War on the Wards: The collapse of health care infrastructure resulting from violent conflict

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WAR ON THE WARDS:
The collapse of health care infrastructure resulting from violent conflict

Nathan Hersh, Amy Hagopian, Barry Levy*

Introduction: While utilizing satellite images to verify reports of hospital damage resulting from armed conflict allows for remote assessment, the use of private satellites to gain access to images prohibits widespread use. The questions this study sought to answer were: Is it possible to replicate the findings of previous reports of hospital damage that used the services of private satellite imagery using open source software, such as Google Earth? What variations exist among the different sites where damage to hospitals is visible, and what gradation is possible? Is this methodology applicable to other examples of armed conflict?

Methods: Using the map of bombed Syrian hospitals published and maintained by Physicians for Human Rights, hospitals were selected according to their location and the time period of the attack. These coordinates were entered into Google maps and once the attack was verified, a grade of damage was assigned. This methodology was then applied to reports of similar attacks in Iraq.

Results: While much information can be gleaned from open source data such as Google Earth, the level of detail in satellite images is lower and coordinates data is less specific. [Further results pending.]

Conclusion: There is room for the use of open source satellite technology to track and grade the damage done to health care infrastructure during armed conflict. [More conclusions pending.]