think it went very well. No one believes me and everyone thinks I'm being negative. My clinical colleagues say I'm catastrophising. I should probably focus on building my clinical skills first before I take this on.

It *can* be depressing when you first realise what's really going on. But, even though it's bad news, it's true! And who is better trained to deliver bad news than nurses and doctors? Isn't that what you do every day?! Just recently I came across this poll – it shows that health professionals are more trusted than other profession. So, really, you are perfectly suited to help us.

G



T

I'm sorry I have to run, my pager is beeping Code Blue. I just don't feel confident that I can contribute. I've just started a new job and it's really overwhelming. I'm doing ten things at once and barely even have time for myself. I want to help but I honestly don't know how, what and where I will find the time. I hope you understand. I still want to try helping in other ways. I'm sorry to let you down. I have to go resuscitate a patient.

Suit yourself. I thought you understood and I thought you cared. I see that I was mistaken! You have a comfortable life and that is more important to you. It's always the same.

G

12 January 15:01 [Gervais has logged off]