Sammy Mehtar 11 February 2018

**Concept Note**

1. **Title of the Proposed Project:** *Attacks on Healthcare Infrastructure and Infectious Disease Morbidity*
2. **Name of the Organization:** Assistance Coordination Unit (ACU)
3. **Potential Donors:** JMP Grant, Human Rights Center Grant, Shoeneman Grant
4. **Context:**

Syria has been engulfed in a civil conflict that has become a proxy battlegrounds for global powers. Civilians have become the ultimate victims in this conflict that has disregarded the ethical and legal principles of war. Healthcare providers and infrastructure have been routinely targeted, resulting in shortages of care and potentially contributing to reemergent diseases in the region. This project will study if and how these attacks have contributed to the burden of infectious diseases in Syria and possibly the reemergence of previously controlled diseases.

1. **Main Research Question**

How have attacks on healthcare facilities in northern Syria affected morbidity of infectious diseases in the region?

* How has it affected the capacity for surveillance?
* Has it contributed to the emergence or exacerbation of vaccine treatable diseases such as polio and measles?
* How has it affected vaccine campaigns?

1. **Rationale for the Proposed Project:**

The ACU has been monitoring diseases, coordinating projects, and conducting advocacy work in Syria since 2013. They have a well-established surveillance network in Syria, with weekly and annual reports published and used by NGOs, the WHO, and other actors. However, this data has yet to be analyzed and interpreted, and could help us further our understanding of the role conflict and displacement plays in health and the spread of infectious diseases. The level of detail available in the collected data over a relatively long period of time may yield some unique insights, and in doing so we hope to further the relationship between the academic establishment and locally based organizations serving complex crises, in this case starting with UC Berkeley and the ACU.

1. **Project Goals and Objectives:**
   1. Consolidate data collected by ACU and WHO through the EWARN and EWARS systems, respectively
   2. Collect data from ACU and WHO on reported attacks on healthcare facilities
   3. Analyze trends between the two (retrospective cohort study)
   4. Establish relationship with organization to build capacity for epidemiologic studies and statistical analysis
   5. Publish the findings in partnership with ACU to improve the efficacy of advocacy
2. **Ethical considerations**
   1. Safety: The data has already been collected, and the organization is based in southern Turkey, so there will be no ethical or safety concerns regarding collection of data or travel safety.
   2. Identifiable health information: the data is will already be deidentified.
   3. Storage of Data: Data will be encrypted and stored on researcher’s computer. Only researcher and research mentors will have access to the data.
   4. Power dynamics: There is a concern for imbalance in power dynamics; coming from a top-tier research university could create the impression of a power dynamic between researchers and the ACU team. Intention and goal is to establish a partnership on equal footing. This must be explicitly stated from the beginning, care and awareness of the impact of our words and actions must remain throughout.
   5. Publication: Partner organization will be continuously updated on progress of the paper and its publication.
3. **Research methods:**

This will be a quantitative study conducting statistical and epidemiologic analyses on datasets already collected by the partner organization. It will be structured as a retrospective cohort study. The program STATA will be used for statistical analyses.

1. **Limitations:**

Despite the rigorous surveillance efforts of the ACU and WHO, there are inevitable limitations in the process of collecting and analyzing data from a conflict setting. The populations accessible to surveillance may not be representative of the entire population. There are multiple actors involved in the process of data collection, some of which may be uncoordinated or overlap. We must be aware of these and other limitations we come across, hopefully diminishing their effects where possible and being transparent about them when not.

1. **Timeline:**

Spring 2018: Preliminary literature review, IRB approval, statistical and epidemiologic training

Summer 2018: Data collection, building relationship with partner organization

Fall 2018: Data analysis, formal literature review

Spring 2019: Preliminary paper draft, work on continuity of capacity training project

Summer 2019: Send team to continue analytical capacity training, potential establish future research projects

Fall 2019: Submit final paper for publication

1. **Proposed Budget**

Summer timeline: 8 weeks (min)

Flights: $1800

Lodging: $1500

Based on $750 rent/month

Commute (car rental): $1,400

Based on ~$27 a day

Food: $1,100

Based on ~$18 a day

Tech: STATA, Hard drive