

**Tim Phillips [00:00:00]:**

Today on VoxTalk's Economics, the effect on children's health in Africa of the arrival of refugees. Welcome to VoxTalks Economics from the Centre for Economic Policy Research. My name is Tim Phillips. Every week we bring you the best new research in economics. So remember to subscribe, follow us on instagram as well. You will find us, not surprisingly, at VoxTalks Economics. There's a puzzle in the results of research into migration. Often we find the arrival of migrants has a positive economic effect on the local population, but some studies have also found a negative health effect on that same population. Anna Maria Mayda of Georgetown University, who's also visiting Johns Hopkins site Europe, and Jean-François Maystadt of UC Louvain and Lancaster University are two of the authors of a new discussion paper which might resolve this contradiction for refugees in Africa, and they join me now. Anna Maria, welcome back to VoxTalks Economics.

**Anna Maria Mayda [00:01:15]:**

Thank you, Tim. Hello.

**Tim Phillips [00:01:17]:**

And Jean-François, welcome.

**Jean-François Maystadt [00:01:18]:**

Hello, Tim.

**Tim Phillips [00:01:19]:**

We do get the sense from the news that there are more migrants in Africa. Now, is this objectively true?

**Anna Maria Mayda [00:01:30]:**

This is correct, Tim, but we need to distinguish between economic migrants and refugees. And in our paper we focus on refugees. Let me give you some numbers. In 2023, the World Bank published the World Development Report on migration. And in this report, the World Bank estimates that there are 184,000,000 immigrants in the world, and 37 million of them are refugees. Refugees are a specific type of migrants since they have been granted international protection by a country of asylum because of violence or armed conflict in the country of origin. Now, in the last few years, we have heard a lot about Ukrainian refugees in Europe, refugees from Venezuela and South America, or refugees in the Middle East. But actually in Africa, the number of refugees has increased quite a lot. And this is because of renewed violence in the Sahel, like Mali, Niger, Burkina Faso. And these new conflicts have added to the long standing

conflicts in Nigeria, DRC, Sudan and Somalia. And all of this has increased the number of refugees in Africa from 2.2 to 7 million between 2010 and 2022.

**Tim Phillips [00:02:43]:**

So when they reach their destination country, where do they usually end up living?

**Jean-François Maystadt [00:02:50]:**

First of all, of course, they move because they fear persecution or they fear violence in the country of origin. But that's true that the most striking fact is basically where these refugees are going. While economic migrants are fairly equally shared between high income countries and poor countries, refugees are not. Three out of four refugees are actually hosted in low and middle income countries. And the reason is simple proximity. Refugees, they will mostly escape violence to neighboring countries. So it's estimated that about 70% of refugees are indeed hosted by one of their neighboring countries. And this could be seen in many contexts. Think about the Ukrainian refugees. They are mostly going to Poland, for example, refugees from Venezuela, they would go mostly to Colombia. And very recently, for example, you have heard about refugees from Sudan. They would move to the Central African Republic, to Chad or Ethiopia. So distance remains really the driving factor for the location of refugees. And so where they go, basically, when they move to neighboring countries, most of the time, they are either dispersed refugees or in camps. And the majority of these refugees in camps, they would be in a situation of what the UN agency for refugees call protracted refugee situation. They don't stay for little time, but they would stay for more than five years.

**Tim Phillips [00:04:12]:**

And these camps, how many of them are there?

**Jean-François Maystadt [00:04:15]:**

To be honest, Tim, that's quite of a difficult question to know how many refugee camps exist today in Africa? There are, of course, some well known and long standing camps, like the Kakuma camp in Kenya or the Dadaab camp in Kenya. But over time, you have also new camps opening and new camps closing. What I can say is, based on our data, between 2000 and 2016, we count about 500 camps in Africa.

**Tim Phillips [00:04:46]:**

So, for your research, how many of these refugee camps in the areas around them were you able to study?

**Anna Maria Mayda [00:04:53]:**

Before talking about the data, let me tell you broadly what we do in our analysis, so it is clear what data we use. So, in our paper, we want to analyze the impact that refugee arrivals in Africa have on the health of the local community. To do so, we obtain the exact location of refugee camps in Africa between 2000 and 2016. We know when these refugee camps open, when they closed, how many refugees there are in each of them each year, and where refugees are coming from. We then match this data with information on health outcomes of the local community, in particular, kids under five years old, from the demographic and health service. And after we match the data, we end up with a data set which includes 307 camps present in 34 African countries between 2000 and 2016. And we analyze 400,000 children under the age of five.

**Tim Phillips [00:05:56]:**

Now, as you said, no one knows exactly how many refugee camps there are. This is often a very chaotic situation, isn't it? How reliable is your data therefore?

