

Medical Leadership in the Event of Catastrophe. Experiences from Haiti

Rolf A. Streuli, M.D., MACP, FACP, Switzerland

Almost one year ago, on January 12, 2010, at 4:53 local time a disastrous earthquake occurred in Haiti. Its epicentre was 16 kilometres southwest of the two-million capital of Port-au-Prince, and its magnitude was 7.2 on Richter's scale. It was thus distinctly weaker than the earthquake that occurred on December 26, 2004 in Sumatra and which was followed by a devastating tsunami. It had a magnitude of 9.3. The earthquake in Haiti nevertheless resulted in a death toll of 220,000 people, which was about the same as 5 years ago in Sumatra. Several factors contributed to the high number of victims: 1) The epicentre of the earthquake was very close to the big city of Port-au-Prince. 2) The tectonic shifts occurred only 10 kilometres below the surface. 3) the city is densely populated and the construction of the buildings is not earthquake-safe.

Immediately after the earthquake the Swiss Disaster Relief Corps was alarmed and a team of 7 physicians, 7 nurses and several logistics specialists were equipped and sent to Haiti to support the health infrastructure in the University Hospital of Port-au-Prince. Equipment to run a whole hospital in tents was transported by two big airplanes. This first team had the task to build up the departments of pediatrics, pediatric surgery, gynecology and obstetrics in 12 tents in the garden of the University Hospital, because almost all buildings were severely damaged and unsafe to use. The conditions were harsh: huge amount of severely injured patients, temperature of 40 degrees centigrade, and humidity of almost 100 percent.

Two weeks later the author was summoned up to lead a second medical team that had to replace the first one. We had to take over 120 patients. The prevalent pathology we met was as follows: 1) Broken extremities, most of them open and infected. 2) Large wounds, also most of them infected. 3) Malaria, many cases with cerebral manifestation. 4) Typhoid fever, often with intestinal perforation. 5) Tetanus. 6) Diarrhoea. 7) Gun shot wounds.

Medicine had to be practiced with our eyes, ears, nose, fingers, and with the stethoscope. Radiology was available, but was of very low quality. Laboratory analyses lasted 24 hours. There was no functioning bacteriology lab. Infections were treated with *ceftriaxone* and *metronidazole*, and if there was a suspicion of malaria we were adding i.v. *quinidine gluconate*. Anesthesia had to be done with *ketamine* or locally with *lidocaine*.

These are the characteristics of a catastrophe: 1) Confused situation. 2) Lacking information. 3) Contradictory information. 4) Interrupted connections. 5) Rumours. 6) Contradictory orders. 7) Unclear responsibilities. 8) Irrational behaviour because of fear. 9) Fear to fail. 10) Overtiredness. 11) Overwhelming impressions. 12) climatic, visual, olfactory burden.

The leader has two ways to take decisions in the event of a catastrophe: 1) Intuitive decisions and 2) Rational decisions. Intuition is a feeling arising from the interior ("Gut Feeling"); it is based on experience; it is an unexplainable insight and understanding; it is a "sixth sense".

In mankind's history of catastrophes there is one outstanding example of great leadership: it is Ernest Shackleton's expedition to the South Pole in the year 1916, almost ending in the death

of all participants. Shackleton succeeded in avoiding such a catastrophe by his excellent leadership. His principles of leadership were as follows: 1) Engage cheerful, optimistic people for your team. 2) Regularly organize meetings to boost the spirits of your team. 3) Regularly give feedback to your people. 4) Gather the uncontents around you to prevent them from poisoning the atmosphere of your team.

The contrary, i.e. a sample for bad leadership in a catastrophic situation, was Captain Edward J. Smith of the Titanic, who was overwhelmed by his task after the collision of his ship with an iceberg in the year 1912.

My experiences of leadership after the earthquake in Haiti can be summarized as follows: 1) Do not wait for orders. 2) Take the initiative. 3) Management by walking around. 4) Do not rely on electronic communication. 5) Carefully observe your collaborators. 6) Early diagnosis of overexertion in your team. 7) Early diagnosis of stress in your team. 8) Early diagnosis of sick collaborators. 9) Motivate your collaborators. 10) Send back home people, who seriously damage the morale of your team.