

House Foreign Affairs Committee  
Tom Lantos Human Rights Commission

Hearing  
on  
Protecting Health Care During Armed Conflict

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**Protecting Medical Care in Conflict: A Solvable Problem**

**Written testimony provided by Dr. Larry Lewis**

We have heard today about the tragedies that result when militaries attack medical facilities, when medical services are disrupted. But there is some good news. I hope to show today that better protecting medical care in conflict is a problem we can solve, by addressing the common failures that contribute to attacks on medical facilities.

I am with CNA, a non-profit research institute that focuses on national and homeland security challenges. My remarks today are based on my experience working with the US military and allies, particularly my research on reducing civilian casualties. I have spent ten years studying how civilian casualties take place and working with militaries on how better to avoid them, in Afghanistan, Iraq, and Syria, and with the Saudi-led coalition in Yemen.

The basic idea behind my work is this: if we better understand the root causes of why these tragic events occur, then we can come up with more effective ways to avoid them. With that goal, I have examined over 1000 real world incidents where civilians were harmed in conflict. And this data-based approach works: when I worked with General McChrystal in Afghanistan, we analyzed incidents and identified common patterns of harm. When US and international forces took on preventative measures to address those patterns, the civilian casualty numbers went down.

We can take this same approach to the protection of medical care. I want to be clear that, for the goal of avoiding attacks on medical facilities, some important advances have already been made. Over the past few decades, the US military has developed formal processes for better estimating civilian casualties and avoiding strikes on protected entities such as medical facilities. These processes are important developments that enable better informed decisions regarding the use of

force. Yet recent attacks on medical facilities in these conflicts, with those processes in place, suggest room for improvement.

For attacks on medical care, analysis of historical cases shows three contributing factors: military forces do not use known information about the location of hospitals to deconflict the object of attack; they fail to identify a hospital as such during an attack; and they do not follow historical best practices for mitigating civilian harm.

For the sake of time, today I am going to focus on one of these three contributing factors: the failure of militaries to identify hospitals as such during an attack. It can be difficult for tactical forces to identify medical facilities. In areas of armed conflict, they are not always in easily distinguished structures such as established hospitals. And while IHL is clear about the protected status of medical facilities, the only practical identification measure it provides is the original Geneva Conventions of 1949 statement that medical facilities may display a red cross or red crescent emblem to show they are protected. Unfortunately, advancing technological developments in sensors and networking can make this measure less effective. For example, a colored marking will not necessarily be a discriminating feature for a pilot conducting an air strike using an infrared sensor, a type of sensor used by many modern militaries.

So, what could be done? I will give a few possibilities. Reflecting their increasing use of data links and systems for situational awareness, militaries could require that systems display and exchange information regarding protected entities such as hospitals (e.g., having such information in an aircraft cockpit or exchanging No Strike List information over secure, digital datalinks). Many militaries already do this for the protection of friendly forces and the exchange of threat information. But there is often not a requirement to do so for protected civilian entities such as hospitals.

Another idea: while many worry about military applications of Artificial Intelligence, I have written about ways to use AI for good in war. And this is one such opportunity. I was talking recently to a group from Australia and we were discussing ways militaries could use AI to improve their identification of hospitals using machine learning techniques. These examples show there is a lot of room for creativity if the will exists to do something.

These are new military capabilities, which take time to develop, so are there triage-type measures that can decrease risk in the meantime? The problem I mentioned with infrared sensors not showing colored symbols was also a factor in friendly fire incidents involving US forces. An easy, cheap solution was to field identification panels compatible with multiple kinds of military sensors. As militaries take time to develop and field new capabilities to better identify hospitals, perhaps in the short term they could distribute such measures to humanitarian groups: not as a requirement to avoid attacks but as a part of a larger safety net to aid their protection efforts.

If you would like more information, I have a paper that explores challenges in the protection of medical care in conflict and potential solutions in more detail. I share these examples today to

illustrate that this tragic problem is a solvable one. Much more can be done through practical measures that countries and militaries can take, including the development of new capabilities but also strengthened doctrine, training, and policy commitments. All that is required is that countries like the US make such practical steps a priority.

The US has already demonstrated global leadership in its commitment to international law, and again in its concrete steps to better protect civilians in conflict over the last decade. This effort is another opportunity for the US to show leadership, by promoting practical steps to better protect medical facilities where such protection is needed most: in the heart of conflict.