RAPID LANDSCAPING OF LITERATURE ON HEALTH SYSTEMS DURING EPIDEMICS

The START team conducted a rapid landscape analysis of studies of health systems in the context of epidemics with an emphasis on research that may bear relevance to the global response to COVID-19. There was a strong focus on including both quantitative literature to understand what direct and indirect outcomes result during epidemics, and qualitative literature to understand how and why these outcomes occur.

OBJECTIVES

To conduct a rapid landscaping of:

Qualitative literature on the provision of and access to care during epidemics to inform the design of effective interventions

Quantitative literature on the health system gaps for responding to direct and indirect impacts of epidemics

STRATEGY

Engaged with key informants to inform strategy

Conducted a detailed search of literature databases and COVID-19 pre-print servers:

Pubmed   medRxiv
bioRxiv   arXiv
ResearchSquare   CDC
COVID-19 Database   Scopus
PsycINFO   Somatosphere

OUTPUT

A health systems literature tool

Four briefs outlining specific insights from past epidemics relevant to COVID-19

EXAMPLE OF INTEGRATING QUANTITATIVE AND QUALITATIVE FINDINGS

Quantitative: Having been isolated (not isolated group compared to isolated group OR=0.75, 95 CI 0.62-0.91) was significantly associated with psychological distress Dai 2020 COVID-19; China

Quantitative: Healthcare workers reported feeling 'isolated' and 'deprived'. "*We did not even have access to even our own children. We were lying on the floor for 21 days.*"

BRIEFS FOCUSED ON HEALTH SYSTEMS

The START team developed four briefs using the literature database tool. Two of the briefs focused on the impact of epidemics on health systems, which are detailed below. For additional information on the creation of these briefs, please see the following Methods Annex.

RECOVERY OF SERVICES AFTER EPIDEMICS

Objective: This brief focused on the recovery of the utilization of routine services after epidemics to understand if services did or did not recover and how long this recovery may take.
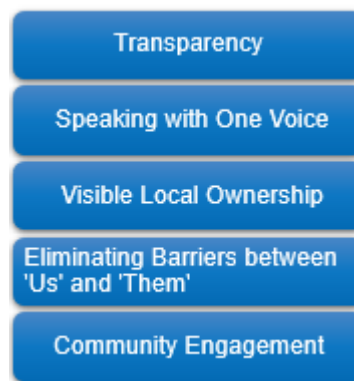

Health System Recovery to Pre-Ebola Levels by Indicator
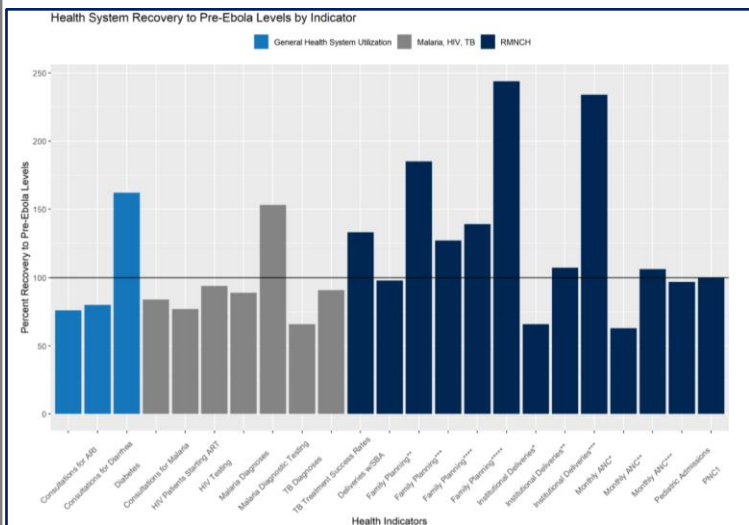
- **Distrust of government** was the strongest predictor of negative health service usage in Liberia during the late-crisis period of Ebola (OR = 0.75, p<0.01).
- **Government-organized community outreach** was the strongest predictor for positive health service usage (OR = 2.79, p<0.01)
- A **participatory action research** model of community engagement identified **fear of infection** and **mistrust of health facility staff** as two of the top listed barriers to the recovery of antenatal and obstetric services. A Liberian hospital employing PAR reported a **46% recovery in monthly ANC usage** in the post-Ebola period

READ THE FULL BRIEF HERE

RESILIENCE OF HEALTH SYSTEMS

Objective: This brief focused on understanding how to build a resilient health system, one that is capable of withstanding health shocks to recover and grow in expected and unexpected conditions. This brief primarily leveraged qualitative findings that explain quantitative trends identified in the Recovery of Health Services brief.

Transparency
Speaking with One Voice
Visible Local Ownership
Eliminating Barriers between 'Us' and 'Them'
Community Engagement

BUILDING TRUST

- **Building trust** was a commonly listed factor in enhancing resilience
- **Community engagement** was mentioned as an effective trust-building tool in **80%** of studies mentioning trust
- Actionable enhancements to promote resilience during epidemics fell into four categories: 1) **Supporting healthcare workers; 2) Generating a sense of local ownership; 3) Making local health systems a national priority; 4) Communicating clearly and effectively**

**READ THE FULL BRIEF HERE**

Andrew Secor, William Sheahan, Boya Guo, Aldina Mesic, Paul Drain

BRIEFS FOCUSED ON THE HEALTH WORKFORCE

The START team developed four briefs using the literature database tool. Two of the briefs focused on the impact of epidemics on health workers, which are detailed below. For additional information on the creation of these briefs, please see the following Methods Annex.

MENTAL HEALTH OF HEALTHCARE WORKERS

Objective: This brief assesses the mental health status of healthcare workers during epidemics with a focus on understanding risk and protective factors and potential interventions.

