Unrest and Violence During COVID-19:
A Call To Action For Joint Public Health And Security Authority Implementation & Enforcement Of Mitigation Measures

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The Background: What We Know

Outbreaks, epidemics, and pandemics are associated with social unrest and violence [1-5]. In the 14th century, the Black Death led to mass expulsions and executions, and in the 19th century, cholera outbreaks triggered violent riots [1]. More recently, the 2014 – 2016 Ebola outbreak in West Africa led to violent attacks against health and government officials and protests of mitigation strategies [1,3,4]. In fact, SARS (2003), H1N1 (2009), MERS (2012), Ebola (2014), and Zika (2016) outbreaks all significantly contributed to increased social unrest and civil disorder [5].

During the COVID-19 pandemic, evidence shows that levels of social unrest and violence also continued and increased [6]. Specific mitigation strategies, such as workplace and school closures and general restrictions on movement, were positively associated with social unrest [7].

The Gap: What We Don't Know

There is little documentation on how and to what extent the implementation and enforcement of different mitigation strategies link to unrest and violence during pandemics, like COVID-19.

The Aim: What We Did

We reviewed 1,370 web-scraped COVID-19 news articles published during the first six months of the pandemic to examine how incidents of unrest and violence were associated with the implementation and enforcement of different mitigation strategies.
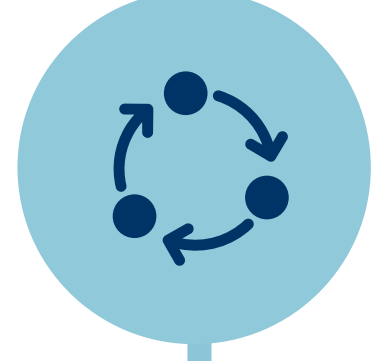
The Method: How We Did It

We conducted a secondary analysis. The original dataset included 34,225 news articles from six countries published during the first six months of the pandemic.

We developed machine learning text classification models to identify 3,142 articles that referenced COVID-19 mitigation strategies and unrest or violence.

We trained a team to manually review the articles for a direct association between the instances of unrest or violence and the mitigation strategies. We identified a total of 1,447 relevant articles.

We used content analysis to categorize, quantify, and summarize the relationship between mitigation strategies and unrest or violence [8]. Through our coding process, we excluded an additional 77 articles.

We used MAXQDA's code relation browser and matrix features to examine patterns between the mitigation strategy categories and the adapted Typology of Violence (see poster 1).

| Original dataset 34,225 articles | Machine learning text classification models 3,142 articles | Manual screen 1,447 articles | Content analysis 1,370 articles |

The Results: What We Found

Overall, most unrest and violence discussed in the news articles was physical (see table 1) and perpetrated by the police against the community (see table 2).

The unrest and violence associated with individual-level mitigation strategies was often physical and directed at the community by the police. There were references to financial violence by the state against its citizens and verbal violence by the citizens against their state. Of the individual-level mitigation strategies, **masks and mask mandates** led to most of the unrest and violence.

Most of the unrest and violence associated with community- and environment-level mitigation strategies was physical and perpetrated by the police against the community and, to a lesser extent, by the state against its citizens. Articles also referenced financial violence inflicted by the state against its citizens and verbal unrest by citizens against the state. Of the community- and environment-level mitigation strategies, **restriction of movements** (i.e., lockdown mandates, stay-at-home orders, bans on social gatherings, and social distancing policies), was associated with each type of unrest and violence, often as the most prominent source. **Quarantine/isolation** measures were associated with financial violence and deprivation (neglect) by the state and verbal unrest by citizens.

Most of the unrest and violence associated with state-level mitigation strategies was verbal from citizens against their state and psychological from the state against its citizens. Of the state-level mitigation strategies, the unrest and violence were associated with **border security measures**, **election postponements**, and **state of emergency/pandemic funds.**

Table 1. COVID-19 Mitigation Strategy Categories by Type of Unrest or Violence*

Type of Unrest or Violence	Individual	Community & Environmental	State
Physical	74	789	158
Sexual	-	31	2
Financial	36	259	37
Deprivation/Neglect	3	70	28
Psychological (Emotional)	15	152	131
Verbal	17	244	257

Table 2. COVID-19 Mitigation Strategy Categories by Perpetrator-Victim of Violent Act*

Perpetrator-Victim	Individual	Community & Environmental	State
Self	-	7	2
Family/Partner	-	20	2
Community-Community	12	87	5
Police-Community	64	576	60
Community-Police	4	65	9
State-Citizens	34	370	176
Citizens-State	18	277	159
State-State	2	49	84

*Some articles contained multiple incidents of unrest or violence, and some incidents of unrest or violence were directly associated to more than one mitigation strategy.

The Contribution: Why Is This Important?

The findings suggest that governments need to create stronger formal partnerships between public health and security authorities to better implement and enforce mitigation strategies in ways that mitigate potential negative consequences.

The Recommendation: What Next?

We recommend developing a formal Joint External Evaluation indicator focused on the joint public health and security authority implementation and enforcement of mitigation measures. The indicator would outline the roles, responsibilities, and best practices for enforcing mitigation measures and controlling potential negative consequences of these measures.

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