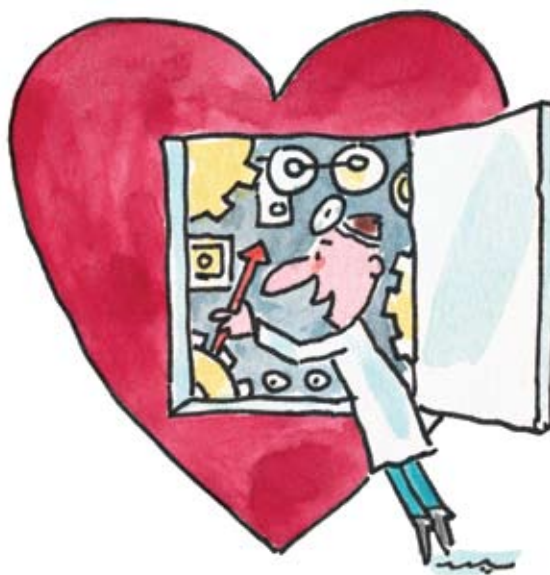


Operation Lionheart

By Dr Daniel Chang

Location: Pariaman, Padang – a well-off Indonesian district with an international airport. It is well-served with 'international cuisine' such as KFC and Pizza Hut. The main mode of transport is via motorbike, and it is not uncommon to see children riding wearing slippers and no headgear.



On 30 September 2009, an earthquake measuring 7.6 on the Richter scale struck Pariaman, Sumatra at 1716 hours Indonesian time.

“You have been activated. Please report to HQ within an hour with your passport.” This was the message that hit me and marked the start of 16 days far away from home.

My team was from the Singapore Civil Defence Force (SCDF) and we formed the Singapore rescue team. I was privileged to be the sole full-time National Serviceman (NSF) involved in this relief mission. Our contingent comprised the elite, Level 2 medically-trained Disaster Assistance Rescue Team (DART), the Dog Rescue Team, aptly named the K9 Unit, and the Medical Team consisting of one doctor and two paramedics. Our mission was simple: to rescue earthquake victims trapped under rubble.

GROUND ZERO

By 7pm local time, we were at Paya Lebar Airport awaiting our departure to Padang. Heart full of anticipation and not knowing what to expect, I was greeted by a familiar face at the airport –

Dr Colin Teo, who was flying to Padang to do some groundwork. This chance meeting proved instrumental to Part 2 of our mission, after our rescue mission was completed.

We arrived in Padang at approximately 9.30pm. The local authorities in Padang assigned a region in the South to us. We earmarked two locations, a collapsed hotel and a public library, and sent a team to do some recce work.

Our team accessed the badly affected areas, focusing on the structure of buildings, the ratio of casualties to healthcare workers, the amount of supplies available and the standard of medical care provided. Through our initial recce, we provided the United Nations team and the Singapore Armed Forces (SAF) contingent with some of the above information to facilitate the subsequent planning and execution of our concerted relief effort.

As the local authorities were concerned about the hotel and library, our search dogs went in first to look for signs of life. This was followed by the rescue team, targetting areas in which the dogs were sniffing for anything out of the ordinary. These dogs were highly-trained and experienced, having gone

on missions to Sichuan and Pakistan prior to this operation. Finally, the local excavation team commenced their job, using large machinery to clear the rubble.

MEDICAL COVER

While attending to the quake victims, we performed basic wound management in the form of wound dressing, wound care and fracture splinting.

We also provided medical cover to the contingent. Common ailments encountered were upper respiratory tract infection (URTI); coughs and colds were common complaints due to extreme weather changes and sleeping in the open. Some also suffered from gastroenteritis, not being used to the local food and water, resulting in episodes of diarrhoea and vomiting. Luckily, all cases were self-limiting. Foot rot was a common problem resulting from prolonged wearing of the same pair of socks in boots. In addition, sleeping on the open ground exposed the contingent to sandfly bites, resulting in skin rashes. As the weather tended to get extremely hot by noon, members of the team would suffer from heat exhaustion. We also had to watch out for hypoglycaemia in cases of fitting.

We used a three-pronged system for our medical protocol:

Firstly, in the area of healthcare, we had two mandatory water parades, one at 8am, and the other at noon. Secondly, we conducted daily self-imposed thermometer checks, and the medical officer was to ensure that everyone was feeling well. Otherwise, those febrile were to report sick between 8 and 8.30am.