PREVALENCE OF MENTAL HEALTH SYMPTOMS AMONG HCWs DURING AND AFTER EPIDEMICS
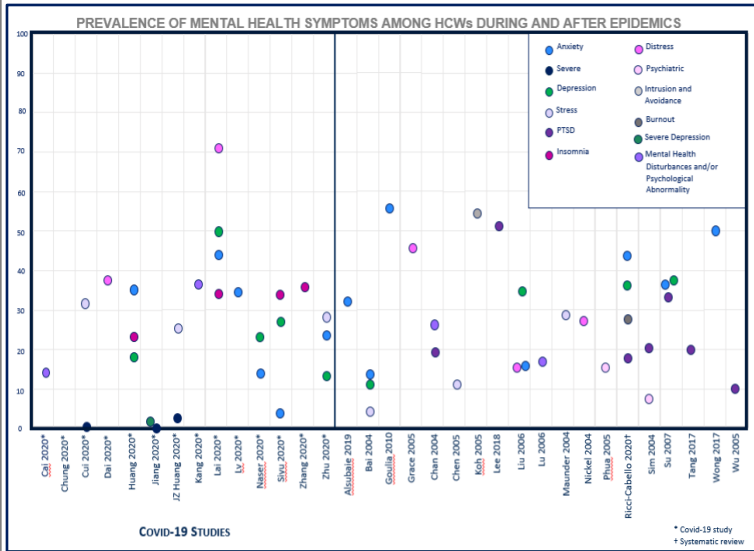
- Anxiety prevalence ranged from a low of 6% to a high of 57% among healthcare workers during epidemics.
- Many individual, social, and occupational factors increased the risk of developing adverse mental health outcomes. For example, healthcare workers reported that the epidemic significantly impacted their lifestyle and activities. Healthcare workers stated they felt, 'isolated', 'deprived', and 'ostracized', stating "we did not even have access to even our own children."

READ THE FULL BRIEF HERE

MAINTAINING THE HEALTH WORKFORCE

Objective: This brief assesses factors which affect the ability of healthcare workers to perform their duties during epidemics and interventions that can address these barriers.

PERCENTAGE OF HEALTHCARE WORKERS WILLING/ABLE TO WORK DURING EPIDEMICS
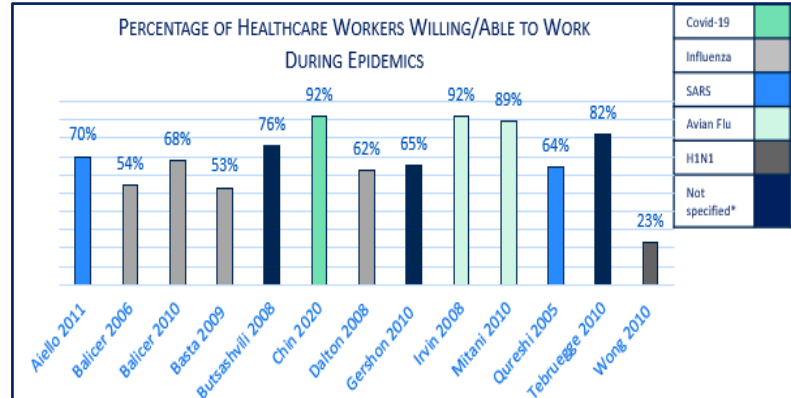
- The percentage of HCWs that were able and willing to work during epidemics ranged from a low of 53% to a high of 92%.
- School closures and family responsibilities were often cited as reasons that healthcare workers could not attend work during outbreaks (*"Choosing between my work as a nurse or my family's safety, I will choose my family."*)
- Childcare and financial compensation can be implemented to reduce absenteeism among healthcare workers.

READ THE FULL BRIEF HERE

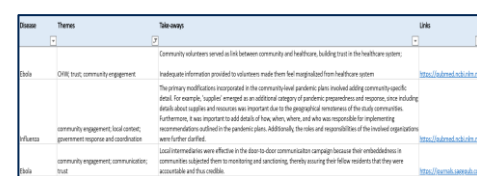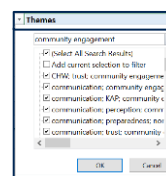## HEALTH SYSTEMS DURING EPIDEMICS LITERATURE TOOL

The START team developed a literature database, which includes qualitative and quantitative literature relevant to understanding health systems during epidemics. The START team collected information on each study including: publication year, authors, title, country/region, setting (LMIC, HIC, both), disease, study type (qualitative, quantitative, mixed-methods), data type (primary, secondary, review, commentary, modelling), themes, link to full text, and abstract. The tool includes 1141 studies across 85 countries/regions. For additional information on the creation of this tool, please see the following Methods Annex.

GUIDANCE ON USING THE LITERATURE TOOL

1 Identify a topic or question of interest to pursue

Example: The brief on health system resilience highlights the importance of community engagement for building trust, which may be interesting to explore

Building Trust During an Epidemic
Over **1/3** of the papers reviewed listed trust as a key factor in establishing health system resilience. Of these, **80%** indicated that community engagement is effective in building trust in the health system. This supports

2 Filter the excel sheet to all themes that include your topic of interest

There is a complete list of themes listed by descending frequency and definition available HERE and in the database

3 Use the abstract or key takeaways fields to obtain a quick summary of relevant literature in the database

These may include key results, conclusions, or themes drawn from each article

4 Follow relevant links to read the full text of available articles

Compile findings from your list of articles for presentation

ACCESS THE HEALTH SYSTEMS LITERATURE TOOL HERE