

The Implications of the Reverberating Effects of Explosive Weapons Use in Populated Areas for Implementing the Sustainable Development Goals

SDG Goal 3: Ensure healthy lives and promote well-being for all at all ages

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This factsheet is an extract from a longer UNIDIR report on Reverberating Effects of Explosive Weapons Use.

Target:

3.8: Achieve (...) access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

3.12: Substantially increase (...) recruitment, (...) and retention of the health workforce (...)

Explosive weapons undermine safe access to health care by destroying health care infrastructure such as hospitals, clinics and health care transport, notably ambulances. Hospitals under attack frequently have to be evacuated, which puts vulnerable patients and staff at risk. The quality of health care may also be undermined by disruption to supply chains. Aid agencies providing health care services in conflict zones may be forced to close or limit operations where they suffer an attack or feel threatened by the use of explosive weapons. The death toll among staff and the difficult living conditions make it difficult to retain qualified medical staff, as many leave areas affected by explosive weapons.

Access to health care requires the provision of safe health facilities, supply of medicines, electricity and clean water, medical transport and appropriate working and living conditions for health care workers. All of these requirements can be compromised by the use of, or threat of the use of, explosive weapons.

The effects of explosive weapons on health care facilities and transport

The use of largely air-delivered explosive weapons has **damaged a large number of hospitals** in Afghanistan, Sudan, Syrian Arab Republic and Yemen. The non-governmental organization (NGO) Physicians for Human Rights counted 336 attacks on medical facilities in the Syrian Arab Republic between January 2012 and January 2016.¹ According to Médecins Sans Frontières (MSF), 130 health facilities were attacked in Yemen between March 2015 and January 2016.² No other weapon type has caused comparable damage to health infrastructure.

When a health facility comes under attack, it has to be **evacuated, which causes additional stress and danger for patients and staff**. For example, in July 2014, when the al-Wafa hospital in Gaza was shelled, nurses ran on to the road and flagged down ambulances while dodging fire in order to evacuate patients.³ In Yemen, MSF staff evacuated patients between air strikes.⁴ In South Sudan, staff at the MSF hospital in Leer fled into the bush, carrying patients on their backs.⁵ In some cases, sudden attack makes evacuation impossible, as was the case during the aerial bombardment of the MSF hospital in Kunduz where patients burned to death in their beds.⁶

Hospitals damaged by explosive weapons are often forced to reduce the range of services offered. For example, Shiara Hospital in Razeh District, Yemen, had to reduce its services to stabilization, emergency,

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maternity and lifesaving activities due to damage from bombs in late 2015. In January 2016, a projectile hit the hospital and the building collapsed reducing the facilities to six inpatient beds for day time emergencies.⁷

Damage to electricity supply can have terrible consequences for patients in hospitals because most modern health care facilities are heavily dependent on access to stable power. For example, in 2012, it was reported from Homs in the Syrian Arab Republic that 18 premature babies died because their incubators failed during a power cut caused by shelling.⁸ Loss of electricity can affect the safe and proper storage of drugs and blood supplies, putting the safety of patients at risk. Most hospitals run backup generators, but fuel to operate them can be challenging to obtain in conflict environments.⁹

Vehicles providing essential transport services for health facilities may also be damaged or destroyed by explosive weapons. For example, in October 2015 aerial bombardment hit the ambulance centre in Idlib Governorate, Syrian Arab Republic, destroying four out of five ambulances.¹⁰ Loss of ambulance services reduces access to health services and inevitably raises death rates.¹¹

Explosive weapons can also disrupt the supply of essential supplies and thereby reduce the effectiveness of health services. Supply tends to be affected by damage and destruction of key transport hubs, or by the unwillingness of transporters to drive into areas affected by explosive weapons. For example, it was reported that the main paediatric hospital in the northern part of Yemen closed because of a combination of lack of drugs and fuel, and the physical damage caused by explosive weapons.¹²

The reverberating effects of explosive weapons on the health system

IHL extends particular protection to medical facilities. However, as there have been an increasing number of attacks on health facilities caused by negligence or deliberate targeting, **humanitarian agencies are increasingly reluctant to work in conditions** in which their neutral and protected status is not respected. In fragile States, humanitarian health agencies often provide key health services. If they leave, many people are left without many health services. For example, MSF closed its hospital in Farandala, South Kordofan, after it was bombed for a second time in January 2015¹³ leaving the population with only two hospitals (both run by charities) and one qualified surgeon serving 1 million people. Both of these hospitals have also been bombed (Lwere in May 2014 and Gidel in May 2015).¹⁴