Of course, living under the stars, with the cold wind blowing, hygiene was another of our concerns. We resided in the local governor's home but before you picture swanky toilets and king-sized mattresses, let me set the record straight: we shared the compound with multinational relief teams such as those from the UK, UAE, Switzerland, Japan, and Korea, not to mention the numerous media groups. It was really quite a crowd. There were only two public toilets open to us, so you can imagine the queue for these treasured commodities. So how did we get by? Well... we used dry toilet for bowel movement and empty mineral bottles for passing urine, and stuck to mineral water and combat rations for food and drink. To shower, we used water from a well, and converted it into bath water through the process of reverse osmosis. At night, we slept in three-man tents. And boy was it cosy.

Thirdly, we conducted fingernail checks and made sure everyone had a daily morale-boosting shower, as well as daily change of clothing and socks. And take it from me: nothing kept us going better than a refreshing bath after a hard day's work.

Diet-wise, we ensured that daily servings of fruits and vegetables for fibre, essential vitamins and Vitamin C supplements were present to boost the immune system against the flu bug.

WORKING WITH SAF

After our rescue mission was over, my two paramedics and I decided to continue our work in Padang. Recalling my chance encounter with Dr Colin Teo previously, I called him and he

was very receptive, encouraging us to join his team over at Pariaman. Hence, with a snap of fingers we moved onto Part 2 of our relief effort. This was a collaboration with the SAF medical team and we are grateful to Dr Mohd Rosman and Dr Teo for giving us an opportunity to be a part of the SAF relief effort.

I also had the privilege of working with Dr John Chua at Pariaman Hospital's A & E Department and I learnt a great many things from him, including the soft skills in medicine, something many of us have overlooked

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since our schooling days. Here is a doctor who has shown me the meaning of dedication to his craft – he would take upon himself entire day and night shifts and practically plant himself at the Accident and Emergency Department (A & E), surviving on next to no rest. He would rush his meals and sleep in our makeshift clinic, all in the name of service to the locals. Kudos to you Sir!

The objectives of the SAF medical team were to augment primary healthcare services in the aftermath of the earthquake, and to provide medical stabilisation followed by early surgical

intervention to earthquake victims.

Essentially, the medical facility was next to Pariaman Hospital. This was a five-ward hospital with basic surgical and A&E features. There was no ICU or High Dependency ward, so emergencies had to be evacuated to Padang which was more than an hour's travel away. There was an attached polyclinic which catered to walk-in cases, thereby lightening the load of the A&E considerably.

The operations were divided into four areas: the mobile clinic, A&E, Surgery and Radiology Units. I was fortunate to be given a chance to contribute to the mobile clinic. This was a setup at Koto Bangko, a hillside village which could only be reached via a narrow dirt track that traversed scenic padi fields and loads of coconut trees. The journey there was bumpy, with many road blocks set up along the way. Basically, the villagers would place wooden planks on the track to slow down our vehicles, and young kids would come up to us with small containers asking for donations.

The cases we saw were the standard "GP" types: URTI, GE, and puncture wounds (because the locals have a tendency to ambulate in spite of the absence of footwear).

At the A&E, we saw a huge number of emergency cases, many of which were earthquake-related during the initial week. Patients were from badly-hit areas in the vicinity of Pariaman and many came by private ambulances or private transport. We triaged, dispensed medicine and instituted basic treatment (bandages, splints, wound dressing, suturing, stitching). Due to the nature of accessibility and communications, many only sought treatment three to four days after the injury. Hence we saw a number of poorly-healing wounds which required debridement and wound care. The wound dressing, wound care and splintage aspect was very well-handled by the SAF medics.

In addition, there were a sizable number of non earthquake-related cases.

Given the prevalence of young riders in the area and the relaxed attitude towards the use of helmets, road traffic accidents were common. In addition we also saw a number of other cases ranging from obstetrics to shock. Thankfully, the SAF medical team was well-equipped to handle the majority of the emergencies. Only a handful had to be evacuated to intensive care centres at Padang.

