

## SARS Plague: Duty of Care or Medical Heroism?

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### Abstract

Severe acute respiratory syndrome (SARS) is a new infectious disease that emerged in mid-November 2002 in Guangdong, southern China. The global pandemic began in late February 2003 in Hong Kong. By the time SARS was declared contained on 5 July 2003 by the World Health Organization (WHO), it had afflicted 8096 patients in 29 countries. No other disease had had such a phenomenal impact on healthcare workers (HCWs), who formed about 21% of SARS patients. In Vietnam, Canada and Singapore, HCWs accounted for 57%, 43% and 41% of SARS patients, respectively. At the beginning of the outbreak, there was practically no information on this disease, which did not even have a name until 16 March 2003, except that it was infectious and could result in potentially fatal respiratory failure. Indeed, HCWs had lost their lives to SARS. Understandably, some HCWs refused to look after SARS patients or even resigned. Initially, much negative publicity was given to such HCWs. It was a very trying time for HCWs as many were also ostracised by the society which they served. They were perceived to be a potential source of infection in the community because of their contact with SARS patients, whom they risked their lives looking after. Subsequently, as we learnt more about the disease and educated the public about the plight of the frontline HCWs, the public gave the frontline HCWs tremendous support and even honoured them as heroes. Being in the medical profession, caring for patients is one of our expected responsibilities. On the other hand, as public citizens, HCWs have the right to resign when they feel that their responsibility to their families should take priority over that to their patients. As a result of this scourge, each HCW learnt to decide if caring for patients is their chosen profession and vocation. Many chose to live up the Hippocratic oath.

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**Key words:** Healthcare workers, Heroes, Psychological impact, SARS

### Introduction

SARS has been described as a Chinese plague because it emerged from the colourful markets of wild animals and the exotic kitchens of Guangdong, southern China in mid-November 2002.<sup>1</sup> In late February 2003, the Metropole Hotel in Hong Kong became the epicentre where SARS crossed intercontinental boundaries through rapid air travel, affecting mainly Asian countries.<sup>2</sup> Hence it has also been labelled an Asian plague.<sup>1</sup> Singapore was the fifth most severely SARS-afflicted country, with 238 cases after China (5327), Hong Kong (1755), Taiwan (346) and Canada (251).<sup>3</sup>

### Healthcare Workers and SARS

Worldwide, about 21% (1706/8096) of SARS victims

were healthcare workers (HCWs).<sup>3</sup> The percentage of HCWs was highest in Vietnam (57%), Canada (43%) and Singapore (41%), followed by Hong Kong (22%), Taiwan (20%) and mainland China (19%).<sup>3,4</sup>

In Singapore, three-quarters of infection occurred in hospitals or nursing homes.<sup>5</sup> Tan Tock Seng Hospital (TTSH) was designated the national SARS hospital on 22 March 2003.<sup>6</sup> As Director of medical intensive care unit (MICU) in TTSH, I became the Director of the National SARS ICU by default.<sup>7</sup> I'll never forget that shocking one-week belated birthday present, mixed with conflicting feelings of responsibility, pride and that all-too human fear of the unknown. Being in the frontline, I hid my fear behind my N95 mask. I had to set an example of courage and confidence for others to follow.<sup>8</sup> Medicine being my

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vocation, I told myself that I could not turn my back on my responsibilities, however dangerous, especially in the thick of an unprecedented national crisis.<sup>7</sup>

### Fear of the Unknown and Death

Initially, SARS was an unknown microbiological enemy. We were grappling in the dark with this highly contagious, deadly disease. We raced against time to try to outwit the virus before it overwhelmed us. We knew we were gambling with our lives. As one French lung specialist in Hanoi eloquently expressed, *“We were not playing with fire – the fire was playing with us. We faced death. We played bridge with it, but it was not a virtual partner.”*<sup>9</sup>

Every day, when we arrived in hospital for work, we had to gear up, physically, psychologically and emotionally, for another day of battle (Fig. 1).<sup>10</sup> We could not escape from hard facts such as these: 1 in 5 patients required ICU care and about half of ICU patients died.<sup>11</sup>

Within the jaws of death, many of us stopped having physical contact with our family and loved ones, as we just could not risk passing the infection to them in case we had been infected.<sup>7</sup> One nurse shared that she had stopped kissing her child so that others could continue to do so. I stayed in a separate room from my wife during the epidemic.

