* News * World news * Swine flu Swine flu will be biggest pandemic ever, warns world health chief



- Aida Edemariam
 - o The Guardian, Thursday 16 July 2009



Margaret Chan: leading the fight against swine flu Photograph: Fabrice Coffrini/AFP/Getty Images

As swine flu sweeps the planet, Margaret Chan, head of the World Health Organisation, tells how she is leading the battle against it – and the personal price she is paying

Although she would no doubt point out thatswine flu should properly be called H1N1, there is something pleasing in the fact that the first thing Margaret Chan, director-general of the World Health Organisation, does when I enter her office is pick up a cut-out of a pig that has fallen on its face and carefully place it upright. A pink and gilt confection, it's left over from celebrating the Chinese year of the pig in 2007: it was so cute, she says, that she couldn't bear to throw it out.

A year earlier, Chan had been a surprise candidate in a surprise election (the previous incumbent died halfway through his term), but she won with a clear majority to become the first Chinese national to run a major UN agency. A rule change in 2005 (the WHO no longer has to beg states for information about threats to global health, but can just demand it) also makes her the most powerful public health official in history.

Tiny in her orange jacket and neat little orange-brown Miu Miu mules, she wears that authority not lightly, exactly, but naturally: in an organisation famed for its bureaucratic circumlocutions, she is refreshingly direct. It's a strength she's aware of – "I have a reputation for being a straight-talker, I will tell them the story like it is" – but that makes it no less striking, or true. (Also striking, for those who have witnessed it, is her penchant for bursting into song: she once punctured a tense moment at a summit about bird flu by singing a few lines of Getting To Know You, from The King and I.)

Months later, on 11 June 2009, she found herself the first WHO chief in 41 years to stand before the world and announce that a new virus had reached pandemic proportions. Right up until the last minute, scientists were calling her up and warning her to be careful about raising the threat alert so high — but the strict definition of "pandemic" is a new disease spreading uncontrollably through numerous countries, and on that count her decision has been completely borne out. On 11 June, swine flu had been registered in 74 countries; when we meet in Geneva four weeks later, it has just been confirmed in 140 countries.

Born in another year of the pig, 62 years ago, Chan began her career as a liberal arts graduate and a high school teacher of home economics, Chinese and English, but when her boyfriend moved to Canada to study medicine, she followed him. Finding that she still saw him very little,

she applied to study medicine herself, in the same class. When they graduated they returned to Hong Kong, and in 1994 she was appointed as director of health there, with a staff of 7,000. Three years later, she faced a major outbreak of bird flu.

Chan learned then that clarity of communication is of utmost importance, and that over-reassurance can be as bad as no reassurance at all. She has in mind the (infamous in Hong Kong) moment when she was trying to tell people that it was still safe to eat chicken. "They asked me, 'Do you eat chicken?' and I said, 'Yes, I do. I eat chicken every day." It's the last sentence she regrets, because it is so patently undermining. No one would go on that kind of diet, right?

Her critics were not to know that it was, in fact, true: Chan did eat chicken every day, just as she has had a tuna sandwich every single lunchtime (barring official functions) for the five years she has lived in Geneva. Her job is so big, so unpredictable, that she says these fixed points are crucially important "to maintain my sanity". So now it's a tuna sandwich every day, and a session on a treadmill every morning.

But in Hong Kong the damage was done, and she eventually ordered a cull of all 1.5m chickens in the country. By the time the Sars epidemic came round in 2003, she was experienced and tough enough to have earned the nickname "Iron Lady"; although 299 people died in Hong Kong, and she was criticised in some quarters for being slow off the mark (she replied that she had found it hard to get accurate information from mainland China), most experts applauded her efficiency. She was headhunted to improve the WHO's response to infectious disease threats because, as the then director-general told her, "You are the only person who has managed crises. I have many armchair experts. I need generals."

Chan's war has arrived with a vengeance. A 2007 WHO report, A Safer Future, estimated that a flu pandemic could affect more than 1.5 bn people, or 25% of the world's population. Could swine flu be that big? "Quite likely. Quite likely. But it probably won't happen in one run. It will probably come back [in two or three waves]."

How does she expect it to compare to other pandemics? "In terms of the number of countries affected and the number of people infected, this has got to be the biggest."

Bigger than 1918? "If you're talking about mortality then it's different. 1918 is the biggest in terms of mortality. I would not like to make any predictions . . . I hope we don't see the 1918 picture. But we should expect to see more people infected, and more severe cases coming up, including deaths."

Swine flu is probably already much bigger than anyone knows. Ten days ago, only six countries in Africa had reported cases, but as Chan readily admits, this is rather misleading: until the WHO started sending out lab kits in early May, many developing countries had no means of testing for it. Furthermore, modelling suggests that swine flu has an attack rate of 30% — once it enters a country, the likelihood is 30% of citizens will catch it at some point.

In wealthy countries such as Britain, she observes, "The disease is self-limiting. Some even recover without medicine. But is it going to be the same in a country where they have a high proportion of people suffering from HIV? Or chronic malnutrition? Or diabetes? [all of which damage immune systems]?"

