Armored Conflict and Climate Change: The Impact on Health Care Provision and Health Systems in Syria

Visualizing the Complex Relationship between Violent Strife, Environmental Degradation, and Poor Health

Abstract

What began in Syria in 2011 as a non-violent pro-democracy protest has intensified into a devastating civil war that has lasted almost eight years and has killed over 360,000 people.1 The complexity of the conflict and the involvement of many opposing and collaborating actors has made peace talks and political resolution nearly impossible. 65% of Syria’s population have been displaced from their homes, with 5.7 million people fleeing the country and 6.2 million internally displaced.2 When the conflict broke out in 2011, large numbers of people migrated to the northern region of Syria, which were seen primarily rural, to avoid the violence which was at that time more concentrated in Damascus and western Syria. Movement towards the northern cities has been influenced by severe drought as well, which is due in large part to warming global temperatures. This trend of the northern migration of internally displaced people has continued over the duration of the civil war, despite rising rates of violence occurring in this region, and has put tremendous strain on the already limited resources. Migriton trends are also in large part to the decreasing availability of water.

The 1986 Ottawa Charter for Health Promotions outlines the fundamental prerequisites for health as “peace, shelter, education, food, income, a stable economy, sustainable resources, social justice and equity.” Within Syria, these conditions have been delimited and destroyed, leaving civilians vulnerable to severe health complications. The aim of this project is to explore the extent to which Syria’s health systems have been impacted by climate change and conflict, and the resulting health outcomes of its remaining citizens. In addition, the project seeks to capture the demonstrated health needs of the populations, especially in the most devastated and neglected regions of the country. A keen look is taken at northern Syria, which contains some of the last remaining opposition-held territories. Chronic disease indicators are included to elucidate the impact of war beyond direct injuries sustained from the violence itself.

Methods

The majority of the data used in this project was downloaded from the Humanitarian Data Exchange, and the location of each data set is indicated below the corresponding infographic or graph. The data was organized in latitude and longitude coordinates. All infographics are original and were created using Adobe Illustrator.

Access to Chronic Disease Medications by Sub-District in Northern Syria (2019)

The majority of the Syrian health care facilities are concentrated along the Euphrates River and in northeastern Syria (primarily in the district of Idleb), indicating predominantly two things: First, that attempts are being made to address the health needs of Syria’s most vulnerable populations, and that health care itself is being targeted.

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Figures 1-3

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Results

The majority of the Syrian population is currently living in northern and western Syria, where the violence is heaviest (Figure 1). In addition, the number of people “in need” corresponds strongly with the heaviest hit locations in regards to armed conflict events (Figure 1). This may indicate that civilians are being intentionally targeted. The cities and regions around Damascus and Aleppo have experienced a very high concentration of armed conflict attacks so far in 2019 and has the greatest number of people “in need” (Figure 1). Northern Syria, specifically the district of Idleb (also commonly referred to as IDLS) and western Aleppo, has seen the highest rates of violence than far in 2019, and is therefore a focus of this project. Many Syrians are living along the banks of the Euphrates River where water is more plentiful. Despite the presence of many regional emergency clinics and primary health care facilities, many are in western Syria, a great number of these communities are still without any healthcare facilities (Figure 1). As a result, Syrians suffering from both acute and chronic diseases have many of their health needs unmet.

Health systems and infrastructure, especially as they relate to public health, need to be strengthened if they are to adequately deal with potential climate crises and the resultant health effects. Currently, the trend is attacks on health care targets, which has caused a decline in access to essential services and health care and thus their right to health. These attacks have instilled great fear not only in the healthcare and humanitarian workers themselves, but in the population of large, putting up yet another barrier to health for Syrians citizens.

The Impact on Health Care Provision and Health Systems in Syria

Conclusions

Armed conflict and climate change have severe implications for health systems, health care provision, and human health both during the periods of violence and long after they have ceased. Syria is an unfortunate model for this devastating relationship, as demonstrated by the devastation in Syria which is deeply intertwined with water scarcity and agricultural decline. While the “force multiplier” relationship between climate change and the beginning of the country’s civil war has been contested,3 it is clear that the changing environment has exacerbat ed this already horrific situation. The water shortages have had enormous detrimental effects in Syria which have complicated an already violent and unstable situation, including the death of livestock, cereal, increased food costs, and forced migrations of millions. This project indicates that the toll inflicted by armed conflict and climate change must include far more than the immediate morbidity and mortality, and that care and attention must be given to the growing enduring impact. The value of peace will only continue to increase in Syria long after the guns have stopped firing; and the air strikes have ceased.


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