Over at the Surgery Unit, wound debridements and open reductions, internal fixations were the order of the day. This was well complemented by Radiology. Tan Tock Seng Hospital's Radiology Department had kindly supplied the equipment while an SAF medic, who completed a half-day crash course with the local radiologist, performed the role of radiographer with exemplary competence. X-rays were conducted and results were out within minutes, hence speeding the subsequent management of patients considerably.

CHALLENGES AND HOW WE OVERCAME THEM

Looking back, this mission was sudden and we had a lack of time for adequate mental and physical preparation. Through the course of 16 days, many of us were hit by fatigue from working non-stop with minimal rest, while meals were rushed in an effort to attend to patients. Thankfully, this was overcome by morale-boosting elements such as fresh rations, laundry service and so on, and an agreement to send non-emergency cases to the attached polyclinic.

Language wise, a significant communication barrier was evident and sign language could only get us so far. The different Indonesian accents were a barrier even for our Malay personnel and sometimes a local was needed to aid in interpretation.

Also, there was a lack of healthcare amenities. The time it took to get from badly affected areas to a medical facility could be as long as two hours. Hence, many took a wait-and-see approach and only resorted to medical treatment when all else failed. This delay in seeking help

proved to be a huge stumbling block for us in providing primary care.

There were two learning points from the mission.

During the rescue mission in Padang, we established ties with representatives from the United Nations and SAF. This would facilitate international cooperation during future missions. Items discussed included the setup of a medical post to attend to mass casualties, implementation of an Air Evacuation via Heli-evacuation, collaboration with the SAF medical team to provide medical stabilisation and augment primary healthcare elements in earthquake torn areas.

When we went to Pariaman next to provide medical cover, we learnt much through our hands-on work at the mobile clinic, A&E Department and Surgery Unit, gaining exposure into operating under harsh conditions. We also made sizeable contributions in terms of manpower, expertise and supplies.

PERSONAL REFLECTIONS

On a personal level, this was a meaningful and humbling experience. The memories I had, the experience I gained, and the people I met have touched me on a deeply personal level. Many of us lead blessed lives. We seek, and we find. We ask, and we receive. We knock, and the door is open. Man's basic necessities of food, water and shelter are hardly lacking in our secure, sheltered lives. The hawker centre with its variety of cuisines is just a road away. The shopping centre is a bus-ride away. Our homes are a MRT-ride away. Think about it. How many of us have complained about our food being bland and crappy? How many of us have complained about travelling time and distance? And how many of us have complained about living in a small home with no garden? Mind you, people just an island away are living with no such amenities, but are contented all the same. Yes, happiness and peace of mind are but a matter of perspective.

An Indonesian doctor told me a story: There was a king in Indonesia who lived in a sprawling castle with a

large pool, a beautiful flower garden with the finest blooms in the land, a 10-storey high viewing tower, and dozens of servants. On his son's 12th birthday, he decided it was time for him to learn the meaning of poverty. So, he sent his son to live in the poorest place in the land, a mountain village accessible only by a rocky sand path.

After a week, the king was sure his son would have had enough. He went down to the village to take his son home, quietly confident that he would realise how fortunate and blessed he had been, living in a castle with everything taken care of. However, what his son told him took him completely by surprise.

"Dad, thank you for this wonderful experience. I had an excellent time in this village. I realise how lonely I was back in the castle with no one to play with. Here there are dozens of kids my age so I have made lots of friends. I sleep under the stars and have the vast sky as my blanket. Across the plains is a never-ending river full of fish that I swim in daily. The forest is my garden and the mountains are my viewing tower. I love it here Daddy. Thank you for this beautiful birthday gift. Can I stay here for another week?"

On behalf of SCDF medical corps, I would like to take this opportunity to thank Dr Chiam Tut Fu for all his guidance and support. He has been a father figure and his leadership will be greatly missed by us all.

As I pen this article, I can still see the appreciation and gratitude of the locals. I can still feel the warm handshakes of the villagers and hear the familiar *Paddle Pop* melody that accompanies the old ice cream man when he peddles into our midst: Paddle pop, Paddle pop, super duper yummy! **SMA**



Daniel is a medical officer with a passion for the arts, nature and sports. He loves his mum, spoils his schnauzer, and enjoys hard runs at Botanic Gardens, MacRitchie and East Coast. Not the poor schnauzer though. His secret ambition is... to form a rock band and be the drummer.

But the Good Lord has other plans for him so that dream will be shelved... for now.