

WHO Trauma Operational and Advisory Team (TOpAT) visits the emergency unit in Madina Hospital, Mogadishu, Somalia. WHO/Sara Halimah

11 December, 2022, Cairo - Somalia witnessed one of its worst mass casualty incidents with

the double bomb blast on 29 October 2022, which resulted in more than 117 civilians dead and over 344 injured. Approximately 70% of the trauma deaths occurred before victims could reach the hospital.

A major public health burden in Somalia, exacerbated by the conflict, trauma accounts for nearly 80 lives lost and over 200 civilians injured from blast injuries every month in Mogadishu alone. Children constitute at least one third of the total casualties, many of whom are left with a life-long disability. The rising violent incidents and associated deaths are increasing and there is an urgent need to capacitate the country's trauma response. The World Health Organization has deployed its Regional Trauma Operational and Advisory Team (TOpAT) to Mogadishu to provide surge support and technical support.

TOpAT's preliminary findings revealed that at least one third of the deaths could have been avoided with an adequate prehospital care system. However, there is no unified prehospital care system spanning the country, or indeed the capital Mogadishu, despite the high number of mass casualty incidents. To make matters worse, those at the frontline, and first responders, have little access to training or even supplies.

Medina Hospital, Somalia's "safe haven"

Located in the heart of Mogadishu, Medina Hospital is widely recognized as the main trauma hospital in all of Somalia. Its emergency unit (EU) is equipped with a total of 4 beds, only 2 vital signs monitors, one portable X-ray machine and no CT scanner.

"Sometimes we see around 20 gunshot wounds on a single shift and, monthly, around 400 trauma victims – that is, excluding bomb blast victims," Dr Abdul, emergency doctor at Medina Hospital, told WHO.

The hospital's infrastructure includes a ward housing 108 beds, 4 operating theatres (OT) with 4 anaesthetic machines and a minor surgery room with 2 operating beds. Located a long distance apart, it takes up to 6 minutes to reach the OT from the EU.

The WHO team also noted a severe shortage of equipment and supplies, particularly external fixators – used to keep fractured bones aligned and stabilized. Medina Hospital Director Dr Bortagal revealed that, "Four of our patients are still waiting to have surgery, weeks after the

blast, simply because we do not have access to the external fixators needed," adding that "Our supplies depleted within the first hour after the blasts."

Two ER doctors at Mogadishu's main trauma hospital 🛛 🗎

As for human resources, Medina Hospital's 4 general surgeons are supported by 5 anaesthetic technicians – but no anaesthetic physician. Two doctors handle the EU, aided by 15 nurses. During the night shift, there is only one doctor in the EU and one general surgeon in the OT.

Crowd control is another major concern during the hospital's response to mass casualty incidents, with concerned family members sometimes behaving aggressively and bystanders crowding the hospital. During the latest blast, the crowd even broke the hospital gates. "At one time, there were around 350 bystanders just in and outside our ER," said Dr Saeed, the hospital's Medical Director.

Mass casualty management

When the Medina Hospital staff heard the bomb blast, which had detonated nearby, their response was immediate – and extremely challenging. There was no pre-alert communication from any of the ambulances, and the only method of internal communication among the Medina Hospital staff itself is a cell phone instant messaging group. "Within minutes of the blast, 79 patients turned up at the hospital. We simply could not manage," said Dr Saeed. Also within minutes of the blast, the morque had reached full capacity – which currently stands at 7 bodies.

Nearly 70 patients needed blood transfusions, but there is no blood bank. There is, however, an effective alternative strategy for blood collection during mass casualty events: another instant messaging group.

Before reaching the hospital

One of the only 2 prehospital providers in all of Somalia is Aamin Ambulance, currently only serving Mogadishu 24/7 with a total of 20 paramedics, most of whom have no training at all and are working as volunteers. They currently have 17 ambulances, 2 of which are out of order. During the recent blast, Aamin Ambulance transported a total of 95 patients; 23 were dead on arrival at the hospital.

WHO's pathway for trauma management []

