In Beijing during the SARS outbreak

Sarah Borwein, MD, CCFP

Ode to the White Coat Angel

It is a battlefield without fumes
Your movement is crucial to the survival of a nation
You are risking your life to fight against SARS
And your smile cleans the clouds in the sky.
Salute the White Coat Angels fighting at the front line against SARS!!

(Poem received by all front-line medical workers in Beijing from the Beijing Red Cross, July 2003)

During spring 2003 (5 months after the first case in Guangdong), Beijing experienced the largest severe acute respiratory syndrome (SARS) outbreak in the world; 2521 of the 8422 global cases occurred here. During the SARS outbreak, we at Beijing United Family Hospital (BUFH) had a central role in providing care and information to the foreign community here, which numbers between 150 000 and 200 000 people. Its wholesale flight could have had disastrous economic consequences for China.

Rumours and anxiety
The hospital began to respond on March 16, when the World Health Organization (WHO) issued its Global Travel Advisory. Although we were unaware of it until many weeks later, Beijing was already 2 weeks into its SARS epidemic. The first case had been treated in a military hospital on March 2; by mid-March several hospitals had unannounced outbreaks. But we were the first hospital in the city to have even a limited response, and certainly the first to have N95 masks.

During the last half of March, rumours began to circulate in Beijing, and the expatriate community’s anxiety levels rose. Community members wanted to know that we did not have any SARS cases in hospital (and hence could be considered safe); they also wanted assurances that we would look after them should they become ill.

At the end of March, a visiting International Labour Organization official was admitted to a local hospital with SARS. The subsequent death of Pekko Aro was a turning point for BUFH, for the expatriate community in Beijing, for the WHO in China, and perhaps ultimately for the central government. The case made several things unpleasantly clear. First, our hospital would not be allowed to look after SARS cases. All SARS cases, foreign or local, would be transferred to a government-designated local hospital and would be subject to prolonged isolation. Second, anxiety in the foreign community was rising rapidly. Third, there were a lot more cases in Beijing than were being publicized. And fourth, we could not speak openly about it because of an old Chinese law that equates giving information on an epidemic to revealing state secrets.

Perhaps the most important achievement of the hospital in the aftermath of this episode was establishment of a shared-care agreement with Peking Union Medical College. The College set up a foreigners’ SARS ward and allowed our physicians continuing access to and cooperation in the management of their own patients. This was a critical development for a frightened and uncertain expatriate community, whose greatest fear was now prolonged isolation in a Chinese-speaking facility. This development was also unprecedented in China. The announcement of this agreement probably kept thousands in Beijing who would otherwise have fled. It also created problems for us, however, as it later became clear that it applied only to foreign passport holders. Chinese passport holders, including our own staff, would go where the government put them.

Letter from China

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Between caution and hysteria

Until April 20, when Beijing admitted to several hundred more cases than previously declared, our response swung between cautious and phlegmatic. The difficulty for the hospital was that our information, instead of coming from reliable public health sources, was coming through delayed and tortuous channels involving personal connections. We were two steps ahead of every other hospital in the city, but one step behind where we should have been. We trod a fine line between responding to the rumour mill and feeding it. Staff members had widely varying reactions to the situation. One emergency room physician was so anxious that he slept in his N95 mask in the call room. At the other end of the spectrum, some refused to wear the masks at all and had to be coerced into stopping nebulizer treatments.

Fortunately, no full-time staff contracted SARS; however some of our local outside consultants did, including one intensive care specialist who became desperately ill. His hospital was at the time still denying it had any cases, to the extent that many sick patients were driven around the city in ambulances while the WHO inspected it. This colleague survived, but is still in hospital battling complications.

The epidemic feared in the highly mobile foreign community never materialized. Local hospitals were the centres of contagion; most expatriates never visit these. Every pneumonia case was suspected SARS, and of these there were many, but in the end only two confirmed cases passed through the hospital.

The sublime and the ridiculous

Lack of public health education had some ridiculous results. Our tires were sprayed with disinfectant whenever we drove into our residential compound—by guards who still spit in the street. When SARS patients were transferred around the city, people hid inside, fearful of catching the dread disease from the ambulance passing by. Just as Europeans in the 14th century burned incense to ward off the plague, Beijingers did the same in the belief that it would prevent SARS. Many took injections of dubious and costly immune boosters prophylactically. They almost certainly caused more cases of SARS than they prevented, by bringing people to local hospitals. But basic hygiene measures were still lacking and there was little understanding “in the street” about how the disease was transmitted. One person in our local management office told us to avoid eye contact, as that could spread the disease!

Perfectly rational response: When migrant workers in Beijing fled the city and returned to their villages, many villages sealed themselves and quarantined returning workers in tents outside town.
Not so bizarre was the practice of rural Chinese of barricading themselves against Beijingers. At the end of April, when rumours of martial law were circulating here, millions of migrant workers fled the city and went back to their villages. We feared a rural SARS calamity. Instead, most villages sealed themselves off and quarantined returning workers in tents outside of town; even the villages immediately around Beijing did this. Given the lack of access to health care in most parts of China, this reverse quarantine was a perfectly rational response and probably did more than almost anything else to prevent the uncontrolled spread of SARS in the Chinese hinterland.

Filling the public health void
One of the BUFH’s key roles was in public health. We became the most important information source for the foreign community in Beijing (and perhaps in China) and a reliable information source for the local WHO office. Because half our medical staff were local Chinese with connections at local hospitals, we had a good idea of what was truly happening in Beijing well before it was made public.

I became a fixture on the speaker circuit, giving more than 40 public seminars to schools, businesses, chambers of commerce, residents’ groups, and embassies. The hospital also maintained daily contact with many businesses as well as the two largest international schools in the city, who in turn established an information network linking all of the other international schools. While public schools in Beijing were closed for over a month, the international schools were able to finish the school year. We heard that absenteeism actually went down during this period, as people paid such strict attention to hand hygiene and to not sending sick children to school that rates of minor viral illness dropped substantially.

The true heroes
Foreigners living in Beijing, with its five ring roads and trendy restaurants, find it easy to forget that, in China, freedom of speech is still a work in progress. The SARS epidemic was a stark reminder. At the same time, the ability of the central government to take decisive and effective (if belated) action commands respect.

Changes are sweeping across China; political change lags far behind economic change, but we can sense that change is inevitable. This is not the same China that sat silent through government lies after Tian’anmen, not the same people who endured the Cultural Revolution and obediently melted all their farm implements during the Great Leap Forward. The people have moved forward, indeed faster than their political system. The anger of the local population was vocal and intense; a decade ago that anger would not have been expressed.

The effect of SARS on the psyche of the people here has been profoundly different from that in other seriously affected areas. The Chinese people, accustomed as they are to catastrophes, did not have their confidence shaken in the way that those in Hong Kong did. In an ironic way and perhaps because their expectations were low, the SARS epidemic gave them faith that their government could respond in a crisis and that it did now care about losing face in the court of international public opinion.

The SARS epidemic in Beijing was the most intense professional experience of my career. Yet I am keenly aware that our experience was nothing compared to that endured by local front-line health care workers. Chinese physicians and nurses faced permanent job loss if they abandoned their posts. For the most part, they were quarantined inside their hospitals for weeks to months at a time, working under desperate conditions with inadequate protection, often struggling to save their own colleagues. These are the true SARS heroes; China owes them a great deal.

This article reflects the personal views of Dr Sarah Borwein and not necessarily the official views of Beijing United Family Hospital.

At the time of writing, Dr Borwein was a physician in the Department of Family Medicine and was Director of Infection Control at the Beijing United Family Hospital in China.