Pregnant women are among the groups most severely affected; already, every minute of every day, a woman dies in childbirth or pregnancy. Furthermore, unlike seasonal flu, H1N1 tends to affect previously healthy 30-50 year-olds; developing countries have large, young populations often living in crowded conditions.

As well as having no testing facilities, these countries will often have almost no access to antivirals such as Tamiflu. "Is it fair," demands Chan, rhetorically, "for these countries to go into a pandemic empty-handed?" So she has gone, cap in hand, to the companies that produce them: Roche has just provided 5.6m free doses of antivirals, which Chan has dispatched to the developing world; she is angling for another 5-6m, and hopes they will soon come through.

"Vaccines are much more difficult," she says with some understatement, "because of the limitations in production capacity." Companies in Europe and North America, and a few small ones in Asia, are racing to make a vaccine to combat this new disease. "One should be available soon, in August. But having a vaccine available is not the same as having a vaccine that is proven safe. Clinical trial data will not be available for another two to three months."

The process of acquiring a vaccine is already a salutary lesson in health inequality. "Most of the production capacity has already been booked up by wealthy countries. Again I have to ask the question: do the developing countries have to wait at the end of the queue? Because if that's the case, they won't have a vaccine for six months."

So Chan is trying to persuade manufacturers to free up a percentage of their production capacity for developing countries – 10% is her modest request. "The most important thing is to have a supply of vaccine to protect, first and foremost, a functioning health system. It is always important to keep taking care of pregnant women, cancer patients, diabetics and so forth. And I'm also mindful that a certain amount of vaccine should be provided to countries so they can maintain a stable society — that they must vaccinate law enforcement officers, and fire brigades, for example. Making sure that society can function in a normal way."

There is, of course, the caveat that swine flu has been "mild so far". Many countries may opt not to vaccinate at all, or not to make it

compulsory. But it is also the case that an estimated 250,000-500,000 people die every year from seasonal flu (not including those who die of respiratory failure or heart disease which hasn't been traced back to an initial flu virus), and that the situation with swine flu could change at any moment. British scientists admitted this week that they were taken by surprise by swine flu's sudden spread; Chan is aware that while it could work itself out with comparatively minimal damage, she could also suddenly find herself dealing with a far more virulent, more deadly mutation.

And that, of course, would be on top of the myriad other epidemics and crises currently demanding her attention; the massive health impacts of climate change, for example, which she is in no doubt "will be the defining issue of the 21st century".

Declining food security will, she predicts, mean massive rises in people dying from malnutrition and diarrhoea, and probably more wars. More floods will mean more water contamination and issues with water security, and more deaths due to injuries and drowning. More waterlogged areas and changes in temperature will mean sharp rises in vector-borne diseases such as malaria and dengue fever.

"The prediction is that, within the next 10-20 years, food production in Africa will drop by 50%. If that's the case, how many more people will go hungry? Remember that malnourished, stunted children cannot reach their education potential, which will have a massive social and economic impact."

Chan worries, too, about massive rises in non-communicable diseases (cancer, diabetes, smoking-related illnesses) outside their traditional stamping grounds of the well-fed west. The trouble, from her point of view, is that these diseases attract nothing like the funds that, say, malaria or polio or HIV/AIDS do: "60-80% of the disease burden in developing countries is now due to so-called lifestyle diseases" – and yet, until the last two years when the Bloomberg and Gates foundations got in on the act, non-communicable diseases received no donor funds at all.

Then, of course, there are the ongoing battles — malaria (at least seven African regions have reduced deaths by half), polio, measles, HIV and TB, where another crisis of global proportions threatens: "The challenge is drug-resistant TB. And this is really huge. If it gets out of control," Chan warns, "it will take us back to the pre-antibiotic era."

And so her days begin at 7am, on her treadmill, and end hunched over her files late at night. Her husband opted not to come with her to Geneva (there would be nothing for him to do, and she travels frequently), so she lives alone in a flat five minutes' walk away from WHO headquarters. She does not drive, and speaks so little French that when she first came she couldn't even find a tin-opener in the shops. For 30 years her husband did all the cooking, so she had forgotten how – after a year and a half she fell ill with anaemia. Living apart from him for the first time in 50 years is taking its toll.

"I'm sorry!" she says, flapping her hands helplessly and wiping tears away. "When I talk about my husband . . . you know, he is so interesting, he is such a lovely man. I once said, 'David, can I have a contract?' He said, 'What do you mean?' I said, 'Can I marry you again in the next life?' It's not easy. But it is the kind of sacrifice I think you have to make in the interests of global health."

And it is a fixed term; she will be done in another two-and-a-half years. In the meantime, there are aeroplanes. The day after we met, Chan flew to Sharm-el-Sheikh to address the spouses of world leaders on maternal death rates; it was a brief stop on her way home to Hong Kong for a couple of weeks' annual holiday. Although "with a pandemic," Chan says wryly, "you can't really be on leave" •