**Anna Maria Mayda [00:06:06]:**

Our data comes from the UNHCR, which is the UN agency for refugees. And actually, the UNHCR, for practical reasons, is very good at counting people. Their mandate is primarily about protecting these people. So moving in and out of refugee camps is usually strongly controlled. And as a consequence, the number of refugees, as recorded by the UNHCR, seems to be highly reliable. What we do is to aggregate our data on refugee camps to the national level and to compare those numbers to official statistics, and they follow each other quite closely. Now, one issue is that we only look at refugees in refugee camps. We don't look at refugees who are so called dispersed refugees, not in refugee camps. So the aggregate numbers that we have are smaller than the official statistics because they do not include dispersed refugees.

**Tim Phillips [00:07:06]:**

Now, in your research, you have found a negative health effect in the local population. What is that effect? How big is it?

**Jean-François Maystadt [00:07:14]:**

We find that the presence of refugees at the time of birth reduces the height for age, so the height of children, and to some extent also the weight of children among the hosting populations, children are basically shorter and thinner than what they should be if they are born close to a refugee camp. And this is true if you compare children between exposed villages and other villages, but also if you compare children born at different times within the same villages, or even if you compare children, and maybe I should say, siblings born at different times within the same household. And so the other result also we found is that this effect, this impact of

refugees on the health is really concentrated at a very early age. So in our data, it's really during the first year of life. And this is quite consistent with the literature on child human development. Maybe you were asking about the effects side. It's also quite consistent with the literature. Of course, the impact is much lower than the impact you would find, for example, from a shock, like a natural disaster or armed conflict, but it's still fairly sizable. So, according to Omaine estimates, let's imagine you double the number of refugees in a particular location. The height of the children would decrease by about 2%. And this is also true even if with slightly lower magnitude for the weight. We try also to seek, really to identify the causal impact of refugees and to distinguish it from a misleading correlation. Indeed, refugee camps could be simply located in poor or deteriorating health conditions. But we show that, on average, health conditions were not deteriorating before camps opened, and also that mothers of children exposed to the presence of refugees, they are not different from other mothers. It seems something causal is going on here.

**Tim Phillips [00:09:04]:**

Well, let's try and track down what that cause is. So the first thing that comes to mind, the local health services are stretched because they need to cope with a lot of new arrivals. Maybe there's an impact on local family income or family structure. The time that the parents have to give to their newborn children, are these causes?

**Anna Maria Mayda [00:09:25]:**

So, first of all, the channel of impact of this negative effect of refugees on health is really central to our research project, and our results are consistent with what the literature finds in specific case studies. So there is a paper for Tanzania, one for Colombia, and another one for Ethiopia, and they find results which are consistent with ours. So a finding of a negative impact. But notwithstanding that, to be honest, we were surprised by those results and by our results, and we were expecting actually a positive overall impact. And the reason is that the economics literature tends to show that refugees to low and middle income countries make a positive average contribution to the local economy. And so to the extent that the local community uses these better intimate opportunities to pay for medical care, we would expect the opposite of what we find. So finding out what drives this negative impact was important for us also to reconcile the different findings in the literature, the evidence of a positive average economic effect and of a negative health impact. So we started looking for different explanations, and one of them is what you suggest. So the fact that when refugees arrive, although humanitarian assistance comes in, there is this possibility that the IRC, the Red Cross, humanitarian assistance in general, cannot provide enough health services within camps, and refugees need to use health services outside of camp at the expense of their host. But we don't find evidence of that. If anything, health access and early life care, such as vaccination, have improved in the refugee hosting areas. That's what we find. Another possibility is that although the economics literature finds evidence of a positive economic average effect, there are winners and losers. So the economic effects are quite uneven. So it might be possible that those who lose drive this

negative health impact, but we don't find evidence of that. Another possibility is instead rather the opposite. Maybe these positive economic effects imply that parents, mothers work more and they don't have time to take care of their newborns. This is not what we find. The evidence is not consistent with that. And importantly, we also investigate whether our results are driven by selection effects. You mentioned changes in the family structure. So it might be that the households that decide to have kids when refugees arrive are different from the pool of households who don't. We investigate them, but we don't find evidence that the pool of households changes as a consequence of the arrival of refugees.

**Tim Phillips [00:12:39]:**

So Anna, what's the explanation? What's causing this?

