

The Turkish village blighted by cancer

Jonathan HEAD

Toraks
Bülteni

BBC News



The central Turkish region of Cappadocia is a geological wonderland; a landscape of fantastically-eroded rocks and rich, historic remains which attract around two million tourists every year.

The soft rock which has been worn down into the region's characteristic "fairy chimneys", and carved to make cave-churches and underground cities, was deposited millions of years ago by the eruptions of volcanoes surrounding the Cappadocia plateau.

The new wealth that tourism has brought has been a blessing to most of the region. But in a few isolated spots, those volcanoes left more of a curse.

“ Even if a child born in the village leaves during childhood, he cannot run away from mesothelioma. It is a horrible disease”

Dr Izzettin Baris

Outwardly, little distinguishes the village of Tuzkoy from its neighbours.

Tractors rumble through its streets, women in baggy trousers work in the surrounding fields, the men spend their spare time in tea shops, playing cards and backgammon.

Most of the buildings are made from the characteristic soft, yellow rock.

'Easy to inhale'

But for as long as the village has been there, its inhabitants have suffered abnormally high rates of respiratory disease, responsible for about half of all deaths.

Until recently no-one knew why.

The cause was discovered by Dr Izzettin Baris, who began studying patients in Tuzkoy and two other affected villages, Karaiun and Sarahidir, in the mid-1970s.

"Doctors then were diagnosing these patients with tuberculosis, which was quite common then," he recalls.

"But they did not understand why the usual treatment for TB was not working."

Dr Baris discovered that the patients were actually suffering from mesothelioma, a virulent form of cancer caused by exposure to asbestos.

The rates in Tuzkoy were hundreds of times higher than anywhere else in Turkey.

But there was no asbestos in the region.

Further research showed the cause to be a rare mineral called erionite, which has similar properties to asbestos, and is commonly found in the rock around Tuzkoy.

As the rock is soft and powdery, it is very easy to inhale the erionite fibres.

"Women would often go into their barns and brush the dust off the walls," says Dr Baris.

"Then they breathe in the fibres. Even if a child born in the village leaves during childhood, he cannot run away from mesothelioma.

It is a horrible disease, causing great pain."

'Stuck here'

Further research showed people from Tuzkoy who had moved as far away as Istanbul and Sweden also suffered high rates of mesothelioma.

The only solution, said Dr Baris, was to move the village.

More than 30 years after his initial discovery, that is at last about to happen.

A new town is being constructed on the hill above the village, an area free of erionite.

ERIONITE

- Belongs to a group of minerals called zeolites
- Usually found in volcanic ash altered by weathering and ground water
- Some properties similar to asbestos
- Listed by the International Agency for Research on Cancer as a Group 1 Carcinogen

Funds have been released by the central government, after parts of Tuzkoy were declared a disaster area.

The Turkish parliament now has a special committee to decide what to do with the village.

But there are still people living in the danger zone. Some refuse to believe the link between the stone their houses are made of and cancer.

Dr Baris says he is no longer welcome in Karain because the local people accuse him of branding it as a “cancer village”.

Others, like Dondu Guler in Tuzkoy, say they cannot afford to leave the danger zone.

“Of course I want to move,” she told me.

“I worry about myself, and the children. But we don’t have the financial means to do so. So we are stuck here. Once we get the cancer, there’s nothing we can do.”

Ms Guler is living in an old house belonging to relatives, despite the fact that several family members have already died from

mesothelioma, because she pays no rent for it.

‘Next generation’

As she does not own property in the village, she is not entitled to one of the new houses - she would have to pay for it.

Meanwhile her children play among buildings whose walls almost certainly contain the lethal erionite fibres.

There are similar complaints from the men in the tea-shop.

They say people who left the village years ago, but own property in the danger zone, have been given new houses which they then rent out.

Only 250 houses have been built; more than 1,000 residents remain in the old village.

The village mayor, Umit Balak, is well aware of these complaints.

He praises the current government for being the first to deal with Tuzkoy’s extraordinary health problems, but says he needs more.

“I plan to go back to Ankara, to the prime minister himself if need be, and explain that the whole of Tuzkoy should be declared a disaster zone, so that more funds can be provided to make sure everybody moves,” he says.

“This is urgent, so we can save the next generation.”

The mayor would like to demolish the old village, cover it with soil and plant trees there.

Dr Baris opposes this idea.

“Demolishing the houses is pointless and dangerous. Think of all the dust. Who would do the job?” he asks.

He suggests fencing off the village, and allowing nature to take it over.

He says erionite is present elsewhere in Turkey, but much deeper underground.

Only in these three villages is it present in the surface rock.

The nearby tourist towns in Cappadocia, where tourists often stay in hotels carved out of the rock, he says are perfectly safe.