The fear of death was intensified by the close proximity to and personal identification with our previously healthy colleagues, who had been struck down by SARS and were dying in our own ICU.<sup>12</sup> We had a very touching and special experience of the fragility of life and the sudden imminence of our mortality.<sup>12</sup> I could fully empathise with Dr Vu Hoang Thu from Hanoi, who said, *“We were scared. But we did not have a choice; we had to work, to care for our colleagues. Those in good health saw others fall sick and their health deteriorate. We cried a lot. But we had to*

*encourage them; and for some, lie to them, about the progress of the illness. What we lived through, it was like a war. Without force, without solidarity, we would not have been able to get through it.”*<sup>13</sup>

A TTSH medical social worker made up her mind to help colleagues combat SARS without consulting her husband and 3 children. She wrote in a letter to her family, *“Forgive me for my decision to help my colleagues fight SARS, which may hurt you or bring the possible risk of disease back home... I hope you remember that I love all of you very much.”*<sup>14</sup>

We knew that dying from SARS was a very lonely affair because of the need for strict isolation to prevent transmission. Nobody wanted to die in this lonely manner, isolated from their loved ones (Fig. 2). Dr Carlo Urbani, aged 46, was not spared a similar fate. The world is indebted to this SARS warrior, who first alerted the medical community about this new infectious disease.<sup>15</sup> Dr Scott Dowell, a WHO doctor who attended to Dr Urbani in Bangkok, aptly said, *“To be by yourself in a strange country, in a room full of people in spacesuits who cannot touch you... That is not a good way to die.”*

Our worst nightmare became a reality when our colleague, a 27-year-old medical officer, died on 7 April 2003 (Fig. 3).<sup>7</sup> We lost a total of 5 HCWs to SARS in Singapore: 2 doctors, 1 nursing officer, 1 nursing aide and 1 hospital attendant.

During the SARS Commemoration Ceremony on 22 July 2003, among the 4000 who gathered to remember the 33 victims were widows and widowers. One mother, who had lost her husband, had brought her young daughter, said, *“I want her to remember that (her dad died while looking after patients). I also want her to know that she can live on because there are children who have lost a mother.”*<sup>16</sup>



Fig. 1. Gearing up for battle daily.

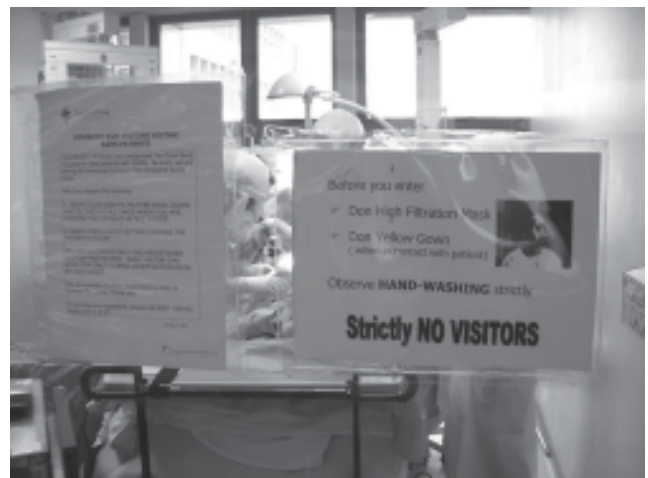


Fig. 2. Lonely death in isolation room.

The then Prime Minister Goh Chok Tong, during the SARS Commemoration Ceremony that moved many to tears, commended these HCWs *“There is nothing more noble. There is nothing more humbling.”*<sup>17</sup>

### Medical Plague

Fighting this scourge was a very traumatic experience for HCWs. They risked their lives fighting a previously unknown enemy, yet they faced discrimination from the public. For example, nurses in uniform were given suspicious stares, or kept at a distance by the public in buses or Mass Rapid Transit (MRT) trains.<sup>18</sup> Some foreign HCWs living in Housing and Development Board (HDB) flats found leaflets in their letterboxes stating: *“TTSH staff are not allowed to use lifts.”*