**Anna Maria Mayda [00:12:42]:**

Against all these explanations that I talked about and exploiting the richness of our data. We have data on the origin of refugees by Kent. What we have found is that it is the spread of malaria that explains our findings. The negative health impact on local communities, on children, is driven by refugees coming from high malaria countries. When we look at refugees coming from countries with low malaria rates, there is no evidence of a negative impact. And we find additional pieces of evidence that are very consistent with this malaria channel. First, we find that the negative impact is there when refugees come from high malaria countries, but go to countries where malaria rates are low. In Africa, in a lot of regions, there are the mosquitoes that carry the parasites that give rise to malaria. So these are the situations where we find evidence of a negative impact when a population which is highly infected goes to locations where there are the mosquitoes responsible for malaria, but infection rates are still low. Now, another piece of evidence that we find consistent with the malaria channel is that when refugees come from high malaria countries, symptoms that are usually associated with malaria increase in children at destination. These symptoms are fever, diarrhea, anemia. And you can see the connection between these symptoms and malnutrition, long term developmental consequences. So this is all very consistent with a negative impact on height and weight. And notice that these symptoms do not arise when refugees come from countries where malaria is not prevalent.

**Tim Phillips [00:14:36]:**

But explain this to me. How does it work? Because malaria isn't passed from person to person, it's passed by mosquitoes.

**Anna Maria Mayda [00:14:45]:**

You're right, Tim. So malaria is a disease caused by parasites that are transmitted to people through the bites of infected female mosquitoes. And these are particular type of mosquitoes, which, unfortunately, are still widespread in Africa. So what we have in mind is a situation in

which a population with high infection rates, which is the population of refugees, moves from the country of origin to the country of destination, and this population infects the mosquitoes through bites. And in turn, these mosquitoes infect the local population.

**[Voiceover] [00:15:28]:**

In April 2022, Sascha Becker talked to us about new research that is discovering the economic impact of mass displacement in history, both on refugees and on communities. And the lessons we can learn from the past. Listen to Forced Displacement: then and now. And in December 2021, we interviewed Tim Hatton about the differences in recognition rates for refugees claiming asylum across Europe in the episode Europe's Asylum Lottery.

**Tim Phillips [00:16:02]:**

Okay, so we need to work out what are the policy implications of this. It's pretty important, given this, that you limit the access of refugees to their region or to their country. Is this the appropriate response?

**Jean-François Maystadt [00:16:23]:**

Let me try to answer this sensitive question. I'm glad you asked it, because our paper should not be misinterpreted. We really look at one particular channel, the health impact. And so that's true. We find this detrimental impact on health, but only in some particular circumstances. Refugees would deteriorate the health of the host only if they are coming from countries where malaria is prevalent and in particular when they move to this area with the low prevalence of malaria. So overall, we are not saying refugees have necessarily a detrimental impact on their host. The literature is actually clear about it. Even with strong redistributive effect, refugees can actually contribute positively to the local economies.

**Tim Phillips [00:17:05]:**

But Jean-François, we want to do the best that we can. So are there other policy options that could mitigate this negative effect?

**Jean-François Maystadt [00:17:15]:**

Yes, an obvious policy would be to rethink the relocation of refugee camps in light of these results, but of course, it's a shared responsibility. There is a strong call since the signing of what is called the 2018 Global Compact for Refugees to share the responsibility of hosting refugees. But in reality, this responsibility sharing remains very limited. As I told you, only three out of four refugees are actually hosted in low and middle income countries. Even more, 20% of refugees are actually hosted by one of the 46 poorest countries in the world. So this is already a sign that

high income countries do not take their responsibility. So we could certainly do more in offering alternative pathways for migration to refugees. Many refugees have talents or have skills that are in high demand in high income countries, and offering new resettlement programs or revisiting existing ones should certainly be a priority. But of course, this is a kind of global response. More immediate policy could be offered. So, for example, more could be done to provide bed nets and insect repellents in this risky area. We identify this area where refugees would come from countries with high prevalence of malaria to areas with low prevalence of malaria. And then beyond the risk of malaria, more could be done to help refugees to integrate into their hosting communities. So, as shown in the last world development report, and with the right support from the international community, we know that three elements are really important. First of all, refugees need to have the right to work in the hosting communities. Second, refugees need to be allowed to move freely within the country of asylum. And last, refugees need to be integrated into the local or the national systems, providing health, education and social services. So we know that with climate change and other sources of instability, force displacement is likely to remain high on the agenda in the years to come. So certainly the asylum system should change to adapt to this new reality.

**Tim Phillips [00:19:36]:**

Well, these are important questions and they are only going to get more important. Thank you very much, Anna Maria.

**Anna Maria Mayda [00:19:43]:**

Thank you very much, Tim.

**Tim Phillips [00:19:44]:**

And Jean-François as well.

**Jean-François Maystadt [00:19:46]:**

Thank you, Tim.

**Tim Phillips [00:19:55]:**

The paper is called Refugees, Children's Health and Malaria Transmission in Africa, and the authors are Olivier Dagnelie, Anna Maria Mayda and Jean-Francois Maystadt. It is discussion paper 18284 at CEPR.

**[Voiceover] [00:20:14]:**

This has been the final VoxTalk of 2023, brought to you by the Center for Economic Policy

Research. We hope you've enjoyed listening as much as we have enjoyed creating the episodes. We'll see you in 2024.