Attacks on health facilities and the perception that they are deliberately targeted can make **patients afraid to use health services.** For example, the Shiara hospital in Yemen reported the absence of pregnant women in maternity services for fear of bombing.¹⁵ When health infrastructure has been destroyed, people have to travel long distances for medical help. Reluctance to seek medical assistance or travelling far increases the risk of additional medical complications and may result in deaths that would have been preventable.

Medical staff may find the working conditions and risks to their personal safety intolerable in areas threatened by explosive weapon use. Many trained medical professionals want to work in their profession unhindered and decide to leave in order to work where this is possible. According to ICRC figures, 20,000 of the 34,000 doctors registered in Iraq in 1990 had left the country by 2008.¹⁶ The majority of these doctors cited security concerns as the main reason they left.¹⁷

In summary, people living in areas affected by explosive weapons use suffer elevated mortality as a result of reduced access to health care due to damage to infrastructure and health care providers being unable to safely provide services. This contributes to elevated mortality.

Endnotes

- ¹ Physicians for Human Rights, *Anatomy of a Crisis. A Map of Attacks on Healthcare in Syria*, 2016.
- ² “Yemen: People are Scared of Going to Hospital”, *Médecins Sans Frontières*, 25 January 2016.
- ³ Nora Barrows-Friedman, “Doctors evacuate patients after Israel bombs hospital”, *Electronic Intifada*, 17 July 2014; Allison Deger, “The Israeli Army Bombed and Destroyed Gaza's Only Rehab Hospital”, *Alertnet*, 19 July, 2014.
- ⁴ Kareem Fahim, “Doctors without Borders Says Yemen Hospital is Destroyed”, *The New York Times*, 27 October 2015.
- ⁵ “South Sudan: Imminent Attack Forces MSF Evacuation from Hospital”, *Médecins Sans Frontières*, 9 May 2015.
- ⁶ Rob Crilly, “Kunduz Hospital Bombing Could Be ‘War Crime’ – Latest”, *The Telegraph*, 3 October 2015.
- ⁷ “MSF-Supported Hospital Bombed in Northern Yemen”, *Médecins Sans Frontières*, 10 January 2016.
- ⁸ Stephen Wright, “The bloodiest 24 hours yet: ‘18 premature babies die in Homs hospital after power cut caused by fifth day of shelling by Assad troops’”, *Daily Mail Online*, 9 February 2012.
- ⁹ Almgdad Mojalli, “Fuel Shortage Leads to Yemen Hospital Shutdowns”, *Irin*, 5 May 2015.
- ¹⁰ Michael Weiss, “Russia Is Bombing Ambulances in Syria”, *The Daily Beast*, 10 June 2015.
- ¹¹ “Operational Update: Gaza: Wounded People Dying while Waiting for Ambulance”, *ICRC*, 5 January 2009.
- ¹² Emma Gatten, “Saudi Blockade Starves Yemen of Vital Supplies, as Bombing Raids Continue”, *The Independent*, 20 September 2015.
- ¹³ “Sudan: MSF Hospital Bombed in South Kordofan”, *Médecins Sans Frontières*, 22 January 2015; “Sudan: Brussels-Based Operational Centre of MSF Stops Emergency Medical Aid Following Government’s Systematic Denial of Access”, *Médecins Sans Frontières*, 29 January 2015.
- ¹⁴ “Church Hospital Bombed in Juba Mountains”, *Caritas*, 5 May 2014; Jonahhes Dietrich, “The Lone Fighter: Saving Lives along the Border of Sudan and South Sudan”, *Worldcrunch*, 1 May 2014.
- ¹⁵ “Yemen: People are Scared of Going to Hospital”, *Médecins Sans Frontières*, 25 January 2016.
- ¹⁶ Jomana Karadsheh, “Iraq Works to Reverse Doctor Brain Drain”, *CNN*, 29 September 2008.
- ¹⁷ Nabil Alkhalisi, “The Iraqi Medical Brain Drain: A Cross-Sectional Study” *International Journal of Health Services*, 43:2, 2013, pp. 363-78.