The SARS crisis had become a medical plague. One citizen wrote to The Straits Times, the largest circulating English local newspaper, *“I read with tears in my eyes to see that you have to make arrangements to stay elsewhere, get ostracised by family, friends and society, are unable to show love and care to your family members... Some of you even have to sign on insurance policies, write a will, in case anything happens. Only you will know how it feels to be outcast by the very society that you’re serving.”*<sup>7</sup>

Is the accepted norm of professional responsibility for HCWs to be ready to sacrifice their lives for patients they do not even know during epidemics?<sup>4</sup> In reality, the medical profession will always carry an inherent occupational risk of being infected by their patients even during normal times.

Many HCWs struggled to choose between their instinct of self-preservation (fear of contracting SARS and dying) and their professional duty as HCWs.<sup>12</sup> In our personal capacity, each one of us is still a parent, spouse and child.



Fig. 3. TTSH’s flag (to the right of the state flag) flying at half mast on 8 April 2003 in honour of our first fallen comrade.

Faced with the risk of contracting the bug and facing death, despite taking all the necessary precautions, our personal duties to loved ones usually take an overwhelming priority over our professional duties.<sup>4</sup> Our ex-PM Goh praised the HCWs who soldiered on to treat SARS patients as valiant people. *“To get the nurses and doctors to work with SARS patients is a feat. I really admire the dedication and professionalism of our hospital workers.”*<sup>19</sup>

The Hippocratic Oath embodies the doctors’ moral identity by providing a broad ethical framework for the conduct and practice of doctors.<sup>20</sup> Although the Pledge has been modified since the 1948 Geneva declaration adopted by the World Medical Association, 3 important obligations remain, namely *“duty to the public, duty to the patient and duty to the profession.”*

At the Singapore Medical Council Physician’s Pledge Affirmation Ceremony on 7 May 2005, Dr Balaji Sadasivan, Senior Minister of State, Ministry of Information, Communications and the Arts and Health, aptly said: *“The practice of medicine is a calling. It is a calling in which your heart will be exercised as much as your mind. Your call is to be with those who suffer... Nothing will sustain you more potently than the power to recognise in your humdrum routine, the true poetry of life – the poetry of the commonplace, of the ordinary man, of the plain, toil-worn woman, with their loves and their joys, their sorrows and their griefs.”*<sup>21</sup>

Dr Carlo Urbani helped accept the Nobel Peace Prize for Doctors Without Borders in 1999. He eloquently exemplified this calling in his speech: *“Health and dignity are indissociable in human beings. It is a duty to stay close to victims and guarantee their rights.”*<sup>15</sup>

### Courage

We realised that courage was not the absence of fear. Instead, our devotion to duty became very powerful in the face of this adversity.<sup>12</sup> This commitment was so strong that it overcame all personal dilemmas and kept us on the job.<sup>8,12</sup>

TTSH Chief Executive Officer, Dr Lim Suet Wun, recalled: *“We told them the little we knew but no one knew for sure. The doctors and nurses were just as fearful as anybody else. Some even asked who would take care of their families if they died. They were aware of the risks yet they went right in to take care of SARS patients.”*<sup>22</sup>

Even foreign HCWs stayed on and stood shoulder to shoulder with their Singaporean colleagues throughout the crisis.<sup>23</sup> They could have simply returned home as Singapore is not their country and the patients were not their people. One foreign HCW said, *“At the end of the day, this is my job, and it is like a war, you don’t leave your colleagues to fight it alone.”*

Despite the social stigma of being ostracised by the public and the heightened awareness of strict infection control measures observed in the hospital, we all found a new family and sense of belonging in TTSH. There was a very high level of camaraderie, cohesion and encouragement, and determination from the lowest to the highest levels to give our utmost despite the high risks involved. Our lives depended on each other and we trusted our lives with our comrades-in-arms. There was never the question of giving up the battle. We knew that we could not lose in the fight against this terrible scourge.<sup>7</sup>

Professor Low Cheng Hock, Associate Dean of TTSH, broke down in tears in a tribute to one of our fallen colleagues: “*We are a nation in tears, but tears of love... tears that will galvanise the medical profession as we rise to the challenges ahead.*”<sup>24</sup>

### Heroes and Cowards

Theoretically, heroes are admired. But their loved ones would rather grow old with an ordinary person than live with the memory of a dead hero.<sup>7</sup> Honestly, who is not afraid to die? But the sad fact was that we had to be prepared to die in the course of our professional duties.

In a study on the psychological impact of SARS on HCWs in Singapore, fear was the most commonly reported emotion.<sup>12</sup> This was not surprising as prior to 12 March 2003, the disease did not even have a name. The utter lack of knowledge of this new disease meant that we did not know about the aetiological agent, its mode of transmission, its natural history or effective therapy. It was terrifying to turn up for work daily and face an unseen lethal enemy while none of us could yet be certain about the efficacy of protective measures. In addition, there was the haunting fear of acquiring and spreading the disease to families, friends and colleagues. Helplessness prevailed as anyone

could fall victim to the disease in the line of duty.

Love of life also includes love of self, not just love for others. The HCW’s autonomy in making their own decision to take either a break from intensive physical and emotional burdens or to soldier on in their job should be respected. It is within their human right.<sup>4</sup> In some countries (including Singapore), frontline warriors of SARS were honoured as heroes.<sup>7,25</sup> Concurrently, punishment was suggested, such as the threat of withdrawing the professional licenses of those who refused to turn up for work in Taiwan.<sup>4</sup> Between the hero and coward labels, there must be sufficient space in a developed and cultured society to practice humanism to every human being in any kind of crisis. For those HCWs who resigned because of SARS, they had “*made a personal decision when they realised that this is not the profession for them.*”<sup>26</sup>

Two weeks after the recognition of the syndrome and the implementation of full protective measures, not a single SARS ICU staff was infected from 17 March 2003.<sup>27</sup> This testimony to the effectiveness of our protective gear was a crucial and potent psychological antidote to our anxiety about the safety of our work environment. To be a well-equipped and well-prepared, combat-ready professional is more useful than being a dead hero.<sup>4</sup>

What factors made HCWs continue “*to give their heart and soul to the battle, even when their colleagues fall victim to the deadly virus*” and to even “*step foot outside the security of their home every day*”?<sup>28</sup> Firstly, it was their professional commitment to duty. Secondly, a sense of altruism and self-sacrifice was very strong when facing the uncertainty of this new disease.<sup>12</sup> A study from Hong Kong reported that at least 90% of the respondents who survived the SARS catastrophe believed themselves to be more altruistic because the diversion of attention and energy to helping others helped them to conquer their own feelings



Fig. 4. Messages of gratitude and encouragement from the public to HCWs.

of powerlessness and regain a sense of control over other aspects of life.<sup>29</sup> Thirdly, an adequate supply of protective gear<sup>29</sup> and medical insurance coverage for all HCWS and their families were crucial for their physical and psychological well-being. Fourthly, messages of gratitude and encouragement from relatives, friends and strangers were morale boosters (Fig. 4).<sup>25</sup> Emotional support and positive affirmations from fellow HCWs were also useful. Lastly, many found calm and peace entrusting themselves to their gods.<sup>12</sup>

## Conclusion

When Singapore was declared SARS-free on 31 May 2003, we were quietly jubilant. We all remembered Toronto's nightmare. They were the second last to be finally free from SARS on 2 July 2003, followed by Taiwan 3 days later.<sup>30</sup>

Three years on, as I reflect on the many joyful and tragic moments, I am glad that our HCWs have reaffirmed that their career is also their vocation.<sup>7</sup> This SARS scourge will go down in history as one of our darkest moments but it was also one of our finest triumphs.<sup>10</sup> This microbiological battle has been a great humbling experience, where our healthcare community epitomised the Hippocratic oath through their acts of selfless behaviour, sacrifice and love. Many HCWs now have a renewed appreciation for the meaning, nobility and importance of their profession.<sup>29</sup>

Dr Lim Suet Wun said: "*Somebody has to do it. We have been designated and entrusted to do it. We will do it to the best of our ability...*"<sup>26</sup> For the frontline SARS HCWs who had soldiered on despite the risk, it was the "*badge of honour*" that they had chosen to wear.

## Dedication

This article is dedicated to all the HCWs who fought the SARS battle.

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